

abbvie



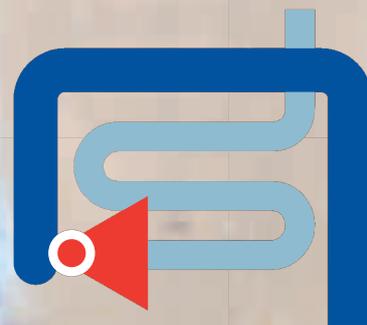
# BIG Meeting

(British & Irish Gastroenterology)

11 - 12 April, 2013  
Waterfront Centre  
Belfast



**ASACOLON**<sup>®</sup>  
mesalazine  
targeted delivery



**ASACOLON**<sup>®</sup> – targeted delivery  
for over 7 million patient years\*

For the treatment of mild acute ulcerative colitis and  
the maintenance of remission of ulcerative colitis



**LEGAL CATEGORY:** POM. **PRODUCT AUTHORISATION NUMBER:** ASACOLON<sup>®</sup> Suppositories 500mg PA 1204/1/1, ASACOLON<sup>®</sup> Tablets 400mg PA 1204/1/2, ASACOLON<sup>®</sup> Tablets 800mg PA 1204/1/3. **PA HOLDER:** TILLOTTS PHARMA LIMITED, United Drug House, Magna Drive, Magna Business Park, Citywest Road, Dublin 24, Ireland. **DATE OF PREPARATION:** February 2010. **FULL PRESCRIBING INFORMATION AVAILABLE ON REQUEST FROM THE MARKETING AUTHORISATION HOLDER.** ASACOLON<sup>®</sup> is a trademark.  
\*Data on file, Tilotts Pharma AG.



## Welcome

### Dear Members and Guests,

This past month has been one of the coldest in memory and while I can't guarantee a balmy April I can assure you all of a very warm welcome to Belfast, and to the 2013 BIG Spring Meeting. Belfast may be a small city but don't let the size fool you - because we're big on excitement. Once the home of the Irish linen industry, tobacco production, rope making and the world famous Harland and Wolff shipbuilders, Belfast lays claim to a unique history. The city is a superb back-drop for a conference, with excellent hotels, restaurants and bars, cultural activities and a vibrant night life. Likewise, the Waterfront Centre, which has already secured a reputation as one of the leading multi-purpose venues in the UK, is an excellent facility with spacious lecture theatres and a modern, bright and professional ambience.



The BIG Gastroenterology Conference sees the unique coming together of the three main organisations involved in Gastroenterology in these islands BSG, ISG and USG.

As you will see from the scientific programme this Conference should maintain the three Societies long-standing tradition of promoting research, education, fellowship and intellectual stimulation. The BIG meeting kicks off on Thursday morning with Clinical Updates on Upper GI Disease and IBD. After lunch there is an Update on GI related Cancer and the first day rounds off with a session on Training. The meeting on Friday leads with sessions on Liver & Pancreas and Alcohol related topics (I assure you the timing has nothing to do with the dinner being held on Thursday evening). Friday afternoon has a session on Endoscopy and the meeting closes after a session on Nutrition & Obesity.

The academic quality of abstracts accepted for the oral short papers has been most impressive. They, and the poster presentations will be a showcase of research across the spectrum of gastroenterology. Rather than have a research only session the oral presentations will be given during the relevant Clinical session. The prizes for the best abstracts will be awarded during the final session on Friday.

Only in Belfast can you trace the Titanic story to its source, discover the passion and pride of those who designed and built her and relive the excitement of the Titanic era when the city was at the height of its powers. We are therefore delighted to beholding the Gala Dinner on Thursday evening in the New Titanic Centre. Located on the top two floors, the decor is themed on the interiors of Titanic itself, including a replica of the liner's Grand Staircase. The Titanic Centre has panoramic views over the city and shipyard where the world famous liner was designed, built and launched.

I would like to thank the Organising Committee and the Scientific Committee for all their hard work in arranging the meeting and also thank all our invited speakers. I look forward to meeting many of you over the course of the Conference.

### **Eamon Mackle**

President Ulster Society  
of Gastroenterology



## Programme for BIG Meeting

11th & 12th April 2013

### Thursday April 11th 2013

- 08.00 **Registration**
- 09.30 **Welcome Address**  
**Mr Eamon Mackle**  
President USG
- 09.40 **Session 1: Upper GI Disease**  
**Chairs: Inder Mainie & Kieran McManus**
- Oral Free Papers (1 - 3)**
- 10.00 **Management of non-obstructive dysphagia**  
**Prof Brian Johnston**  
Consultant Gastroenterologist  
Royal Victoria Hospital, Belfast, N. Ireland
- 10.20 **H pylori - testing for a nation**  
**Prof Colm O'Morain**  
Consultant Gastroenterologist  
Adelaide & Meath Hospital, Dublin, Ireland
- 10.40 **Stenting non-cancer oesophageal disease**  
**Prof Stephen Attwood**  
Consultant Surgeon  
North Tyneside Hospital, UK
- 11.00 **Coffee, Poster Viewing & Trade Exhibition**
- 11.20 **Session 2: Inflammatory Bowel Disease**  
**Chairs: Gavin Harewood & Eamon Mackle**
- 11.20 **The Management of IBD in the Elderly**  
**Dr Garret Cullen**  
Consultant Gastroenterologist  
St Vincent's University Hospital, Dublin, Ireland
- 11.40 **Oral Free Paper (4)**
- 11.50 **Surgery in Crohn's Disease**  
**Mr Roy Maxwell**  
Consultant Colorectal Surgeon  
Royal Victoria Hospital, Belfast, N. Ireland
- 12.10 **IBD adolescent transition service**  
**Prof David Wilson**  
Consultant in Paediatric Gastroenterology  
& Nutrition  
Royal Hosp for Sick Children, Edinburgh, Scotland
- 12.30 **Oral Free Paper (5)**
- 12.40 **Immunomodulators - for how long?**  
**Dr Glen Doherty**  
Consultant Gastroenterologist  
St Vincent's University Hospital, Dublin, Ireland
- 13.00 **Lunch and Poster rounds**

- 14.00 **Session 3: GI related cancer**  
**Chairs: Martin Eatock & Mike Mitchell**
- 14.00 **The effect of cancer on the GI tract**  
**Dr Jervoise Andreyev**  
Consultant Gastroenterologist in  
Pelvic Radiation Disease  
Royal Marsden Hospital, London & Sutton, UK
- 14.20 **Oral Free Paper (6)**
- 14.30 **Oesophageal cancer - a natural history**  
**Prof Rebecca Fitzgerald**  
Consultant in Gastroenterology & Oncology  
Addenbrookes Hospital, Cambridge, UK
- 14.45 **CT colonography**  
**Dr Myles Nelson**  
Consultant Radiologist  
Antrim Area Hospital, N. Ireland
- 15.00 **Oral Free Paper (7)**
- 15.10 **Bowel cancer screening - the NI experience**  
**Dr William Dickie**  
Consultant Gastroenterologist  
Altnagelvin Hospital, Derry, N. Ireland
- 15.30 **Coffee, Poster Viewing and Trade Exhibition**
- 15.50 **Session 4: Training**  
**Chairs: Colin Rodgers & Mark Taylor**
- Endoscopy training**  
**Mr Rodger Leicester**  
Consultant Colorectal Surgeon  
St George's Hospital, London, UK
- 16.10 **Oral Free Paper (8)**
- 16.20 **Gastrointestinal Surgical Training**  
**Mr Kourosh Khosraviani**  
Consultant Colorectal Surgeon  
Royal Victoria Hospital, Belfast, N. Ireland
- 16.35 **Oral Free Paper (9)**
- 16.45 **Hepatology training**  
**Dr Neil Paterson**  
Consultant Gastroenterologist  
Royal Victoria Hospital, Belfast
- 17.00 **Nutrition training**  
**Dr Penny Neild**  
St George's Hospital, London, UK
- 19.30 **Drinks Reception**
- 20.00 **Gala Dinner, Titanic, Belfast.**



## Programme for BIG Meeting (continued)

11th & 12th April 2013

### Friday April 12th 2013

- |       |   |       |  |       |  |
|-------|---|-------|--|-------|--|
| 09.15 | <b>Welcome Address</b><br><b>Aiden McCormick</b><br>President ISG   |       |  |       |  |
| 09.00 | <b>Session 5: Liver &amp; Pancreas</b><br><b>Chairs: Aidan McCormick &amp; Johnny Cash</b>  | 14.00 | <b>Session 7: Endoscopy</b><br><b>Chairs: Paul Lynch &amp; Kevin McCallion</b>   | 14.00 | <b>Setting up an Upper GI bleeding service</b><br><b>Dr John Morris</b><br>Consultant Gastroenterologist<br>Glasgow Royal Infirmary, Scotland                  |
| 9.20  | <b>Update in viral hepatitis</b><br><b>Prof Graham Foster</b><br>Consultant Hepatologist<br>Barts & Royal London Hospitals, UK                                | 14.20 | <b>Oral Free Paper (14)</b>  | 14.30 | <b>Improving adenoma detection</b><br><b>Prof Roger Leicester</b><br>Consultant Colorectal Surgeon<br>St George's Hospital, London, UK                         |
| 9.40  | <b>Oral Free Paper (10)</b>   | 14.50 | <b>Quality assurance in Colonoscopy - what we can learn from the sports industry</b><br><b>Prof Gavin Harewood</b><br>Consultant Gastroenterologist<br>Beaumont Hospital Dublin, Ireland | 15.05 | <b>Oral Free Paper (15)</b>  |
| 9.50  | <b>Interventional radiology - HCC v cholangio</b><br><b>Dr Ronan Ryan</b><br>Consultant Radiologist<br>St Vincent's University Hospital, Dublin, Ireland      | 15.15 | <b>EMR &amp; ESD of the lower GI tract</b><br><b>Dr Bjorn Rembacken</b><br>Consultant Gastroenterologist<br>Leeds General Infirmary, UK  | 15.30 | <b>Coffee, Poster Viewing &amp; Trade Exhibition</b>   |
| 10.10 | <b>30 years experience of the Kings criteria</b><br><b>Prof John O'Grady</b><br>Kings College Hospital, London, UK  | 16.00 | <b>Session 8: Nutrition &amp; Obesity</b>  | 16.00 | <b>Prize giving for best abstracts</b>   |
| 10.30 | <b>Oral Free Paper (11)</b>   | 16.15 | <b>Endoscopic bariatric techniques</b><br><b>Dr Dimitri Coumaros</b><br>Consultant Hepatologist & Gastroenterologist<br>University Louis Pasteur, Strasbourg, France                     | 16.30 | <b>Bariatric surgery</b><br><b>Mr Justin Geoghegan</b><br>Consultant Hepatobiliary and Transplant Surgeon<br>St Vincent's University Hospital, Dublin, Ireland |
| 10.40 | <b>Cystic tumours of the pancreas</b><br><b>Mr Mark Taylor</b><br>Consultant General & Hepatobiliary Surgeon<br>Mater Hospital, Belfast, N. Ireland           | 16.45 | <b>Nutrition in acute IBD</b><br><b>Dr Gerard Rafferty</b><br>Consultant Gastroenterologist<br>Antrim Area Hospital, N. Ireland  | 17.05 | <b>Surgery for intestinal failure</b><br><b>Mr Keith Gardiner</b><br>Consultant Colorectal Surgeon<br>Royal Victoria Hospital Belfast, N. Ireland              |
| 11.00 | <b>Coffee, Poster Viewing &amp; Trade Exhibition</b>  | 17.20 | <b>Close of Meeting</b>  | 13.00 | <b>Lunch and Poster rounds</b>   |
| 11.15 | <b>Session 6: Alcohol</b><br><b>Chairs: Suzanne Norris &amp; Tony Tham</b>  |       |  |       |  |
| 11.15 | <b>Alcohol and society</b><br><b>Prof Sir Ian Gilmore</b><br>President BSG  |       |  |       |  |
| 11.35 | <b>Oral Free Paper (12)</b>   |       |  |       |  |
| 11.45 | <b>Alcohol and problems for the gastroenterologist</b><br><b>Dr Neil McDougall</b><br>Consultant Hepatologist<br>Royal Victoria Hospital, Belfast, N. Ireland |       |  |       |  |
| 12.05 | <b>Oral Free Paper (13)</b>   |       |  |       |  |
| 12.15 | <b>Alcohol treatment services</b><br><b>Prof Kieran Moriarty</b><br>Consultant Gastroenterologist<br>Royal Bolton Hospital, Greater Manchester, UK            |       |  |       |  |
| 12.35 | <b>Political discussion</b><br>Open debate with political representatives and CMO   |       |  |       |  |



PEGASYS\*

for the treatment of Chronic Hepatitis C\* or  
HBeAg positive/HBeAg negative Chronic Hepatitis B



\* The optimal way to use Pegasys in patients with Chronic Hepatitis C is in combination with ribavirin.

**Legal Category:** Limited to sale and supply on prescription only. **Marketing Authorisation Holder:** Roche Regeneron Limited, 5 Farnborough Way, 3rd Floor, Welwyn Garden City, AL7 1TW, United Kingdom. Further information is available from Roche Products (Ireland) Limited, 3000 Lakes Drive, Clonsilla, Hans Road, Dublin 24, Ireland. Telephone: (31) 4680700, Fax: (31) 4680701. **PEG111702**





# Irish Society of Endoscopy Nurses

Friday 12th APRIL 2013 WATERFRONT CENTRE, BELFAST

Time	Speaker	Topic
08.30-09.00	Registration	
09.00-09.05	Deirdre Clune ISEN Chairperson	Introduction
09.05-09.15	Deirdre Diver, CNM 2 Endoscopy Unit Letterkenny General Hospital, Donegal	Welcome to Belfast!
09.15-09.45	Paud O'Regan Consultant Gastroenterologist South Tipperary General Hospital, Clonmel	Upper GI Bleeds
09.45-10.15	Orla Kelly SpR Gastroenterologist St. Luke's Hospital, Kilkenny	Lower GI Bleeds
10.15-10.30	Elaine Millington Product Specialist Cook Medical Endoscopy Division	'A new innovation for hemostasis'.
<b>10.30-11.00</b>	<b>COFFEE</b>	<b>Visit industry representative</b>
11.00-11.15	Tig Miller Managing Director Fingerprint Medical Ltd.	"It's a Scopes Life"
11.15-11.45	Caroline Conneely CDU Manager/ Decontamination Advisor Children's University Hospital, Dublin	Validation study of an endoscope drying cabinet
11.45-12.30	Wayne Spencer Healthcare Facilities Consultant National Decontamination Advisory Group	"Endoscopy Decontamination - what can possibly go wrong"?
<b>12.30-13.45</b>	<b>LUNCH</b>	<b>Visit industry representatives</b>
13.45-14.00	Amanda Blair Specialist Nurse Screening Practitioner Altnagelvin Area Hospital, Londonderry	Bowel Cancer Screening – The Northern Ireland Experience
14.00-14.40	Chris Steele Consultant Gastroenterologist Letterkenny General Hospital, Donegal	Sedation
14.40-15.20	Dr. Inder Mainie Consultant Gastroenterologist Belfast City Hospital	Foreign body management, stents and strictures
15.20-15.30	Robert Vavasour Qualified Test Person & Trainer Wassenburg Ireland Sales Manager	Routine testing of endoscope washers and drying cabinets – A User Perspective.
15.30-16.00	Close of meeting	Evaluation Forms - Suggestions for next meeting.

If you would like to attend the meeting you must pay online at <http://www.isen.ie/> to register. Thank you.

# Abstract Winners ISG Winter Meeting 2012



Hepatology Bursary Prizes sponsored by MSD



Hepatology Bursary Prizes sponsored by MSD



Hepatology Bursary Prizes sponsored by MSD



Oral Prizes sponsored by Roche



Oral Prizes sponsored by Roche



Poster Prizes sponsored by Abbott



Poster Prizes sponsored by Abbott



Poster Prizes sponsored by Abbott



**ISG Winter Meeting 2013**  
 will be held at The Malton, Killarney  
 November 22nd & 23rd 2013

Chief Executive I.S.G. Mr Michael Dineen  
 Admin Secretary Ms Cora Gannon  
 Mespil House, Sussex Road, Dublin 4  
 Tel: +353 (0) 1 231 5284 Email: info@isge.ie



## Speakers

### Professor Sir Ian Gilmore President BSG

Professor Sir Ian Gilmore, University of Liverpool, is an honorary consultant physician at the Royal Liverpool University Hospital. He is currently chairman of Liverpool Health Partners, an organisation set up between the University and the teaching hospitals in Liverpool to promote an Academic Health Science Network in order to foster academic innovation, education and service development in the region. His specialty interest is liver disease. He is currently chairing a commission on health and healthcare in Liverpool at the request of the city's elected mayor.

He is the immediate past-president of the Royal College of Physicians (RCP) and is currently president of the British Society of Gastroenterology. He has particular interest in harms related to alcohol misuse and the role of regulation in reducing this. He chaired a RCP Working Party in 2001, producing the report "Alcohol - can the NHS afford it? A blueprint for a coherent alcohol strategy". He chairs the UK Alcohol Health Alliance in which relevant agencies work together in a coherent and focused framework. He has also been appointed as Chair of the European Alcohol and Health Forum Science Group and is a member of the Climate and Health Council. He is also a member of the National Quality Board. He is a Deputy Lieutenant of Merseyside and received a Knighthood in the Queen's Birthday Honours in 2010.

### Mr Eamon Mackle President USG

Eamon Mackle confesses to being a general surgeon, albeit with interests in GI surgery and the pelvic floor. He has been a Consultant in Craigavon Area Hospital for 21 years and is the Southern Trust's Associate Medical Director for Surgery and Elective Care. He is President of the USG and President elect of the Ulster Medical Society.

He is a past member of AUGIS Council. He is a member of the Intercollegiate Committee for Basic Surgical Examinations as well as a member of the IMRCS paper panel and the OSCE subgroup. He is an undergraduate examiner for QUB as well as being an undergraduate and postgraduate examiner for RCSI.

### Prof Aiden McCormick President ISG Consultant Hepatologist St Vincent's University Hospital, Dublin

Prof Aiden McCormick graduated from UCD in 1979, and then trained in Hepatology in the Royal Free Hospital School of Medicine with Prof Dame Sheila Sherlock, Prof Neil McIntyre and Prof Andy Burroughs. Currently Hepatologist and Newman Clinical Research Professor in the National Liver Transplant Unit, St Vincent's University Hospital and University College Dublin.

His research interests are: portal hypertension, complications of chronic liver disease and liver transplantation.



### Mr Keith Gardiner Consultant Colorectal Surgeon

Consultant General, Colorectal and Intestinal Failure Surgeon, Royal Victoria Hospital, Belfast. Honorary Senior Lecturer in Surgery, The Queen's University of Belfast Postgraduate Medical Dean and Chief Executive, Northern Ireland Medical and Dental Training Agency

Trained in Belfast, Baltimore and Oxford. Appointed consultant surgeon/senior lecturer in surgery in Royal Victoria Hospital, Belfast and The Queen's University of Belfast in 1995.

Moved to NHS as consultant general and colorectal surgeon in 1999 at the Royal Victoria Hospital, Belfast. Continued as Honorary Senior Lecturer in Surgery supervising 19 research fellows to higher degrees (PhDs, MDs and MPhils).

Set up first Nutrition Support Team in NI in 1996, Home Parenteral Nutrition Service (NI) in 1997; Regional Intestinal Failure Clinic in 2000; co-author of ASGBI guidelines on Surgical Management of Acute Intestinal Failure.

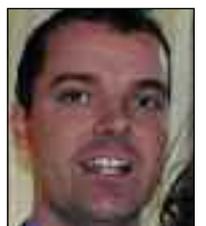
Chairman of NI Basic Surgical Training Committee 1997-2002; Training Programme Director in General Surgery 2000-2007; Associate Dean-Secondary Care 2007-12. Postgraduate Medical Dean 2012-present.

### Dr Glen Doherty Consultant Gastroenterologist

Glen grew up in Northern Ireland and graduated in Medicine at Trinity College Dublin in 1998. He was awarded his PhD by NUI in 2006 and completed his gastroenterology training in Ireland followed by an advanced IBD fellowship at Beth Israel Deaconess Medical Center and Harvard Medical School, Boston. Since 2010 he has worked as a consultant gastroenterologist at St Vincent's University Hospital in Dublin and as a senior clinical lecturer in the School of Medicine and Medical Science at University College Dublin. His research interests are in the role of innate and adaptive immunity in inflammatory bowel disease (Ulcerative Colitis and Crohns Disease) and in the importance of the host immune response in gastro-intestinal neoplasia, particularly colorectal cancer and Barrett's oesophagus. With his colleagues at the Centre for Colorectal Disease at SVUH/UCD he has an established track record in clinical research on a range of digestive disorders and is actively involved in clinical trials in IBD.

### Dr Gerard Rafferty Consultant Gastroenterologist

Qualified from QUB in July 2000. Completed Human Nutrition MSc at Coleraine University in July 2010. Trained in NI deanery. 6 months out-of-programme training in IF and IBD at St. Mark's Hospital London and Hope Hospital Salford. Sub-speciality interests in nutrition and IBD. Work as consultant Gastroenterologist in Antrim Hospital since Jan 2011. Co-chair regional strategy group for Type 2 and 3 IF patients within NI.





**Professor Kieran Moriarty**  
Consultant Gastroenterologist



I trained in medicine at Trinity College, Cambridge and The London Hospital, Whitechapel, qualifying in 1975. I trained in Gastroenterology with Sir Anthony Dawson and Mike Clark at St. Bartholomew's Hospital, London and at Hope Hospital, Salford with Lord Leslie Turnberg. My clinical and research interests have been abdominal pain, bowel disorders and alcohol-related disease. I have published a book for patients on the Irritable Bowel Syndrome.

Since starting as a Consultant at Bolton in 1990, we have pioneered joint Liver/Psychiatry care for people with alcohol-related problems. In 1999, I was British Hospital Doctor of the Year, and in 2002, I was awarded the CBE for Services to Medicine. I have been a close adviser to the Chief Medical Officer, Department of Health and the Home Office. I sit on a number of national alcohol and liver disease committees.

Since 2009, I have been the British Society of Gastroenterology lead on Alcohol Services. In 2010, I was the lead author on a joint position paper on behalf of the British Society of Gastroenterology, Alcohol Health Alliance UK and the British Association for Study of the Liver. The paper was entitled "Alcohol-related Disease: meeting the challenge of improved quality of care and better use of resources".

In 2011, on behalf of the British Society of Gastroenterology and Bolton NHS Foundation Trust, I published the QIPP, entitled "Alcohol Care Teams: to reduce acute hospital admissions and improve quality of care". This is on the NHS Evidence website. In 2012, it has been updated to include the latest evidence-base for "Alcohol Care Teams".

**Dr Myles Nelson**  
Clinical Director for Medical Diagnostic Specialties

Dr Myles Nelson was appointed to the Northern Health & Social Care Trust in 2001 and is presently the Clinical Director for Medical Diagnostic Specialties since 2004. He attended Queens University of Belfast and trained at Huss and East Yorkshire Radiology Training Scheme. Dr. Nelson is the Regional QA Radiology lead for Bowel Cancer Screening Programme and Deputy Radiology Specialty Adviser to CMO. Dr Nelson has published and presented 14 Radiology articles.

**Dr Penny Neild**  
Consultant Gastroenterologist



Dr. Penny Neild MD FRCP is a Gastroenterologist at St. George's Hospital and Honorary Senior Lecturer at St. George's University of London (SGUL). As well as being clinical lead for the intestinal failure service at St. George's Hospital, she has been involved in a number of national roles, particularly related to nutrition education and curriculum development, at both undergraduate and postgraduate level. These include: RCP Nutrition Committee (education liaison rep.). Academy of Medical Royal Colleges intercollegiate group on nutrition (AoMRC ICGN) (education liaison rep.). AoMRC ICGN undergraduate nutrition education group (Chair). BAPEN Medical (education liaison rep). Penny was closely involved in the development of the nutrition component for the 2010

curriculum in Gastroenterology and is currently Chair of the BSG Training Committee.

**Dr Garret Cullen**  
Consultant Gastroenterologist



Dr Garret Cullen is a Consultant Gastroenterologist at St. Vincent's University Hospital in Dublin. He received his medical degree from University College Dublin in Ireland and was subsequently awarded an MD by thesis for research in inflammatory bowel disease (IBD). Having completed gastroenterology training at St. Vincent's University Hospital and Beaumont Hospital, he completed two years of advanced IBD training at Massachusetts General Hospital and Beth Israel Deaconess Medical Center in Boston, MA. Dr. Cullen was subsequently appointed as an attending gastroenterologist at BIDMC and Assistant Professor of Medicine at Harvard Medical School before returning to Dublin to take up his current post. Dr Cullen is involved ongoing clinical research in IBD, focusing on clinical trials in addition to risks and outcomes related to immunosuppression. He has authored a number of peer-reviewed articles, book chapters and reviews in IBD. Dr. Cullen is a Clinical Editor for the IBD Monitor, an author for the IBD section of UpToDate and has served as a reviewer for a number of medical journals including the New England Journal of Medicine, Gut and the American Journal of Gastroenterology.

**Professor Rebecca Fitzgerald**  
Consultant in Gastroenterologist & Oncology



Professor Rebecca Fitzgerald is a tenured Programme Leader at the MRC Cancer Cell Unit, Hutchison-MRC Research Centre, Cambridge and Honorary Consultant in Gastroenterology and Oncology, Addenbrooke's Hospital Cambridge. She graduated from Cambridge University in 1992, performed a research degree at Stanford University, California (1995-1997) and then undertook specialist clinical training and postdoctoral research at Barts and The London Hospitals (1997-2001) before moving to her current position in Cambridge. The focus of her research is to improve methods for early detection of oesophageal cancer through better understanding of the molecular pathogenesis. Rebecca was awarded the prestigious Westminster medal and prize for her first proof of concept work on the Cytosponge and associated assays for diagnosing Barrett's oesophagus in 2004 and this received an NHS Innovation prize in 2011. In 2013 Rebecca was awarded an NIHR Research Professorship to facilitate translational research for patient benefit. In recognition of her work she has given the Goulstonian Lecturer at the Royal College of Physicians and was awarded the Sir Francis Avery Jones Medal from the British Society of Gastroenterology. Rebecca enjoys teaching and communicating science to the public. She directs studies for medical students at Trinity College Cambridge and is a Fellow of the Institute for Learning and Teaching. She has a wealth of lecturing experience including radio broadcasts for BBC Radio 4 and ABC Radio Australia, Health of the Nation. Rebecca is committed to bringing research advances into clinical practice and inspiring other researchers to do likewise.

[http://www.hutchison-mrc.cam.ac.uk/Research/Rebecca\\_Fitzgerald/index.html](http://www.hutchison-mrc.cam.ac.uk/Research/Rebecca_Fitzgerald/index.html)



**Professor Colm O'Morain**  
Consultant Gastroenterologist

Professor Colm O'Morain graduated from University College Dublin and received his post-graduate training in Dublin, Nice, London and New York.



He is the foundation Professor of Medicine at Tallaght Hospital, Trinity College Dublin. He was elected Dean of the Faculty of Health Sciences at Trinity College from 2007 – 2012. He has held many positions of authority in National, European and World Organisations most notably President of the Irish Society of Gastroenterology between 2000 – 2004, President of the European National Societies of Gastroenterology 1997 – 2000.

He is President of the United European Gastroenterology since 2011.

His research interests are in *Helicobacter pylori*, Inflammatory Bowel Disease and Colorectal Cancer Screening

**Mr Roy Maxwell**

Consultant colorectal surgeon at Royal Victoria Hospital, Belfast.



**Dr Bjorn Joakim Rembacken**  
Consultant Gastroenterologist  
and Endoscopist

The General Infirmary, Leeds, UK

Bjorn Rembacken was born in Sweden and qualified from Leicester University in 1987. He undertook his postgraduate education in Leicester and in Leeds. His MD was dedicated to inflammatory bowel disease. Dr Rembacken was appointed Consultant Gastroenterologist, Honorary Lecturer at Leeds University and Clinical Lead for Endoscopy in Leeds in 2005. Although his MD was entitled "The role of *Escherichia coli* in inflammatory bowel disease", his heart was always in endoscopy!



Dr Rembacken has a particular interest in therapeutic endoscopy including EMR and ESD techniques.

**Positions**

- BSG endoscopy subcommittee and research committee
- BSG Information subcommittee
- European Society of Gastrointestinal Endoscopy board (ESGE)
- World Association of Digestive Endoscopy (OMED) - MST working group
- Online Learning in Gastroenterology (OLGa) - Editor

**Mr Kouros Khosraviani**

Consultant Colorectal Surgeon

Consultant General and Colorectal Surgeon at Royal Group of Hospitals since 2001, I am presently head of school of Surgery in Northern Ireland since 2011, and member of the confederation of postgraduate surgical leads for United Kingdom.

**Professor Brian Johnston**  
Consultant Gastroenterologist

Professor Brian Johnston is a consultant gastroenterologist in the Belfast Trust where he looks after the Gastrointestinal Physiology Unit.



**Dr Gavin Harewood**  
Secretary ISG  
Consultant Gastroenterologist  
Beaumont Hospital, Dublin

Dr Gavin Harewood is a medical graduate of National University of Ireland, Galway. Following completion of his general medical training, he moved to Rochester Minnesota where he completed a Fellowship in Gastroenterology and Hepatology along with a Masters Degree in Clinical Research in the Mayo Clinic.



He was subsequently appointed as a Consultant Gastroenterologist in the Mayo Clinic and developed a subspecialty interest in endoscopic ultrasound, health economics and clinical outcomes research. In 2006, he was appointed to his current Consultant post in Beaumont Hospital where he leads endoscopic ultrasound activities and serves as the lead Clinical Trainer in the Endoscopy Department. He also serves as the Secretary for the Irish Society of Gastroenterology. In 2009, Dr Harewood completed a MBA Degree in Health Economics through the UCD Smurfit School of Business. He has authored more than 100 publications in the peer-reviewed medical literature, many dealing with the importance of resource utilisation and economics in healthcare.

**Dr Neil McDougall**  
Consultant Gastroenterologist  
and Hepatologist

Dr Neil McDougall is a Consultant Gastroenterologist and Hepatologist in the Liver Unit, Royal Victoria Hospital, Belfast. He graduated from Queens University Belfast in 1989 and completed specialist training in Northern Ireland before spending time in Royal Perth Hospital, Australia and the Liver Transplant Unit at Kings. His main clinical interests are liver transplantation, viral hepatitis and therapeutic endoscopy/ERCP for hepatobiliary disease. Along with 2 colleagues and a very supportive team he helps provide a regional hepatology service for Northern Ireland. He is currently working with various groups to help improve alcohol services in NI. Hobbies include cycling, photography and learning to play golf left handed (to give his colleagues a sporting chance!).



BSG ANNUAL MEETING  
24 - 27 JUNE 2013



BRITISH SOCIETY OF  
GASTROENTEROLOGY

SCOTTISH EXHIBITION & CONFERENCE CENTRE, GLASGOW

Join us at BSG 2013 at the **SECC Glasgow, UK**. BSG 2013 is a multidisciplinary meeting covering all aspects of medical and surgical gastroenterology and hepatology with cutting edge clinical and basic science research. We hope to see you there!



### The programme features:

- Medical and Surgical Management of Inflammatory Bowel Disease
- Cutting edge endoscopic sessions
- Barrett's oesophagus guidelines
- Interactive case based education day
- ECCO at BSG joint symposium
- Management of IgC4 disease
- Advances in coeliac disease
- Clinical trials symposium
- Best of UEGW and DDW

**Register for the meeting now!**

For further information on the BSG 2013 meeting please visit [www.bsg2013.org.uk](http://www.bsg2013.org.uk)

Follow us on Twitter @2013BSG





**Oral Presentations – BIG Meeting 2013**

Ref:	Abstract No	Author(s)	Abstract Title	Day	Time
1	13B125	Mr Fran Quilty	The Use of Fluorescent Bile Acids to Characterise Uptake in Oesophageal Cells	Thurs	9.40
2	13B221	Mr Bassel Al-Alao	Survival, Recurrence and Prognostic Factors in Surgically Resected Esophageal Cancer	Thurs	9.50
4	13B159	Prof Diarmuid O'Donoghue	Colon Targeted, Low Systemic Absorption Soluble Cyclosporin in Ulcerative Colitis	Thurs	11.40
5	13B115	Ms Hwai Hiew	Efficacy Of High And Low Dose Oral Vitamin D Replacement Therapy In Inflammatory Bowel Disease (IBD): Single Centre Cohort	Thurs	12.30
6	13B127	Dr Ailín Rogers	Prognostic significance of tumor budding in rectal cancer biopsies prior to neoadjuvant therapy	Thurs	14.20
7	13B123	Dr Karen Boland	Targeting the 19S proteasomal subunit, Rpt4, in colon cancer cells induces cell death and reduces cellular proliferation in vitro and in vivo	Thurs	15.00
8	13B112	Dr. Orla Craig	A pilot study on the introduction of a low FODMAP diet in a subgroup of symptomatic IBS patients referred by the gastroenterology service in an Irish tertiary referral centre	Thurs	16.10
9	13B163	Dr Philip Hall	Thiopurine Metabolites In The Management Of Patients With Inflammatory Bowel Disease: A Single Centre Experience Of 100 Samples	Thurs	16.35
17 page 23	13B101	Dr Judith Storm	Accuracy of Endoscopic Ultrasound in predicting early oesophageal neoplasms	Fri	9.40
11	13B210	Dr. Jun Liang Chin	Homozygosity For HLA-C2 Alleles Is Negatively Associated With Treatment Response With Pegylated Interferon-alpha And Ribavirin In Hepatitis C Genotype 1 Infected Individuals	Fri	10.30
3 page 15	13B117	Dr Helen Coleman	Symptoms and endoscopic features at Barrett's oesophagus diagnosis: implications for neoplastic progression risk	Fri	11.35
87 page 54	13B193	Dr Anne-Marie Byrne	Dysregulation of the protein secretory pathway in oesophageal cancer progression	Fri	12.05
14 page 21	13B120	Dr Leanne Stratton	Transarterial Chemoembolisation For The Treatment Of Hepatocellular Cancer In Northern Ireland: Outcomes From A Regional Referral Centre	Fri	14.20
15 page 21	13B119	Dr Syed Muhammad Ali	To Evaluate The Safety And Outcomes Of ESD And Hybrid ESD For Large Sessile Colorectal Polyps Including Procedural Complications And Recurrence Rate	Fri	15.05

# It's about confidence

## Hospira is one of the major companies producing and marketing biologics globally

With over 14,000 employees in 70 countries Hospira Biologics is built on strong foundations of excellence in innovation, service and support.

Global biologics producer – built on foundations of excellence

## Experienced manufacturer of biologics

Hospira Biologics use their extensive biologics expertise to manufacture their marketed products both in their own facilities and through rigorously evaluated manufacturing partners.

Extensive biologics manufacturing expertise

## Proven efficacy and safety

We work hard to ensure our products not only meet stringent efficacy and safety requirements, but also offer the practical features you find useful.

Proven efficacy and safety combined with a range of additional benefits

## Strong heritage of delivering more

Hospira is a global company with a strong heritage of over 70 years, with access to the resources and skills needed to harness the very latest technological advances in biologics development.

Our philosophy is simply to deliver more in everything we do



### **ABSTRACT 1 (13B125) ORAL PRESENTATION**

**Title of Paper:** The Use of Fluorescent Bile Acids to Characterise Uptake in Oesophageal Cells

**Author(s):** F Quilty, F Majer, A Long, J Gilmer

**Department(s)/Institution(s):** Department of Clinical Medicine, School of Pharmacy

**Introduction:** Bile acid presence in the refluxate has been implicated in the development of Barrett's oesophagus and oesophageal adenocarcinoma. However the uptake and distribution of bile acids in the normal esophageal epithelium has not been properly characterised. The role of deoxycholic acid (DCA) in this context is especially important to understand.

**Aims/Background:** To study the uptake and distribution of bile acids in normal esophageal cell lines using the fluorescent analogs. To compare the uptake of free bile acids versus conjugated bile acids.

To study the uptake of bile acids in cells exposed in a pulsative manner similar to GORD.

To characterize this mode of transport of both the free bile acids and the conjugated bile acid.

**Method:** Bile acids analogs (10mg) (3mg dansyl DCA and 3mg dansyl TDCA) were added to a chamber slide of Het1A cells and the images were obtained using a 63x objective on a Zeiss laser scanning confocal microscope. 3mg NBD DCA was used to compare the transport of a different fluorescent bile acid and determine whether the fluorescent component affected the bile acid.

#### **Transport Experiment**

Fluorescent bile acid (10  $\mu$ M) was added to each well of a 48 well plate and left for 30 min. The supernatant was removed and the cells were washed twice with PBS. Equal volume of lysis buffer was added to the well and left for 30 min. This was removed and both the lysate and supernatant were run through HPLC and the fluorescent bile acid was quantified from the chromatogram.

**Results:** Fluorescent bile acids can rapidly enter epithelial cells in the oesophagus and achieve high concentration. The uptake of DCA is a mixture of active and passive transport that doesn't follow Michaelis Menten kinetics.

TDCA is passively transported into the cells with a decrease in transport from normal cells to Barrett's to cancer. Bile acids accumulate to high concentration intracellularly when cells are repeatedly exposed to them at low concentrations as happens in gastroesophageal reflux disease.

There is a proposed novel new mechanism of bile acid transport into epithelial cells via endocytosis through the caveolae which is influenced by EGFR.

**Conclusion:** In the context of the progression from normal squamous epithelial cells to a more dysplastic morphology, bile acids have been shown to play an important role. The ease of bile acid transport and potential to accumulate in high concentrations shown in this study outline the possible long term consequences of GORD.

### **ABSTRACT 2 (13B221) ORAL PRESENTATION**

**Title of Paper:** Survival, Recurrence and Prognostic Factors in Surgically Resected Esophageal Cancer

**Author(s):** Bassel Al-Alao, Haralabos Parissis, Igor J. Rychlik, Alastair Graham, and Jim McGuigan

**Department(s)/Institution(s):** Department Of Cardiothoracic Surgery - Royal Victoria Hospital - Belfast - United Kingdom

**Introduction:** Esophageal cancer is one of the most malignant tumors, with a dismal prognosis in spite of recent advances in early diagnosis, imaging modalities and current neo-adjuvant therapy. These patients need to be stratified according to prognostic variables for precise identification of high-risk groups.

**Aims/Background:** We reviewed our experience in surgically treated esophageal cancer and explored factors influencing overall survival (OS) and Progression free survival (PFS).

**Method:** One hundred and sixty nine patients with esophageal carcinoma were uniformly treated with curative intent between 2005 and 2010. Results and prognostic factors were analyzed by univariate and multivariate analyses.

**Results:** Ninety-six patients (57%) survived at end of follow up. Median OS was 52 months and a 5-years OS rate was 50%. Median follow up for the whole cohort was 25 months (0 – 79). Fifty patients (30%) developed recurrence at end of follow up. Median PFS was 33 months and 5-years PFS rate was 20%.

Complete resection rate R0 was achievable in 113 patients (67%), R1 in 24 (25%) and R2 in 15 (9%). Adenocarcinoma was the commonest histology type in 109 patients (65%). The majority were males 126 (75%) and median age of 65(28 – 85) years. Depths of invasion were T1 in 37(22%), T2 in 36(21%), T3 in 76 (45%) and Tx in 20 (12%) patients. Gastric serosal involvement was positive in 36 (21%) patients, and lymphatic space invasion recorded in 68 (40%). Lymph nodes involvement was N0 in 100 (60%) patients.

Independent prognostic factors for OS determined by multivariate analysis were: recurrence of tumor; odd ratio (OR) = 3.5 (95% CI 1.8 – 6.5; p<0.001), nodal involvement (N1 vs. N0); OR = 2 (95% CI 1.1 – 3.8; p<0.05) and performance status (I vs. 0); OR = 2.1 (95% CI 1.2 – 3.8; p<0.01). Adjuvant chemotherapy use; OR = 0.47 (95% CI 0.29 – 0.76; p<0.001) was the only independent predictive factor for prolonged PFS.

**Conclusion:** Tumor recurrence and lymph involvement after resection plays an important prognostic role in esophageal cancer. Adjuvant chemotherapy extends disease free but not overall survival.

### **ABSTRACT 3 (13B117) ORAL PRESENTATION**

**Title of Paper:** Symptoms and endoscopic features at Barrett's oesophagus diagnosis: implications for neoplastic progression risk

**Author(s):** Helen G Coleman<sup>1\*</sup>, Shivaram Bhat<sup>1\*</sup>, Liam J Murray<sup>1</sup>, Damian McManus<sup>2</sup>, Anna T Gavin<sup>3</sup> and Brian T Johnston<sup>2</sup>.

**Department(s)/Institution(s):** <sup>1</sup>Cancer Epidemiology & Health Services Research Group, Centre for Public Health, Queen's University Belfast. <sup>2</sup>Belfast Health & Social Care Trust, Belfast. <sup>3</sup>Northern Ireland Cancer Registry

**Introduction:** Risk stratification of Barrett's oesophagus (BO) patients based on clinical and endoscopic features may help to optimise surveillance for early detection/prevention of oesophageal adenocarcinoma (OAC) development.

**Aims/Background:** The aim of this study was to investigate patient symptoms and endoscopic features at index endoscopy and risk of neoplastic progression in a large population-based cohort of BO patients.

**Method:** A retrospective review of hospital records relating to



incident BO diagnosis was conducted in a subset of patients with specialised intestinal metaplasia from the Northern Ireland BO register. Patients were matched to the Northern Ireland Cancer Registry to identify progressors to adenocarcinoma of the oesophagus or oesophageal high grade dysplasia (HGD). Cox proportional hazards models were applied to evaluate the association between symptoms, endoscopic features and neoplastic progression risk.

**Results:** During 27,997 person-years of follow-up, 128 of 3,148 BO patients progressed to develop HGD or adenocarcinoma of the oesophagus. Ulceration within the Barrett's segment, but not elsewhere in the oesophagus, was associated with an increased risk of progression (HR 1.72; 95%CI: 1.08-2.76). Long segment BO carried a significant 7-fold increased risk of progression compared with short segment BO. When considering only cancer outcomes, a reported weight loss of >5kg at incident BO was predictive of a doubled risk of progression to cancer, even up to 5 years post-BO diagnosis. Conversely, experiencing reflux symptoms was associated with a decreased risk of cancer progression (HR 0.62; 95%CI: 0.41-0.95).

**Conclusion:** BO patients presenting with a Barrett's ulcer, substantial weight loss or long segment BO have an increased risk of progressing to HGD/OAC and should be considered for more frequent surveillance.

#### ABSTRACT 4 (13B159) ORAL PRESENTATION

**Title of Paper:** Colon Targeted, Low Systemic Absorption Soluble Cyclosporin in Ulcerative Colitis

**Author(s):** DP O'Donoghue, S Bloom and I Coulter

**Department(s)/Institution(s):** ISG;BSG;Sigmoid Pharma.

**Introduction:** Cyclosporin (CsA) is effective as rescue therapy in approximately 70-80% of patients with severe UC in whom surgery is contemplated. A recent study shows CsA to be as effective as infliximab in inducing remission in UC. However its use is limited by concerns re renal and neurological toxicity and difficulty in measuring drug levels. Thus, a form of CsA that is released predominantly in the colon and exhibits low systemic absorption might be of considerable benefit to UC patients.

CyCol® is a delayed release oral formulation of CsA that targets release into the colon. This compound has been shown both to prevent and heal colitis in the DSS and IL-10 knock out animal models and has no appreciable absorption in human volunteers.

**Aims/Background:** Thus, the aim of this double blind placebo controlled multicentre Irish and UK study was to evaluate the efficacy and safety of CyCol in patients with mild or moderate UC, as defined by a score of 4-10 on a modified DAI.

**Method:** The study period was 4 weeks. Patients on 5ASA compounds, immunomodulatory agents or low dose steroids (<10 mgs prednisolone) were included provided their dosages were stable for >8 weeks. Patients were excluded if they had previously failed CsA or had received biologic agents within the past 8 weeks. The primary objective of this study was remission, defined as a DAI of <2 with no score >1. The secondary objectives of this study were response (defined as a reduction in DAI of <3), safety and efficacy of CyCol on the mucosal and histological healing.

**Results:** 118 patients were randomised (154 screened) to receive 75mgs CyCol or placebo daily. More patients on the active ingredient achieved remission (13.6%) than placebo (6.3%) but this was not significant (p=0.22). Likewise, 30.4% of patients on active

treatment responded versus 18.8% on placebo (p=0.35). There was no appreciable difference between groups as regards mucosal and histological healing.

A post hoc analysis showed a significant response benefit for CyCol in those patients who were not taking immunomodulatory drugs. Adverse events (AE) were common in both arms and almost invariably related to disease activity. No AE was attributable to CyCol and ciclosporin levels in blood were undetectable.

**Conclusion:** While CyCol® at the dose employed in this study over a 4 week period had numerically better results than did placebo, the results were not statistically superior. Further studies in moderate-severe patients are planned, with FDA approval, using larger doses of CyCol in a tighter patient population over a longer duration.

#### References

Garcia-Lopez S, Gomollon-Garcia F, Perez-Gisbert J. Cyclosporine in the treatment of severe attack of ulcerative colitis: a systematic review. *Gastroenterol Hepatol* 2005; 28: 607-14.

Laharie D et al. Cyclosporin versus infliximab in patients with severe ulcerative colitis refractory to intravenous steroids: a parallel, open-label randomised controlled trial. *Lancet*. 2012 Dec 1;380(9857):1909-15.

#### ABSTRACT 5 (13B115) ORAL PRESENTATION

**Title of Paper:** Efficacy Of High And Low Dose Oral Vitamin D Replacement Therapy In Inflammatory Bowel Disease (IBD): Single Centre Cohort

**Author(s):** HJ. Hiew, M.Naghbi, J. Wu, J. Saunders, F. Cummings, TR. Smith

**Department(s)/Institution(s):**Department of Gastroenterology, University Hospital Southampton, Southampton, Hampshire

**Introduction:** IBD patients are at risk of micronutrient deficiency including vitamin D. There is evidence that vitamin D deficiency is associated with poor disease activity.

**Aims/Background:** To determine the vitamin D status and evaluate the effectiveness of oral vitamin D treatment in a sub-set of IBD patients at a University Hospital.

**Method:** All IBD patients with serum vitamin D levels measured in 2011 were identified. Vitamin D deficiency was determined as plasma 25-hydroxyvitamin D levels <52 nmol/L. Oral vitamin D treatment was classified as 'low dose' when patients prescribed daily 800 units of vitamin D2/D3 and 'high dose' when given either 100'000 units once or 50'000 units weekly for 6 weeks. Treatment response was assessed within 6 months of treatment.

**Results:** 205 IBD patients had their plasma vitamin D measured. 95 (46%) were found to be vitamin D deficient with no significant difference in the prevalence between Crohn's disease (CD) and ulcerative colitis (UC) patients (p=0.449). 32 treatment episodes had follow up measurement. Those who received 'high dose' regimen demonstrated a 150% increase in plasma vitamin D compared to a 34% increase in those put on 'low dose' regimen (p=0.001). There was no significant difference in treatment response between CD and UC patients (p=0.874) (table 1).



	Subject	Vitamin D Deficient (%)	Treated orally with Vitamin D supplement	% response in plasma vitamin D	Median time to relapse	% response in plasma vitamin D	Time to relapse	% response in plasma vitamin D
All patients	185	55 (30)	22	115	24	120	11	20
UC	76	18 (24)	1	100	20	100	0	0
CD	109	37 (34)	21	116	19	120	11	20
UC vs CD	76 vs 109	18 (24) vs 37 (34)	1 vs 21	100 vs 116	20 vs 19	100 vs 120	0 vs 11	0 vs 20
UC vs CD	76 vs 109	18 (24) vs 37 (34)	1 vs 21	100 vs 116	20 vs 19	100 vs 120	0 vs 11	0 vs 20
UC vs CD	76 vs 109	18 (24) vs 37 (34)	1 vs 21	100 vs 116	20 vs 19	100 vs 120	0 vs 11	0 vs 20
UC vs CD	76 vs 109	18 (24) vs 37 (34)	1 vs 21	100 vs 116	20 vs 19	100 vs 120	0 vs 11	0 vs 20

Table 1 – Plasma vitamin D response to differing doses of oral treatment in CD and UC

**Conclusion:** Oral vitamin D replacement is an effective treatment for vitamin D deficiency in IBD patients and appears to be dose responsive, in both UC and CD patients. The optimal dose of oral vitamin D supplementation is yet to be determined, but higher doses are significantly more effective.

### ABSTRACT 6 (13B127) ORAL PRESENTATION

**Title of Paper:** Prognostic significance of tumor budding in rectal cancer biopsies prior to neoadjuvant therapy

**Author(s):** Ailín C Rogers, David Gibbons, Ann M Hanly, John MP Hyland, P Ronan O’Connell, Desmond C Winter, Kieran D Sheahan.

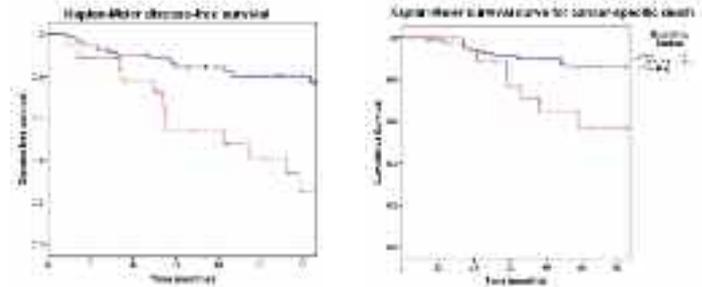
**Department(s)/Institution(s):** Centre for Colorectal Disease

**Introduction:** Tumour budding is an increasingly important prognostic feature for pathologists to recognise. The phenomenon has been associated with a negative prognosis in rectal cancer when identified in surgical resection specimens.

**Aims/Background:** The aim of this study was to correlate intratumoural budding (ITB) in pre-treatment rectal cancer biopsies with pathological response to neoadjuvant chemoradiotherapy (nCRT) and with long-term outcome.

**Method:** Data from a prospectively maintained database was acquired for patients with locally advanced rectal cancer who underwent nCRT. Pre-treatment rectal biopsies were retrospectively reviewed for evidence of ITB. Multivariate logistic regression was used to identify factors contributing to cancer-specific death, expressed as hazard ratios (HRs) with 95 per cent confidence intervals (CIs).

**Results:** Of 185 patients with locally advanced rectal cancer, 89 patients met the eligibility criteria, of whom 18 (20.2%) exhibited budding in a pre-treatment tumour biopsy. ITB predicted a poor pathological response to nCRT (higher ypT stage,  $p=0.032$ ; lymph node involvement,  $p=0.018$ ; lymphovascular invasion,  $p=0.004$ ; and residual poorly differentiated tumours,  $p<0.001$ ). No patients with ITB exhibited a TRG 1 or complete pathological response, providing 100% specificity and positive predictive value for non-response to nCRT. ITB was associated with a lower disease-free 5-year survival rate (33.3% vs. 77.5%,  $p<0.001$ ), cancer-specific 5-year survival rate (61.1% vs. 87.3%,  $p=0.021$ ) and predicted cancer-specific death (HR 3.51, 95% CI 1.03 - 11.93,  $p=0.040$ ).



**Figure 1. Kaplan-Meier survival curve relating to budding status in pre-treatment biopsy.** Patients with tumor budding in initial biopsy have a significantly lower five-year disease-free survival rate (33.33% vs. 77.46%,  $p<0.001$ ) and lower cancer-specific survival rate (61.11% vs. 87.32%,  $p=0.021$ ).

**Conclusion:** ITB at diagnosis of rectal cancer identifies those who will poorly respond to nCRT and those with a poor prognosis.

### ABSTRACT 7 (13B123) ORAL PRESENTATION

**Title of Paper:** Targeting the 19S proteasomal subunit, Rpt4, in colon cancer cells induces cell death and reduces cellular proliferation in vitro and in vivo

**Author(s):** Karen Boland, Niamh McCawley, Deborah Ryan, Suzanne Hector, Elaine Kay, Deborah McNamara, Frank Murray, Caoimhín G. Concannon and Jochen H.M. Prehn

**Department(s)/Institution(s):** Centre for Systems Medicine, RCSI & Department of Gastroenterology and Hepatology, Beaumont Hospital, Dublin, Ireland

**Introduction:** Colorectal cancer (CRC) is the third leading cause of cancer related deaths in the US with half a million deaths worldwide. In recent years much research has centered on the ubiquitin-proteasome pathway (UPP), responsible for the degradation of the majority of intracellular proteins, as a therapeutic target for cancer treatment, with deregulation of the UPP frequently observed in a number of malignancies. Indeed, malignant cells have higher vulnerability to the cytotoxic effects of proteasomal inhibition through their greater dependence on proliferative and anti-apoptotic pathways.

**Aims/Background:** Here we investigated the expression of the 19S proteasome subunit, Rpt4, one of six ATPases of the 19S regulatory subunit involved in the recognition of proteasome substrates and their unfolding and entry into the catalytic core, in tumour samples derived from patients with CRC.

**Results:** Western blotting and immunohistochemical staining of tissue microarrays demonstrated increased expression of Rpt4 in tumour tissue compared to patient matched normal mucosa. Inhibition of Rpt4 expression using siRNA in HCT-116 colorectal cancer cells showed that inhibition of Rpt4 expression leads to reduced cellular proliferation, increased apoptosis and reduced clonogenic survival in a p53 independent manner. CRL 1807 non-transformed colonocytes remained largely unaffected suggesting that tumour cells may be selectively sensitive to Rpt4 inhibition. Moreover, chemotherapy resistant cell lines were demonstrated to be sensitive to the effects of Rpt4 inhibition. In addition Rpt4 inhibition acted in concert with 5-FU based chemotherapeutic agents by enhancing levels of induced cell death. Interestingly, Rpt4 inhibition led to decreased proteolytic activity of the proteasome. Finally, we could demonstrate that decreased Rpt4 expression could inhibit tumour growth in vivo. HCT-116 luc2 ULTRA (Caliper LS) colorectal cancer cells transfected ex vivo with Rpt4 siRNA and subcutaneously



implanted in Balb/c nu-nu immunodeficient mice had significantly increased survival compared to controls. In the same tumour model a cell penetrating peptide based microparticle delivery system administering Rpt4 siRNA via intratumoural injection, demonstrated that in vivo gene silencing of Rpt4 using 0.1 mg/kg siRNA led to reduced tumour volume growth and statistically significant improvement (Log-rank Mantel Cox Test) in survival in these mice.

**Conclusion:** Taken together our data suggest the specific inhibition of Rpt4 function may represent a novel therapeutic target for the treatment of CRC.

### ABSTRACT 8 (13B112) ORAL PRESENTATION

**Title of Paper:** A pilot study on the introduction of a low FODMAP diet in a subgroup of symptomatic IBS patients referred by the gastroenterology service in an Irish tertiary referral centre

**Author(s):** C. O'Meara, O.F. Craig, N. Mahmud, S. McKiernan, F. Maccarthy

**Department(s)/Institution(s):** Department of Gastroenterology and Department of Clinical Nutrition, St James Hospital, James Street, Dublin 8, Ireland

**Introduction:** Patients with IBS frequently relate symptom exacerbation to food ingestion. However there is little evidence to support the role of food allergy in the pathogenesis of IBS. Dietary restriction of short-chain poorly absorbed carbohydrates (FODMAPs – Fermentable Oligo-, Di-, Mono-saccharides and Polyols) has recently been shown to reduce symptoms of IBS. Experience with the low FODMAP diet for the management of IBS in the Irish setting is limited

**Aims/Background:** To determine the benefit of a low FODMAP diet in an Irish population of symptomatic IBS patients

**Method:** 27 symptomatic IBS patients referred from the gastroenterology service for dietary intervention were sequentially recruited. Baseline IBS symptoms were evaluated using a modified validated IBS symptom score and detailed nutritional assessment was carried out. Patients were screened to determine if lactose intolerance was present. Instruction on avoidance of dietary FODMAPs and individually tailored nutritional advice was given. IBS symptoms were re-evaluated at 8 weeks and compliance with the diet assessed. Compliant, symptomatically improved patients were instructed regarding a food reintroduction programme

**Results:** 14/27 patients have been re-evaluated to date. 13/14 had satisfactory relief of global IBS symptoms post FODMAP restriction versus 1/14 pre restriction. 10/12 patients reported an improvement in abdominal pain. 13/14 an improvement in bloating. 11/12 an improvement in flatulence. 10/13 an improvement in faecal urgency

**Conclusion:** Introduction of a low FODMAP diet was feasible in the Irish outpatient setting and provided global relief of IBS symptoms in this cohort as well as improvements in abdominal pain, bloating, flatulence and faecal urgency.

### ABSTRACT 9 (13B163) ORAL PRESENTATION

**Title of Paper:** Thiopurine Metabolites In The Management Of Patients With Inflammatory Bowel Disease: A Single Centre Experience Of 100 Samples

**Author(s):** PSJ Hall1, CB Ferguson1, C Imrie2, M Lynch3, A Neely3, G Morrison1

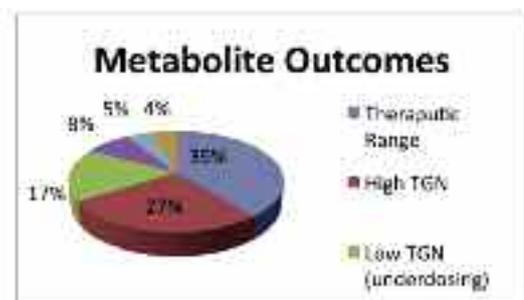
**Department(s)/Institution(s):** Department of Gastroenterology1, Department of Paediatrics2 and Department of Biochemistry3, Altnagelvin Area Hospital, Londonderry, Northern Ireland

**Introduction:** Thiopurine drugs are metabolised by a complex network of enzymes, each with individual genetic variability. Measurement of active metabolites, 6-thioguanine nucleotide (6-TGN) and 6-methylmercaptapurine nucleotide (6-MMPN), can have a role in optimising therapy for inflammatory bowel disease (IBD) patients.1

**Aims/Background:** To evaluate how testing thiopurine metabolite(TPM) levels affects the management of patients with IBD receiving azathioprine or 6-mercaptopurine.

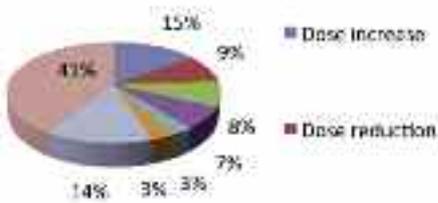
**Method:** A retrospective laboratory database search for TPM levels. The results were analysed in conjunction with outpatient letters and concurrent laboratory data. The primary outcome: how had measuring TPM levels affected patient management? Secondary objective: to combine demographic and test result data to provide information on the patterns of thiopurine drug use in this population.

**Results:** One hundred samples from 78 patients. 45% of samples led directly to changes in patient management. 15% led to dose escalation whilst 9% required dose reduction. The results of 8% led to the use of biological therapy. Treatment was stopped due to potential toxicity in 3%. In 8% of samples, patients were found to be poorly compliant with thiopurine treatment. 3 patients were completely non-compliant. In a sub-group of patients with low Thiopurine S-methyltransferase (TPMT), 78% had high levels of TGN despite the use of low drug doses.





### Change to management



**Conclusion:** Management of patients with BD on thiopurines. They can reveal non-compliance and lead to dose alterations, treatment escalations and the prevention of drug toxicity. We would support the wider use of TPM testing in these patient groups.

### ABSTRACT 10 (13B144) ORAL PRESENTATION

**Title of Paper:** Curcumin, Anti-Oxidant, and Pioglitazone Therapy with Inclusion of Vitamin E In Non Alcoholic Fatty Liver Disease-A Randomized open label placebo controlled clinical prospective Trial (CAPTIVE)

**Author(s):** P Patrick Basu MD, MRCP, FACG, AGAF1,2, N J Shah MD3, R Siriki MD2, K Mittimani MD2, S Farhat MD2, L Ang MD2, S Win MD2, Md A Rahman MD2, S Atluri MD2

**Department(s)/Institution(s):** 1Columbia University College of Physicians and Surgeons, NY; 2 NSLIJHS/ Hofstra North Shore LIJ School of Medicine, NY, 3 James J. Peters VA Medical Center, Mount Sinai School of Medicine, NY

**Introduction:** NAFLD is a global clinical challenge which progresses to cirrhosis and liver cancer. Defective transport of free fatty acids and mitochondrial dysfunction lead to explosion of a series of free radicals, apoptosis, up regulated cytokines and fibrogenesis ultimately causing cirrhosis and cancer. Curcumin is a pan-antioxidant with anti-inflammatory, anti-apoptotic, anti-microbial, and anti-fibrogenic properties.

**Aims/Background:** This study evaluates the role of curcumin in NAFLD to progression of NASH.

**Method:** Eighty patients (n=80) with mean BMI 29% were recruited, NAFLD score 0.66, NASH fibrotic score 0.33, HOMA IR 3.8, ALT 58, LDLc 143, HDLc 29, Triglyceride 186 and Adipokines (Leptin, Adiponectin, Retinol Binding Proteins) were divided into Group A- (n=20) Pioglitazone 15mg, Group B- (n=20) vitamin E, Group C- (n=20) curcumin (all the three above groups received placebo), and Group D (n=20) vitamin E plus curcumin. Pre and post values (Triglycerides, LDLc, HDLc, ALT, HOMA-IR, TNF-alfa, Leptin, Adiponectin, Retinol Binding Protein, HbA1c, Serum necro-inflammatory NAFLD and NASH fibrotic score were analyzed at 3, 6, and 12 months. Diet and exercise were left unchanged. Daily alcohol content was less than 30 grams. Exclusion; HIV, Medications causing fatty liver including herbal supplements, Lipodystrophy, Overt diabetes mellitus, Pregnancy, hypersensitivity to study medications.

**Results:** Group A- Minimal changes on ALT, HbA1c, HOMA, lipids, no changes in TNF-alfa, adipokines, lipid profile and necro-inflammatory score and/or NASH fibrosis score. Group B and Group C had modest changes in ALT, lipid profile, HbA1c and HOMA; while no changes in adipokines, necro-inflammatory score and fibrotic score. Group D had significant changes in all scores particularly the adipokines and small improvements in fibrotic score. All patients tolerated the medications well.

**Conclusion:** This study postulates the positive effects of Curcumin added to vitamin E in NAFLD subgroups; even preventing NASH with a modest anti-fibrotic effect and improved necroinflammatory score; and impressive changes in adipokines levels. Additive effects of Curcumin with vitamin E has significant effects on serum lipids and insulin sensitivity. Unavailability of Pre and post liver biopsy was the limitation of this study. A large control trial needs to validate.

### ABSTRACT 11 (13B210) ORAL PRESENTATION

**Title of Paper:** Homozygosity For HLA-C2 Alleles Is Negatively Associated With Treatment Response With Pegylated Interferon-alpha And Ribavirin In Hepatitis C Genotype 1 Infected Individuals

**Author(s):** M. Collison<sup>1</sup>, J. L. Chin<sup>2</sup>, A. Abu Shanab<sup>2</sup>, R. Mac Nicholas<sup>2</sup>, J. Connell<sup>1</sup>, M. Carr<sup>1</sup>, W. Hall<sup>1</sup>, P. A. McCormick<sup>2</sup>

**Department(s)/Institution(s):** 1-National Virus Reference Laboratory, University College Dublin, Belfield, Dublin 4. 2-Liver Unit, St Vincent's University Hospital, Dublin 4.

**Introduction:** Standard therapy for chronic hepatitis C virus (HCV) infection consists of pegylated interferon-γ and ribavirin. This treatment is only effective in 40-50% of patients with HCV genotype 1 (G1) infections. The IL28B single nucleotide polymorphism (SNP) is well described but other host genetic factors may influence treatment response.

**Aims/Background:** This study investigated associations between host genetic variation and treatment response to standard therapy in HCV genotype 1 and 3 (G3) infected patients. The genetic markers investigated comprised four IL28B SNPs (G1 n=89; G3 n=82): rs12979860, rs8099917, rs4803221, rs7248668; and HLA-C alleles (G1 n=71; G3 n=67): C1/C1, C1/C2 or C2/C2.

**Method:** Nucleic acids were extracted from serum and plasma and SNP typing was performed by allelic discrimination real-time PCR, PCR-SSP and sequencing approaches.

**Results:** For HCV genotype 1 infections, the IL28B SNP rs12979860 was the most significant genetic marker for predicting non-response to treatment, with a positive predictive value of 81.3% in patients homozygous for the T allele. HLA-C2 homozygosity was found to be significantly associated with non-response in genotype 1 infections (p=0.023). 19% (7/37) of non-responders were HLA-C2/C2 homozygotes compared to no patients (0/34) with this genotype who achieved SVR. All HCV genotype 1 patients homozygous for HLA-C2, who did not achieve SVR, were rs12979860 heterozygotes (C/T). For HCV genotype 3 patients, no significant association was observed between HLA-C and non-response to treatment (p=0.09).

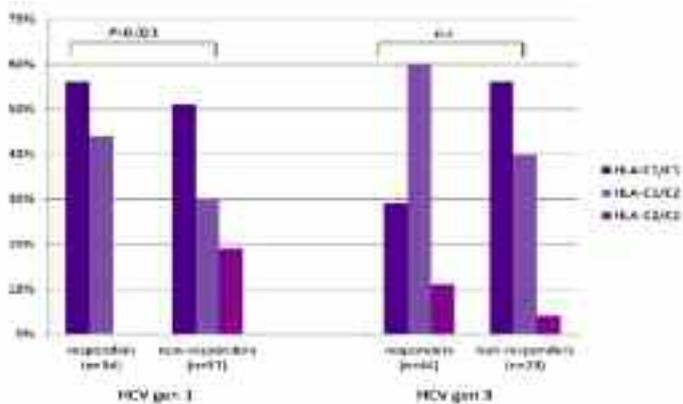
Viral Genotype	Host marker	Reference variant	Risk variant	Specificity	Sensitivity	PPV	NPV
Gen 1	rs12979860	C*	TT	83.5%	30.2%	81.3%	58.0%
		CC	T*	52.2%	83.7%	62.1%	72.4%
	rs4803221	C*	CC	95.7%	14.0%	75.0%	54.3%
		CC	G*	63.0%	65.6%	63.6%	68.0%
	rs8099917	T*	GG	95.7%	14.0%	75.0%	54.3%
		TT	G*	63.0%	67.4%	63.6%	67.4%
rs7248668	G*	AA	95.7%	14.0%	75.0%	54.3%	
	GG	A*	63.0%	65.1%	63.6%	65.1%	
Gen 3	rs12979860	C*	TT	91.2%	4.0%	18.7%	68.6%
		CC	T*	47.4%	62.0%	38.2%	60.2%
	rs4803221	C*	CC	98.2%	0.0%	0.0%	68.1%
		CC	G*	61.4%	64.0%	33.3%	71.4%
	rs8099917	T*	GG	98.2%	0.0%	0.0%	68.1%
		TT	G*	61.4%	64.0%	33.3%	71.4%
rs7248668	G*	AA	98.2%	4.0%	58.0%	70.0%	
	GG	A*	63.2%	64.0%	34.4%	72.0%	



**receiving standard therapy.** Prediction measures were calculated using non-response as the outcome of interest, and each genetic variant as the "test" for non-response. The \* notation refers to all genotypes containing that allele.

Genotype	Response	HLA-C1/C1 homozygous	HLA-C1/C2 heterozygous	HLA-C2/C2 homozygous
HCV genotype 1	Responders	19	15	0
	Non-responders	18	11	7
HCV genotype 3	Responders	13	26	5
	Non-responders	13	9	1

responders



responders versus non-responders

**Conclusion:** A combination of IL28B rs12979860 and HLA-C host genotype may better predict treatment outcomes to standard therapy for HCV genotype 1 infections.

**ABSTRACT 12 (13B146) ORAL PRESENTATION**

**Title of Paper:** Effect of N acetylcysteine (NAC) in hypoxia induced liver injury (HILI) – A Randomized placebo control clinical trial

**Author(s):** P Patrick Basu MD, MRCP, FACG, AGAF1,2, N J Shah MD3, R Siriki MD2, K Mittimani MD2, S Farhat MD2, L Ang MD2, S Win MD2, Md A Rahman MD2, S Atluri MD2

**Department(s)/Institution(s):** 1Columbia University College of Physicians and Surgeons, NY; 2 NSLIJHS/ Hofstra North Shore LIJ School of Medicine, NY, 3 James J. Peters VA Medical Center, Mount Sinai School of Medicine, NY

**Introduction:** HILI is common with a prevalence of 10% in the US. Transient shift of intra hepatic hemodynamic compromise leads to tissue hypoxia and induces hypoxia induced proteins (HIP), heat shock protein 70 and 24 (HSP 24, 70), Endothelial reticular (ER) stress leading to reperfusion injury (RI). Dramatic rise of transaminases is followed by drastic reversal with restoration of perfusion in weeks. In cirrhotics HILI might precipitate acute on chronic liver failure ( ACLF) requiring liver transplantation.

**Aims/Background:** This study evaluated the spontaneous recovery and salvage in HILI utilizing NAC.

**Method:** Sixty patients (n=60) with mean arterial pressure (MAP) < 35% and normal LFT's at base line were recruited. Group A (n=28) chronic liver disease (CLD) [ ALD -11/28 (39%), NASH- 9/28 (32%),

Hepatitis C- 4/28 (14%), hepatitis B- 2/28 (7%), PBC- 1/28 (3%), AIH-1/28 (3%). Group B (n=32) [ Respiratory failure- 12/32 (37%), CHF- 8/32 (25%), CVA- 2/32 (6%), sepsis- 6/32 (19%), post op-4/32 (12%) ]. These were then randomized into Placebo group- A1 (14) and B1 (16) and IV NAC group for 48 hours - A2 (14) and B2 (16). Serum transaminases, bilirubin, INR, creatinine and MELD score at 0, 3rd, 6th, 9th and 12th days with MAP and Modified Sequential Organ Failure Assessment (SOFA) score were calculated. All patients were allowed standard of care (SOC) and resuscitation if required. Exclusions: Organ transplant, Septic shock, hemodialysis, existing malignancy, acute myocardial Infarction, Tylenol injury, acute viral hepatitis and organ trauma burns.

**Results:** In Placebo groups A1, B1: A1 group -[Normalized LFTs- on 3rd day-(7%), 6th day-(21%), 9th day-(36%) and 12th day-(21%). 1/14(7%) died]. B1 CLD group [ Normalized LFTs 3rd day- (19%), 6th (44%), 9th ( 25%) while 2/16 (6%) died of sepsis]. NAC Groups: A2 group [ Normalized LFTs 3rd (57%), 6th day (43%), 9th day (25%) while (7%)-one died ]. Group B2 CLD [ Normalized LFTs- 3rd day- (63%), 6th day- (25%), 9th day 1/16 (6%), one died]

**Conclusion:** This study postulates that i.v. NAC (used in group A2 and B2) has efficient spontaneous recovery and salvage in non-CLD sub group. B2 (63%) > A2 (57%) in day 3, in CLD NAC (A2) > placebo (A1) clinical recovery over placebo at 3rd day, (44%) over (36%) - 6th day. Larger trial need to establish the routine usage of i.v. NAC in HILI.

**ABSTRACT 13 (13B111) ORAL PRESENTATION**

**Title of Paper:** Nutrient sensing in the human gut: Investigation of the co-localization rate between CaSR, T1R1 and GPR43 receptors with satiety peptides in the human antrum, terminal ileum and ascending colon.

**Author(s):** Vasileios Galanakis, Madusha Peiris, Ashley Blackshaw

**Department(s)/Institution(s):**Queen Mary University London

**Introduction:** Increasing evidence from animal studies show that apical nutrient sensing receptors, expressed in gut enteroendocrine cells, play a key role in the release of satiety peptides. Early human studies indicate a similar expression pattern of these receptors and role in peptide release.

**Aims/Background:** In this study the anatomical relationship between amino acid sensing (CaSR), carbohydrate sensing (T1R1), and short chain fatty acid sensing (GPR43) receptors and appetite regulating peptides GLP-1, PYY, 5-HT was investigated in the human gut.

**Method:** Healthy full thickness human gut sections were incubated with primary and fluorescent secondary antibodies and they were viewed under the fluoroscopic microscope to investigate co-localization of the CaSR, T1R1 and GPR43 with the GLP1, PYY and 5HT.

**Results:** The co-localization rate between CaSR and PYY, GLP1 and 5HT was 0%, <1% and 43% in the antrum, 20%, 12% and 82% in the ileum and 26%, 14% and 91% in the colon, respectively. Co-localization of T1R1 and GLP1 was observed only in the antrum and the colon. GPR43 was not expressed.

**Conclusion:** The results suggest a CaSR mediated PYY, GLP1 and 5HT release in the human gut, which could be further expanded to the development of new anti-obesity strategies.

**ABSTRACT 14 (13B120) ORAL PRESENTATION**



**Title of Paper:** Transarterial Chemoembolisation For The Treatment Of Hepatocellular Cancer In Northern Ireland: Outcomes From A Regional Referral Centre

**Author(s):** L Stratton, SK Bhat, WJ Cash, IS Cadden, P Kennedy, PK Ellis, A Collins, A Gavin, NI McDougall

**Department(s)/Institution(s):** Hepatology Unit, Royal Victoria Hospital, Belfast ; Radiology Department, Royal Victoria Hospital, Belfast ; Northern Ireland Cancer Registry

**Introduction:** Transarterial chemoembolisation (TACE) is often used to palliate patients with inoperable hepatocellular cancer (HCC) and may be used as a holding procedure prior to transplantation. All TACE therapy in Northern Ireland (NI) is delivered by a single centre.

**Aims/Background:** To determine the outcomes for patients in NI treated with TACE for HCC since 2006.

**Method:** Patients with HCC diagnosed between 1 January 2006 and 30 November 2011 who underwent TACE in NI were identified. Case records were reviewed and the regional NI cancer registry database used for mortality data.

**Results:** 78 patients (82% male, mean age 66.3 years) with HCC were included. Mean number of treatments was 2.2 (range 1-6). The number treated each year from 2006 was 6, 11, 15, 14, 14 and 18 in 2011.

**Conclusion:** There has been a progressive increase in use of TACE for HCC treatment in NI since 2006. ALD was the most common aetiology. Mortality at 2 years was 67% which compares favourably with published studies.

**ABSTRACT 15 (13B119)**

**ORAL PRESENTATION**

**Title of Paper:** To Evaluate The Safety And Outcomes Of ESD And Hybrid ESD For Large Sessile Colorectal Polyps Including Procedural Complications And Recurrence Rate

**Author(s):** S. M. Ali, N. Radhakrishnan, R. Hammonds, R. George

**Department(s)/Institution(s):** Gastroenterology, Pennine Acute Hospitals NHS Trust, Manchester, United Kingdom

**Introduction:** The purpose of ESD and Hybrid ESD (circumferential excision and snaring) is to obtain en bloc specimen. Margins are checked for residual tissue and APC applied if appropriate

**Method:** Single endoscopist using ESD and Hybrid ESD (H-ESD) technique was retrospectively audited from April 2004 to August 2012. Service evaluation data of 38 patients with large sessile polyps who underwent ESD and Hybrid ESD was reviewed from a cohort of 224 colonoscopies referred for large polyp EMR. All procedures were intended as ESD. NICE recommendations for case selection were followed in 92% cases. Due to challenges in submucosal dissection of the large lesions, piecemeal resection was done after circumferential cutting. First follow-up endoscopy was performed at 3-6 months and the second at 12-14 months.

**Results:** Mean age was 70 with 16 males and 22 females. Mean size of polyp in ESD group was 26mm. Range 15-50mm. Mean size in the H-ESD group was 49mm. Range 20-100mm. Complete resections were achieved in 17 (44%) out of 38 cases. Due to piecemeal resection pathologists were not able to confirm adequacy of excision

in 12 cases. In 9 cases resection was reported incomplete on index procedure.

ESD performed in 13 (34%) cases. Complete resection achieved in 6. Out of 7 incomplete resections in the ESD group, 3 were reported by pathologists as lesion extending to the lateral margin hence incomplete excision. Histology did not comment on margin clearance in 3 ESD. 1 ESD was a sub mucosal lipoma on histology. This was an unintentional ESD for lipoma. Histology: ESD group: TVA with LGD 7, TVA with HGD 5.

H-ESD was performed in 25 (65.7%) cases. Complete resection achieved in 11 cases, incomplete resection in 7 and lateral margin clearance not confirmed in 7 H-ESD cases due to piecemeal resection. Histology: H-ESD group: TVA with LGD 16, TVA with HGD 6 and adenocarcinoma in 2 cases-one's lateral and deep margins were clear and the other was incomplete and referred to MDT

In 4 ESD and 7 H-ESD cases there was minor bleeding controlled endoscopically at the time. 1 delayed post- HESD bleeding required 11 days of hospital stay and 2 units of blood transfusion. 1 retroperitoneal perforation and 1 case of serosal cut managed conservatively with clips and antibiotics. APC performed in 16 (42%) out of 38.

Recurrence was identified in 6 H-ESD cases (15.7%). 5 local recurrences detected at 3 months and 1 local recurrence detected at 24 months. In 13 ESD cases no perforation or recurrence upto 14 months was noted despite 5 histologically incomplete dissections.

**Conclusion:** ESD in bowel is challenging and has a long learning curve. These procedures should be performed by trained endoscopists in accredited units and a national registry should be maintained.

**ABSTRACT 16 (13B100)**

**POSTER PRESENTATION**

**Title of Paper:** The choice to receive sedation in gastroscopy: Is it an informed and satisfactory one?

**Author(s):** Quinn L., Irwin R., Khan I., Waldron R.

**Department(s)/Institution(s):** Surgery, Mayo General Hospital

**Introduction:** Non sedated oesophageogastroduodenoscopy is considered by most endoscopists to be a quick, safe, and well tolerated procedure. However the uptake of sedation in OGDs varies greatly among different populations, as does the content of information leaflets. In Ireland, when not medically indicated, the choice to receive sedation is often decided by the patients themselves according to their preference and understanding.

**Aims/Background:** The objective of this study was to compare post procedure patient satisfaction with sedation choice, and to assess patient understanding and possible influencing factors on how this decision was made.

**Method:** A study of consented gastroscopy day patients at Mayo general hospital, excluding inpatients and those having a colonoscopy on the same day. A closed ended questionnaire was created in order to collect patient data within two days post procedure. This questionnaire contained seven informative statements based on NHS information leaflets created according to British Society of Gastroenterology guidelines.

**Results:** 111 patients were recruited for this study. 57 of the 63 (90%) who received sedation were satisfied with their decision, whereas 35 of the 48 (73%) who did not receive sedation were satisfied with their decision. 65% of patients were unaware of basic differences between conscious sedation and general anaesthesia





and 37% were not aware that driving is permitted after having lidocaine throat spray alone. The most influencing factors included gender where 68% of females were consciously sedated in comparison to 40% of males. It was also found that the most informed of the age groups had the lowest uptake of sedation and the least informed had the highest uptake.

**Conclusion:** If these results represent a national trend, it is clear that the decision to undergo gastroscopy with or without sedation in Irish patients is not a sufficiently informed one. These results call for more widespread dissemination of information as to what sedation entails. This would enable patients to make a more balanced and educated decision as to which option will best suit their needs, preferences, and personal circumstances.

**ABSTRACT 17 (13B101) POSTER PRESENTATION**

**Title of Paper:** Accuracy of endoscopic ultrasound in predicting early oesophageal neoplasms

**Author(s):** Judith Storm, \*Shatrughan Sah, \*Damian McManus, Michael Mitchell, Inder Mainie

**Department(s)/Institution(s):** Pathology Department, Belfast City Hospital, Belfast, N. Ireland, Gastroenterology Department, Belfast City Hospital, Belfast, N. Ireland

**Introduction:** Adenocarcinoma of the oesophagus has the fastest rising prevalence of any malignancy in the Western world. The majority arise from specialized intestinal metaplasia in the oesophagus, Barrett's oesophagus. Endoscopic ultrasound (EUS) accurately demonstrates the layers of the oesophageal wall, and is believed to be accurate for local T-staging of malignant oesophageal disease. With the introduction of conservative therapies including radiofrequency ablation, photodynamic therapy and endoscopic mucosal resection for Barrett's oesophagus, accurate staging has become increasingly important.

**Aims/Background:** To determine whether endoscopic ultrasound is accurate for T staging of high grade dysplasia /early neoplasia compared with pathology specimens obtained using endoscopic mucosal resection or surgery

**Method:** Retrospective review of patients evaluated by EUS for assessment of early oesophageal dysplasia, between December 2008 and June 2012 in the Belfast City Hospital.: Findings are compared with subsequent surgical pathology, or endoscopy and biopsy follow up.

**Results:** This study included 38 patients (30 men) with a median age of 66. 1 patient was omitted due to an incorrect scope being used during EUS. EUS accurately predicted T status in 34 of 37 patients (92%). 2 patients thought to have submucosal carcinoma during EUS proved to have mucosal carcinoma on EMR specimens. 3 patients thought to have mucosal carcinoma during EUS were found to have submucosal carcinoma on EMR specimens.

**Conclusion:** Endoscopic ultrasound was accurate in the staging of T1 oesophageal lesions. EUS should be increasingly used in the assessment of early oesophageal neoplasms.

**ABSTRACT 18 (13B102) POSTER PRESENTATION**

**Title of Paper:** University Hospitals of Leicester Colonoscopy Audit

2011-2012 And Comparison With Historical Data

**Author(s):** N. Hossain, A. Sasegbon

**Department(s)/Institution(s):** Department of Gastroenterology, University Hospitals of Leicester NHS Trust, Leicester, United Kingdom

**Introduction:** Colonoscopy is an important investigation having a diagnostic and therapeutic role. Over five years an audit of colonoscopies has been conducted at UHL NHS Trust.

**Aims/Background:** Assess: 1. Success rate of colonoscopies performed in UHL between September 2011 and 2012. This will be compared with the results of audits in 2006-2007, 2007-2008, and 2010-2011. 2. Complication rate  
Standards: 1. Caecal Intubation: >90% & 2. Perforation rate: <1:1000

**Method:** The colonoscopy database was searched for all colonoscopies performed on patients aged eighteen and above in UHL between September 2011 and 2012. The procedural notes were analysed looking for: caecal visualisation; reasons for failure and complications. Additionally all patients presenting to UHL hospitals with a diagnosis of perforation were compared against the database to identify potential late perforations.

**Results:** 4001 colonoscopies were performed over the audit period. 3680 (92%) were successful. There were 80 complications (2%) in total. The commonest complications were difficult intubation and patient distress with 52 (1.3%) and 16 (0.4%) instances respectively. 3 (0.07%) perforations occurred. 1 perforation occurred during colonoscopy and 2 potential delayed perforations presented 15 and 18 days post colonoscopy. Success rate over 5 years: 69% 2006-2007, 89% 2007-2008, 93% 2010-2011 and 92% 2011-2012.

**Conclusion:** UHL achieved its colonoscopy targets with a success rate of 92% and a perforation rate of 3:4001. Over the past five years the success rate has improved from 69% to 92%. For the last two years UHL has achieved its targets with success rates of 93% and 92%. This shows the value of these audits in highlighting poor practice and prompting reflection and improvement.

**References:**

1. Gut. 2012 Jul;61(7):1050-7. Epub 2011 Sep 22.
2. Gastroenterology Volume 143, Issue 3, Pages 844-857, September 2012

**ABSTRACT 19 (13B103) POSTER PRESENTATION**

**Title of Paper:** The Use of Faecal Calprotectin In Paediatric Inflammatory Bowel Disease

**Author(s):** J. O'Gorman; S. Hussey

**Department(s)/Institution(s):** Department of Medicine, University of Glasgow, Glasgow, Scotland. Department of Gastroenterology, Our Lady's Children's Hospital, Crumlin, Dublin, Ireland

**Introduction:** Faecal calprotectin (FC) is an inflammatory marker that is raised in inflammatory bowel disease (IBD) and so can be used to determine which children require further investigation.

**Aims/Background:** To evaluate the use of FC in children with possible IBD by establishing if the number of negative endoscopies had been minimised without missing any cases of IBD.



**Method:** A retrospective analysis of FC measurements carried out from October 2011-September 2012. FC values were obtained from the biochemistry department. Following a computerised search of the departmental records the presenting complaint, endoscopy result if applicable, diagnosis of IBD or alternative diagnosis, and follow-up or discharge were recorded for each patient.

**Results:** 36 patients (55%) were not scoped. All had at least one symptom indicative of IBD. 25 of these had a FC value of <math><50\mu\text{g/g}</math>. 4 of these patients had a FC result >math>200\mu\text{g/g}</math>. None of these patients have been diagnosed with IBD. 17 patients were scoped (26%). 3 were diagnosed with IBD. Median FC for the group that were not scoped was

**Conclusion:** FC is a valuable test for excluding IBD in children who present with abdominal pain and diarrhoea; and confirming relapse in established disease. However, guidelines are required to ensure the appropriate use of this relatively new test.

#### **ABSTRACT 20 (13B104) POSTER PRESENTATION**

**Title of Paper:** Palliative stenting for malignant gastro-duodenal obstruction - a district general hospital experience

**Author(s):** M Trotter, R Balamurugan, K Dear, G Naylor, N Everitt, K Ravi

**Department(s)/Institution(s):** Chesterfield Royal Hospital

**Introduction:** For 5 years we have run a combined endoscopic and radiological service to treat malignant gastric outlet obstruction with stenting. In an age of centralization of services for upper GI malignancies we have looked at our outcomes from this service.

**Aims/Background:** To assess the outcomes of palliative stenting for malignant gastro-duodenal obstruction against published data

**Method:** All patients who underwent palliative stenting for malignant gastro-duodenal tumours in our centre from 2007 up to January 2013 were retrospectively analyzed. Two patients were excluded due to non-availability of notes. Outcomes were assessed for technical and clinical success, return to oral nutrition, complication and re-intervention rates and overall survival.

**Results:** 32 stents were placed in 29 patients. The service was provided by the same radiologist in 94% of cases and by the same two endoscopists in 79% of cases. Technical success was 100% and clinical success and return to oral nutrition was 91%. Complication rate was 16% (2 stents migrations, one tumour overgrowth and two patients had food bolus obstruction). Re-intervention rate was 13% with 3 re-stenting procedures and 1 gastroenterostomy. Mean survival was 91 days (5-392). Median wait from decision to stent to actual stenting was 1 day, (0-14). Overall 25 covered and 9 uncovered stents were inserted.

**Conclusion:** Stenting for gastric outlet obstruction in this patient group is an established preferable alternative to surgical intervention. Much of the treatment for upper GI malignancies have now been centralized. Our data shows comparable results with other published data for these procedures with a high success rate and low major complication rates. It is of considerable benefit to these patients not to have to travel to a regional centre for stenting.

#### **ABSTRACT 21 (13B106) POSTER PRESENTATION**

**Title of Paper:** Spilled gallstones at laparoscopic cholecystectomy – A reason for re-operation in those with incidental gallbladder cancer?

**Author(s):** J Ahmad, A.I.W. Mayne, C. Jones, B.V. Dasari, L.D. McKie, T Diamond, M Loughrey, M.A. Taylor

**Department(s)/Institution(s):** Department of hepatobiliary and pancreatic surgery, Mater Hospital, Belfast

**Introduction:** Laparoscopic Cholecystectomy is the gold standard treatment of symptomatic gallstone disease. Incidental gallbladder cancer is found in 0.6-2.1% of cases. Patients with Tis or T1a tumours generally undergo no further intervention. We present a case report and suggest the need for an aggressive management approach in patients with incidental Tis or T1a gallbladder cancer who had spilled stones at primary laparoscopic cholecystectomy.

**Method:** A 37 year-old lady underwent a laparoscopic cholecystectomy for symptomatic gallstone disease. At operation, a number of gallstones were spilled into the peritoneal cavity. Subsequent histological examination showed an incidental pT1a gallbladder cancer, with areas of high grade dysplasia. HPB MDM discussion agreed on regular six-monthly outpatient follow-up. The patient re-presented to outpatient clinic 2 years later with recurrent right upper quadrant pain. Computed Tomography imaging revealed a small lesion in segment 6 of the liver. The patient underwent a diagnostic laparotomy which found multiple metastatic deposits, which on histological examination, were felt to have derived from the spilled gallstones at initial laparoscopic cholecystectomy. Due to the multiple metastatic deposits, the disease was un-resectable and she is to be treated with palliative chemotherapy.

**Results:** Spilled gallstones occur in around 5-7% of laparoscopic cholecystectomies. There is a paucity of literature on the management of patients with spilled gallstones who subsequently are found to have incidental gallbladder cancer. Gallbladder cancers stage Tis or T1a have a favourable prognosis and are normally treated with simple cholecystectomy alone but this case has demonstrated a devastating outcome to this management approach.

**Conclusion:** We suggest an aggressive management approach to patients with spilled gallstones who are subsequently found to have low grade Gallbladder Cancer

#### **ABSTRACT 22 (13B107) POSTER PRESENTATION**

**Title of Paper:** Colorectal cancer presenting with anaemia

**Author(s):** J. Storm, G. Rafferty

**Department(s)/Institution(s):** Antrim Area Hospital, Northern Trust

**Introduction:** British Society of Gastroenterology guidelines state that iron deficiency anaemia should be investigated and confirmed by a low serum ferritin, red cell microcytosis or hypochromia. The main objective of the guidelines is to diagnose significant pathology including colorectal cancer (CRC).

**Aims/Background:** We analysed the number of patients with confirmed colorectal cancer that presented with anaemia and specifically to confirm the number of CRC cases that present with evidence of non-iron deficient anaemia



**Method:** We reviewed the haematology and biochemistry blood results of all Northern Health and Social Care Trust (NHSCT) patients with confirmed colorectal cancer in 2010. Results were obtained for the 12 months prior to diagnosis. Local laboratory criteria was used to confirm the normal range for blood results including Haemoglobin (Hb), Mean Cell Volume (MCV), serum ferritin, serum iron and Mean Cell Haemoglobin Concentration (MCHC)

**Results:** 221 patients were diagnosed with colorectal cancer in 2010. Mean age was 71 (range 22-92). 50% were male. 49% were anaemic (Hb <12 g/dl). 31% had microcytic anaemia (MCV <83) and 18% had normocytic anaemia. 11 patients (5%) had an iron deficient normocytic anaemia. 18 patients (8%) had a normocytic anaemia but no iron studies performed. 11 (5%) patients diagnosed with CRC had a normocytic anaemia with normal serum ferritin and MCHC. For these 11 patients 9 charts were located and 6 had lower GI symptoms requiring colonoscopy but 3 (1%) were investigated as had low serum iron (but normal MCV, normal MCHC, normal ferritin and no lower GI symptoms)

**Conclusion:** These results confirm that a significant proportion of CRC patients present with normocytic anaemia (18%). From these figures it suggests that 1% of the total CRC cases had asymptomatic normocytic anaemia with normal MCV, MCHC and serum ferritin. This however does not include the 18 patients with normocytic anemia that had unknown iron status as iron studies not performed. Iron studies should always be performed in investigating patients with microcytic/normocytic anaemia.

**ABSTRACT 23 (13B108) POSTER PRESENTATION**

**Title of Paper:** Are potentially resectable colorectal liver metastases slipping through the net?

**Author(s):** N Keville, C Jones, A McAfee, J Ahmad, B Dasari, L McKie, MA Taylor, T Diamond

**Department(s)/Institution(s):**Department of HPB Surgery, Mater Hospital, Belfast, N. Ireland

**Introduction:** Liver is the most common site of metastatic spread in colorectal cancer, and its management has significantly evolved in recent decades with liver resection now being the optimal treatment.

**Aims/Background:** This study aimed to assess referral patterns from colorectal multidisciplinary meetings (MDMs) throughout Northern Ireland to the Regional HPB Unit.

**Method:** Over a 6 week period all colorectal MDMs throughout the five health and social care trusts were reviewed. Patients with colorectal liver metastases (CRLMs) were included in the study. The following data were included: patient demographics, details of the health and social care trust, date of MDM discussion, primary tumour pathology, and the MDM outcome. These findings were subsequently compared with regional guidelines for the referral of CRLMs to assess if the decision was deemed appropriate.

**Results:** 21 discussions were recorded, which involved 20 patients, with a mean age of 69 years and 13 were male. 40% of patients were from the Belfast trust, while the remainder was evenly distributed between the 4 remaining trusts. All CRLMs discussed were confirmed by computerised tomography scanning, and the MDM decision was deemed to be appropriate in 85% of patients. Only 15% of patients had KRAS testing performed and 20% were subsequently referred for PET-CT scanning.

**Conclusion:** The majority of potentially resectable colorectal liver metastases had an appropriate outcome in terms of management and referral to the Regional HPB unit. However, this could still be further streamlined through both education, and highlighting the role of PET-CT and KRAS testing.

**ABSTRACT 24 (13B109) POSTER PRESENTATION**

**Title of Paper:** Enteral Nutrition in the Critically Ill: The Impact of Nursing Adherence to Feeding Protocols on the Effectiveness of Treatment in Jordanian Intensive Care Units

**Author(s):** Mahmoud Al Kalaldehy

**Department(s)/Institution(s):**Faculty of Nursing, Zarqa University, Jordan

**Introduction:** Enteral nutrition is a pivotal strategy for nutrition in ICUs (Fulbrook et al. 2007). Nurses are keys to assess patients' nutritional status, detect feeding-intolerance, and curtail the prospect of complications (Persenius et al., 2006; Bourgault et al. 2007).

**Aims/Background:** To assess nurses' adherence to enteral nutrition evidence-based guidelines in intensive care.

**Method:** Mixed-methods design was employed. This abstract will show the results of the quantitative part. A cluster sample recruited ICU nurses (n=253) from different health care sectors in Jordan.

**Results:** Clinical nutrition is perceived by 79.7% of nurses as a secondary role. Nurses showed greater levels of knowledge and responsibility for 'preventing complications' and 'evaluation' than 'assessment' and 'identifying goals'. Tube position is still confirmed via unreliable measures such as air bubbling technique (mean 4.00, SD 1.14). The mean for measuring Gastric Residual Volume was above the mid-point (3.70, SD 1.33). However, there was inconsistency in recognizing the limit, threshold and frequency of measuring this volume. Diarrhoea is the most frequent complication of enteral nutrition (mean 3.36, SD 1.34) followed by abdominal pain, tube dislodgment, weight loss and uncontrolled blood sugar. Nurses perceived that the incidences of complications are less likely to occur in the presence of evidence-based guidelines than absence (rho= 0.73, df= 251, p <0.001).

**Conclusion:** Nurses show more concerns about the outcomes of enteral feeding instead of the preliminary assessment. Measuring GRV and confirming tube placement are still deficient and require further attention. EBP is acknowledged by nurses where undertaking such protocols is emphasized.

**ABSTRACT 25 (13B110) POSTER PRESENTATION**

**Title of Paper:** Patients with intestinal inflammation require more sedation during colonoscopy

**Author(s):** Kale Vikrant, Dunne Cara, Ahmed Magzoub, Lee Chun Seng, Cullen Garret, Mulcahy Hugh, Doherty Glen

**Department(s)/Institution(s):**St. Vincent's University Hospital, Elm Park, Dublin 4, Ireland

**Introduction:** Colonoscopy is the gold standard for assessing inflammation in the colon and ileum, especially in patients with inflammatory bowel disease (IBD). In the IBD cohort, colonoscopy is of valuable for diagnosing disease, assessing severity, treatment



response and identifying complications of the disease (e.g strictures, dysplasia). However, IBD patients are often reluctant to undergo colonoscopy and anecdotally appear to tolerate endoscopy less well than non-IBD patients.

**Aims/Background:** To assess the tolerability of colonoscopy in patients with and without intestinal inflammation by measuring the amount of sedation required and by comparison of the rates of completion and reasons for failed completion.

**Method:** We retrospectively analysed a prospectively maintained endoscopy database in a tertiary referral centre over a four year period from 2009 to 2012. We identified all colonoscopy procedures performed during this period and divided these into two groups depending on the presence or absence of endoscopic evidence of colitis and/or ileitis. Data was analysed by Fishers exact test and 2-sample t-test, as appropriate.

**Results:** 954 (9.43%) out of 9000 procedures performed during the timeframe of the study had endoscopic evidence of either colitis and/or ileitis. The mean age in Group 1 (those with colitis and/or ileitis) was 46.6 years. This was significant less than the mean age in Group 2 (those without colitis and/or ileitis) which was 58 years ( $p < 0.001$ ), in line with the younger age profile of IBD. The proportion of females was less in Group 1 (44% versus 53%). Unadjusted completion rates were significantly better in Group 1, (87% Vs 81%,  $p < 0.0001$ ). The mean dose of midazolam used in Group 1 was significantly higher than Group 2, (6.13 mg vs 5.47 mg,  $p < 0.0001$ ). The mean dose of fentanyl required was also significantly higher in Group 1, (70.7mcg Vs 55.5mcg,  $p < 0.0001$ ). There was no significant difference in the need for use of reversal agent (flumazenil) after (0.004% Vs 0.008%,  $p = 0.22$ ). In a multivariate analysis, midazolam dose was positively associated with the presence of intestinal inflammation, independent of patient age and gender ( $p = 0.025$ ).

**Conclusion:** Patient with evidence of intestinal inflammation (colitis and/or ileitis) at the time of colonoscopy require significantly higher doses of sedation and analgesia to facilitate the examination, but are no more likely to require use of reversal agents. These results are consistent with the clinical observation that IBD patients tolerate colonoscopy less well than non-IBD patients and suggest that guidelines on use of sedation during colonoscopy should be tailored to reflect the specific needs of IBD patients, who require endoscopy to be performed frequently as part of their clinical care.

## ABSTRACT 26 (13B113) POSTER PRESENTATION

**Title of Paper:** BSG Guideline Compliance For The Management Of Acute Pancreatitis – Are Imaging Delays The Real Issue?

**Author(s):** Spence R A J , McElvanna K, McAllister I

**Department(s)/Institution(s):** Surgical Unit, The Ulster Hospital, Belfast, Northern Ireland

**Introduction:** The British Society of Gastroenterology (BSG) set standards for the management of acute pancreatitis; in particular, time until definitive treatment for gallstone pancreatitis.

**Aims/Background:** We evaluated our management of acute pancreatitis against BSG guidelines, focusing on delays to definitive management.

**Method:** Data were obtained retrospectively for 110 consecutive patients admitted with acute pancreatitis during a nine month period, and their management evaluated against the guidelines.

**Results:** One hundred and ten patients (63 male, 47 female) were admitted with acute pancreatitis during a nine month period, with mean age 54.7 years. Aetiology included: gallstones (51 patients), alcohol (39), others (20). Ten patients (9.1%) had severe pancreatitis, 6 of whom died. Overall mean length of stay: 5.8 days (range 2-78 days), gallstone pancreatitis 9.3 days, alcoholic pancreatitis 3.5 days, others 3.8 days. Mean wait for ultrasound: 1.7 days (range 0-5 days, with 59.4% compliance with guidelines), MRCP, as inpatient 3.3 days (range 1-9 days), as outpatient 25 days (range 12-64 days). Intervention for gallstone pancreatitis included ERCP (13 patients; mean inpatient wait 6.4 days, outpatient 42 days); cholecystectomy (24 patients; mean wait: 12.5 days (range 1-81 days)). There was 75% compliance with BSG guidelines regarding definitive intervention for gallstone pancreatitis within 2 weeks.

**Conclusion:** Delay for definitive intervention was partially attributable to imaging, especially as outpatient. Patients should be investigated as an inpatient to ensure guideline compliance with the 2 week rule for gallstone pancreatitis. ERCPs, either for stone removal, or as definitive management, must be performed as inpatient to avoid breach of guidelines.

## ABSTRACT 27 (13B114) POSTER PRESENTATION

**Title of Paper:** Prevalence Of Osteoporosis Amongst A Large Coeliac Cohort Supports Early Bone Mineral Density Assessment For All Patients

**Author(s):** J. Collum, M. Corrigan, A. Smith, K. Martin

**Department(s)/Institution(s):** Department of Gastroenterology, University Hospital Aintree, Liverpool, UK

**Introduction:** Coeliac disease is associated with osteoporosis and osteoporosis is a significant public health problem (1). However, debate exists concerning the routine use of bone mineral density (BMD) assessment at time of coeliac diagnosis.

**Aims/Background:** To determine the prevalence of osteoporosis in patients with coeliac disease, as defined by BMD assessment, and the impact of factors such as gender, age & disease duration.

**Method:** We retrospectively analysed dietitian held data sets, which are kept for all patients with coeliac disease.

**Results:** The data sets for 232 patients were available for analysis. The index BMD assessment was recorded. The prevalence of osteoporosis was 23%. Overall, males were found to have lower average BMD than females. BMD decreased with advancing age. This finding was statistically significant ( $p < 0.01$ ). Greater duration of disease was associated with low BMD, but this did not reach statistical significance. ( $p = 0.42$ )

**Conclusion:** Due to a period of undiagnosed coeliac disease with latent calcium malabsorption, reduced BMD is likely to be present at time of diagnosis. Whilst osteoporosis is often asymptomatic until fracture, when fractures do occur they carry a significant morbidity and mortality. Screening allows identification of reduced BMD prior to fracture and subsequent management strategies can be instigated to improve this. The use of BMD assessment at diagnosis is gaining widespread support, but has not been formalised in UK guidelines (4). This screening strategy is likely to be cost effective, due to the widespread availability of BMD assessment and the markedly decreased cost of bisphosphonate therapy (6).

## ABSTRACT 28 (13B116) POSTER PRESENTATION

**Title of Paper:** A Survey On The Appropriate Use Of Non Invasive Liver Screen By Gastroenterology Trainees In West And South



Yorkshire, UK

Author(s): S.Y.M. Lau1, S. Riyaz1, L. Harrison2

Department(s)/Institution(s): 1Gastroenterology, Barnsley District General Hospital, Barnsley, 2 Gastroenterology, Airedale General Hospital, Leeds, UK

Introduction: Non invasive liver screen (NILS) is an important commonly performed investigation by gastroenterologists.

Aims/Background: We aimed to evaluate the appropriate use of NILS by gastroenterology trainees in South and West Yorkshire, UK, to assess whether training in this topic was adequate.

Method: We devised a survey containing 2 scenarios regarding liver function derrangement and sent it to all 48 gastroenterology trainees in South and West Yorkshire. Trainees were asked to provide their year of training, experiences in liver units, if they had received teaching on NILS, and the investigations they would perform for each scenario. The answers from all 12 respondents were collected and compared against the investigations that we believe were appropriate for each scenario.

Results: Most trainees selected the majority of appropriate tests for incidental abnormal liver biochemistry, but proportionately less so for acute hepatitis. 42% (5) trainees inappropriately tested for alpha-fetoprotein (AFP) in isolated abnormal liver function, and 8% (1) tested for AFP in acute hepatitis. 33% (4) inappropriately selected A-1 antitrypsin to investigate acute hepatitis.

Interestingly, no significant difference in the number of correct answers was seen in trainees who had liver unit experience (mean 13, range 9-15) compared to those who did not (mean 12, range 6-14). Similarly, teaching on NILS (mean 12, range 9-15), or the lack of (mean 11, range 6-14), did not demonstrate a significant difference in the number of correct responses.

Conclusion: Knowledge of appropriate investigations for liver function tests may support development of the target...

Appropriate tests for case 1: incidental abnormal liver function tests	Trainees correct response rate	Appropriate tests for case 2: acute hepatitis	Trainees correct response rate
BBV	11/12 (92%)	BBV	10/12 (83%)
BCV	11/12 (92%)	BCV	6/12 (50%)
Autoimmune screen	10/12 (83%)	Auto. Ab	8/12 (67%)
Ferritin	6/12 (50%)	Cytomegalovirus	5/12 (42%)
Iron, ferritin, transferrin	8/12 (67%)	EBV/CMV	5/12 (42%)
Tissue transglutaminase antibody	7/12 (58%)	Autoimmune screen	6/12 (50%)
A-1 antitrypsin	7/12 (58%)	Iron, ferritin, transferrin	6/12 (50%)
Caeruloplasmin	5/12 (42%)	Paracetamol level	6/12 (50%)
Thyroid function tests	11/12 (92%)	Caeruloplasmin	7/12 (58%)

Author(s): A. Carey, J. O' Gorman, A. Cafferty, K. O'Driscoll, M. Hamzawi, B. Bourke, A. Broderick, S. Hussey

Department(s)/Institution(s): National Centre for Paediatric Gastroenterology, Hepatology and Nutrition, Our Lady's Children's Hospital, Crumlin, Dublin 12, Ireland

Introduction: The rise in the incidence of paediatric inflammatory bowel disease (IBD) in Ireland from 2000 to 2010 has been recently documented.

Aims/Background: The aim of this current study was to examine the phenotypic attributes of IBD among children diagnosed with new onset IBD in 2010 to 2011.

Method: A retrospective review of paediatric IBD was undertaken using nationally representative data from the National Centre for Paediatric Gastroenterology, Hepatology and Nutrition (NCPGHN) in Ireland. IBD was phenotyped using the Paris classification and compared against previous Irish data from 2000 and 2008 and international figures. Data was analysed using the Statistical Package for Social Sciences (SPSS).

Results: The incidence of IBD from October 2010 to October 2011 was 7.5/100,000/year. Seventy nine children were diagnosed with IBD during the defined review period (49 boys, 32 girls, median age of diagnosis 12.7 years). The phenotype of new onset IBD has changed significantly from historic cohorts (Table 1). There is a marked increase in the incidence of combined upper and lower gastrointestinal CD. Furthermore, there is a distinct increase in complex disease behaviour (27%) such as stricturing and penetrating disease. The incidence of UC (n=29) has increased three-fold in 10 years (16 boys, median age of diagnosis 13.1 years). Additionally, 59% of children were reported to have moderate to severe disease activity, similar to previously reported data. At one year, 21 (46%) children with CD and 19 (66%) children with UC children were in remission, with 91% of children steroid free.

Table 1. Location of Crohns Disease and Ulcerative Colitis as defined by the Paris classification

	Location of Crohns Disease n (%)		
	2000 (n= 25)	2008 (n=31)	2010 (n=46)
L1	2 (8)	6 (19)	4 (9)
L2	11 (44)	6 (19)	8 (17)
L3	9 (36)	10 (32)	6 (13)
L1+L4	1 (4)	4 (13)	2 (4)
L2+L4	4 (16)	1 (3)	9 (20)
L3+L4	3 (12)	5 (16)	13 (28)

	Location of Ulcerative Colitis n (%)		
	2000 (n=13)	2008 (n=14)	2010 (n=29)
E1	1 (8)	2 (14)	4 (14)
E2	1 (8)	2 (14)	4 (14)
E3	0	1 (7)	13 (45)
E4	11 (84)	9 (64)	7 (24)

Conclusion: The incidence of IBD in Ireland remains high. The phenotypic behaviour of CD is changing with more complex disease behaviour evident at presentation. The prevalence of UC has tripled over 10 years. Future prospective longitudinal studies are needed to fully elucidate the factors underlying IBD in Irish children.

ABSTRACT 29 (13B118)

POSTER PRESENTATION

Title of Paper: The changing behaviour of new onset IBD in Irish children from 2010-2011

ABSTRACT 30 (13B121)

POSTER PRESENTATION

Title of Paper: Experience In A District General Hospital Of Alcohol Withdrawal Management Comparing Symptom Triggered With Fixed Dose Regimen In Acute Medical Ward



**Author(s):** K.Conroy, S.Paremal, F.Perez, G.Stidolph, J.Topping

**Department(s)/Institution(s):**Gastroenterology, South Tyneside District Hospital, South Shields

**Introduction:** Harmful drinking is endemic in the UK and is a worrying health hazard. It is estimated that up to 24% of the UK adults drink in a hazardous/harmful way<sup>1</sup>. Recent survey shows that up to 35% of the A&E attendance is due to alcohol related<sup>2</sup>, leading into huge financial implications<sup>3</sup>. NICE guidance published in 2010 recommends a symptom triggered regime for patient admitted to hospital with alcohol withdrawal symptoms (AWS)

**Aims/Background:** This Study is designed to compare the effect of symptom triggered regime (STR) using CIWA tool against fixed dose regime (FDR) in patients treated for AWS

**Method:** Retrospective data collection on 60 patients who were admitted with AWS over a 24 months period. 30 were actively managed in a Gastroenterology Ward where STR was used. The other 30 patients were chosen from General Medical Wards where FDR was used.

**Results:** The mean length of stay for the STR group as calculated was 7.9 days and 10.9 days for the FDR one. 80% of patients in the STR group had a hospital admission of ten days or less where as in FDR group only 46% of patients had this length of stay. The mean total Chlordiazepoxide dose given for the STR group was 264 mg, compared with 501 mg for the FDR group.

**Conclusion:** This audit demonstrates that symptoms triggered regimen leads into a significantly lower total dose of benzodiazepines and a shorter hospital admission. Treatment of symptoms has advantages, both in terms of cost and patient safety

**ABSTRACT 31 (13B122)**

**POSTER PRESENTATION**

**Title of Paper:** Upper Gastrointestinal Malignancies: 6976 Endoscopy Review in a Multinational Study

**Author(s):** Dr. Sunil Kanti Roy

**Department(s)/Institution(s):**Queen Mary's Hospital, Sidcup, Kent, UK

**Introduction:** This is a multinational study to compare the prevalence of upper gastrointestinal malignant and pre-malignant conditions in three different populations. The populations involved in this study included British, Japanese and Arabian. It is clearly known that there are distinct variations in the lifestyle and habits of these different groups. Variables include their contrasting diet, smoking tendencies, alcohol intake and genetic pool. This study analyses figures from these different communities highlighting the prevalence of these very important upper gastrointestinal complaints. It is interesting to scrutinize these findings alongside the lifestyle and demographic traits of each society. This study endeavours to demonstrate the significant influence these demographic factors impose upon both malignant and premalignant upper gastrointestinal disease.

**Aims/Background:** To compare the prevalence of upper gastrointestinal (UGI) malignant and premalignant conditions in three separate populations; British, Japanese and Arabian.

**Method:** 6976 Upper Gastrointestinal (UGI) endoscopies were

retrospectively reviewed in a multinational comparative study. This involved three population groups: Group A- British & others (n=2158); Group B- Japanese (n=2628); Group C- Arabians (Saudi Arabians & others (n=2190)).

The majority of the patients fell in the above 16 age group. The patients presented with UGI symptoms and were selected at random. The data was collected between 1986 and 2012.

The study involved patients from Barnsley District General Hospital (Barnsley), Darent Valley Hospital (Dartford) & Queen Mary's Hospital (Sidcup) in UK - Group A; Showa University Fujigaoka Hospital & Niigata Cancer Centre Hospital (Japan)- Group B; Jubail Hospitals (Saudi Arabia) – Group C.

**Results:** A comparison was made for the malignant and premalignant diseases. It revealed a very high incidence of UGI malignancies amongst Japanese (Group B). There is significant number of malignant diseases amongst non-Arabians, but such malignancies amongst Arabians are rare.

The incidence of gastric ulcers and gastric polyps are very high amongst Japanese compared to the other population groups in the study.

It is found that the prevalence of Barrett's Oesophagus has increased significantly in the last ten years.

The results are summarised as below:

UGI malignancies recorded:

Group A: British population: 37 (1.71% with 95% CI: 1.17 to 2.26)

Group B: Japanese population: 148 (5.63% with 95% CI: 4.75 to 6.51)

Group C: Arabian population: 16 (1.17% with 95% CI: 1.17 to 2.26)

Ulcers in the upper GI tract recorded:

Group A: British population: 366 (16.96%, 95% CI: 15.38 to 18.54)

Group B: Japanese population: 498 (18.95% 95% CI: 17.45 to 20.45)

Group C: Saudi population: 506 (23.11%, 95% CI= 21.34 to 24.87).

**Conclusion:** It can be concluded that Arabians (Saudis) suffer rarely from UGI malignancies and it may be related to social, environmental, geographical, genetic and dietary habits. Dietary habits in Japan are very different from the British and Saudi population.

Alcohol consumption amongst Saudis is very little. In comparison, Japanese and UK populations drink alcohol significantly more.

Prevalence of Barrett's has increased significantly in the last 10 years. It is likely due to effective Helicobacter Pylori eradication and due to increasing awareness of Barrett's amongst endoscopists.

**ABSTRACT 32 (13B126)**

**POSTER PRESENTATION**

**Title of Paper:** An Audit to Evaluate the Use of the Alcohol FAST Screening Tool in Acute Medical Admissions in a District General Hospital

**Author(s):** Nidhi Sagar, Charlie Dibor, Rex Polson

**Department(s)/Institution(s):** Gastroenterology, Solihull Hospital Heart of England Trust, West Midlands

**Introduction:** 25% of the UK adult population drink hazardous amounts of alcohol and 30% of male admissions and 15% of female admissions are alcohol related. Similar rates are reported in psychiatric settings demonstrating the significant burden of alcohol within the NHS. Problem drinking is often unrecognised by doctors. The 2011 NICE 'Alcohol Use Disorders' guidelines recommend screening for harmful drinking and alcohol dependence to identify patients in need of intervention.



**Aims/Background:** Our aim was to identify compliance with the alcohol FAST screening tool on admission in all acute adult medical admissions. The FAST tool was developed from AUDIT as a shorter version for hospital environments to detect hazardous drinking. If testing positive, patients will then be referred for brief intervention.

**Method:** A retrospective review of 74 (23 male, 51 female) patient records from December 2012 to February 2013.

**Results:** The FAST tool was completed in 37.8% of cases and missed in 62.2% of patients. When used, the tool was completed correctly in 100% of cases. In the 28/74 cases the FAST tool was utilised, 4(14.3%) patients were drinking over the national recommended limit.

**Conclusion:** Despite the high prevalence of problem drinking and its impact on health, doctors fail to utilise the screening tool in identifying harmful drinking despite its ease in completion as proven by its accurate use each time. This results in missed referrals for interventions to help prevent alcohol related illness and manage alcohol dependence. Improved staff awareness and education is essential to minimise the harmful consequences of alcohol and reduce hospital admissions.

**ABSTRACT 33 (13B128) POSTER PRESENTATION**

**Title of Paper:** Defining Patient-Centred Professionalism in Gastroenterological Outpatient Clinics: engaging with key stakeholders

**Author(s):** Sarah Wright

**Department(s)/Institution(s):** College Of Medicine, Swansea University

**Introduction:** The UK IBD audit 3rd round (RCP,2011) shows that there has been sustained improvement in patient-centred care in terms of clinician commitment to improved quality of care and the provision of specialist IBD nursing and patient education for patients with IBD. This study explores the meaning of the concept 'patient-centred professionalism' in gastroenterology.

**Aims/Background:** The objectives of this study are:

1. To clarify the meaning of patient-centred professionalism in terms of how it relates to professional practice and patient-professional interaction in gastroenterological outpatient clinic consultations
2. To define the concept according to the views and experiences of healthcare professionals, stakeholders and IBD patients.
3. To create materials which may support and enhance optimal professional practice in outpatient clinics for patients with IBD

**Method:** A qualitative study using observation and semi-structured interviews. Ethnographic observation was conducted in 8 outpatient clinics from within one local health board (Abertawe Bro Morgannwg University Health Board). Clinics were led by consultant physician gastroenterologists; surgeons, specialist nurses and joint colorectal MDT clinics.

A total of 31 consultations were observed with IBD patients aged between 18-70 years old. A total of 40 in-depth qualitative interviews were conducted with IBD patients; healthcare professionals and eminent stakeholders in gastroenterology. Ethnographic fieldnotes from observation and transcripts from interviews were analysed using a thematic analysis approach.

**Results:** Key characteristics of patient-centred professionalism in

gastroenterology have been elicited and categorised into thematic areas including shared decision making; transparency, openness and honesty; information and knowledge transfer and integrated approaches to care. Patients' descriptions of experiences of consultations with healthcare professionals are vivid and reveal both best practice in gastroenterological practices in secondary care as well as unexpected views about encounters with the medical profession. An output from this study involves the creation of materials to support gastroenterological outpatient clinic consultations to enhance the optimal professional practice and patient-professional communication.

**Conclusion:** Patients' understandings of patient-centred professionalism, coupled with healthcare professionals and stakeholder understandings of the concept, offer the opportunity to develop enhanced consultations in gastroenterological outpatient clinics.

**ABSTRACT 34 (13B129) POSTER PRESENTATION**

**Title of Paper:** Adult Nutritional Status Assessment: Cross Sectional Follow Up Study In A United Kingdom Hospital

**Author(s):** D. Shah, S. Dhanjal, S. Lunt, C. Cussens, S. Kadri

**Department(s)/Institution(s):** Luton and Dunstable NHS Foundation Trust

**Introduction:** Malnutrition in hospital is widely under-recognised (1). In 2011 a cross sectional study was carried out into nutritional status assessments at a UK District General Hospital. Out of 100 patients only 55% had a MUST (Malnutritional Universal Screening Tool) assessment on admission.

**Aims/Background:** Following the implementation of trust-wide training, monthly spot checks and detailed guidelines on nutrition management, a follow up study was conducted to assess the impact of these changes on nutritional care.

**Method:** Ten patients were randomly selected from the same ten wards used in the initial study, encompassing Medicine, Care of the Elderly and Surgery. For each patient, completion of MUST assessments, nutrition care plans, food and fluid charts were recorded. One ward was excluded from the study due to an outbreak of norovirus which led to ward closure. The data was analysed using Microsoft Excel.

**Results:** 73% (66/90) of patients had MUST assessments on admission compared with 55% previously. Of these, 32% were deemed medium (9/66) or high risk (12/66) for malnutrition. Of these 'at risk' patients, 57% (12/21) and 62% (13/21) had fully completed food and fluid charts respectively, compared with 59% and 59% previously. Only 57% had nutrition care plans daily.

**Conclusion:** Whilst there was an improvement in the number of completed MUST assessment on admission, there was no change in the number of fully completed food and fluid charts for those patients at risk of malnutrition. The aim of these on-going assessments is to identify 'at-risk' patients on admission, optimise nutrition early, and try to reduce complication rates, length of stay, and mortality rates across the Trust (2). The results of this six month follow-up are positive but further cycles of training and reiteration of the importance of nutritional assessment are required. There will be ongoing audits arranged by the nutrition team and nursing staff to assess clinical indicators for fluid and nutrition, based on guidance from Essence of Care, NICE Guidelines, and Trust Guidelines.



**References:**

1: McWhirter JP, Pennington CR. Incidence and recognition of malnutrition in hospital. *BMJ* 1994;308:945-8. 2: Isabel M, Correia D, Waitzberg DL. The impact of malnutrition on morbidity, mortality, length of hospital stay, and costs evaluated through a multivariate model analysis. *Clinical Nutrition* 2003; 22(3):235-239

**ABSTRACT 35 (13B130)**

**POSTER PRESENTATION**

**Title of Paper:** Prevalence of Different Polyp Types in MSI and MSS Age and Gender Matched Cohorts of Colorectal Cancer Resections

**Author(s):** David Gibbons, Ailín Rogers, Chee H Ng, Robert Geraghty, Elizabeth Rhinehart, John Hyland, Ronan P O'Connell, Des Winter, Hugh Mulcahy, Glen Doherty, Diarmuid O'Donoghue, David Fennelly, Kieran Sheaha

**Department(s)/Institution(s):** Centre for Colorectal Disease, St Vincent's Hospital, Dublin 4, Ireland

**Introduction:** The sessile serrated pathway has gained increased recognition in recent years. Up to 30% of colorectal tumours are thought to arise in this manner but its significance remains to be elucidated.

**Aims/Background:** This study sought to establish the prevalence and significance of the sessile serrated pathway in curative resections for colorectal carcinoma.

**Method:** All colorectal carcinomas resected with curative intent, with immunohistochemical characterization of microsatellite status at diagnosis, over an eight year period were identified. 1415 colectomy specimens were identified of which 126 had microsatellite instability (MSI). An age and gender matched MSS cohort was generated. A careful gross examination described and sampled all polyps. All polyps were reviewed, enumerated and classified as SSA (sessile serrated adenoma), adenoma or hyperplastic. Appendiceal polyps were excluded. Mean numbers of polyps, total and subtypes were compared in the MSI and MSS groups. A two tailed t-test was used to test for significance.

**Results:** 57% of MSI cases and 50% of MSS cases had polyps in the resection. In the MSI group there were 5 SSAs, 92 adenomas and 37 hyperplastic polyps (totalling 134). In the MSS group there were 0 SSAs, 62 adenomas and 23 hyperplastic polyps (totalling 95). There were no significant differences in numbers of adenomas, hyperplastic polyps or total polyps in both groups. However there were significantly more SSAs in the MSI group (p=0.0239).

**Conclusion:** Although absolute numbers are low, the finding of an SSA in a cancer colectomy specimen is a strong indicator that the carcinoma will display microsatellite instability (MSI).

**ABSTRACT 36 (13B131)**

**POSTER PRESENTATION**

**Title of Paper:** Colon-targeted cyclosporine in the IL10 knock out model of Crohn's colitis

**Author(s):** IS Coulter, V Aversa, CT Taylor, P Fallon

**Department(s)/Institution(s):** Sigmoid Pharma, University College Dublin, Trinity College Dublin

**Introduction:** Cyclosporine A (CyA) is a powerful immunosuppressive agent and has been used off label for steroid-dependent or steroid-refractory ulcerative colitis. However, systemic

exposure results in a number of side effects. A novel advanced oral drug delivery system, SmPill®, has been developed to permit targeted release of CyA directly into the colon tissue with limited systemic exposure.

**Aims/Background:** The objective was to compare SmPill®-CyA activity in the IL10 knock-out mouse model of Crohn's colitis against the marketed Neoral® (po) and Sandimmun® (ip).

**Method:** Mice were treated for 42 days, received the equivalent of 15mg/kg/day CyA as well as untreated and SmPill® placebo. A secondary objective was to measure systemic pro-inflammatory cytokine activity in isolated spleen cells.

**Results:** General Mouse Health: The SmPill®-CyA group were significantly heavier than mice in all other groups on Day 42.

The SmPill®-CyA group had the lowest Disease Activity Index scores relative to the other groups.

**Colon Tissue Inflammatory Biomarkers:**

The untreated mice had the highest Serum Amyloid A levels (SAA), with the lowest levels seen with those treated with SmPill®-CyA (p<0.001) followed by Sandimmun® (i.p) (p<0.01) treated mice. Sandimmun (i.p) and SmPill®-CyA groups had significantly lower (P < 0.01) histology scores relative to Neoral®. Neoral® (po) had the greatest relative score.

The highest levels of Myeloperoxidase (MPO) activity were seen in the untreated and placebo mice. There was statistically lower MPO activity in both the SmPill®-CyA and Sandimmune® (i.p.) groups relative to untreated mice (p < 0.05).

Similarly to a reduction in MPO activity, the SmPill®-CyA groups also had reduced IL-1α, IL-17 and TNFα pro-inflammatory cytokine levels (p<0.05) in colon tissue at Day 42.

**Systemic Tissue Inflammatory Biomarkers:**

In a measure of systemic CyA activity, the activity of a number of pro-inflammatory cytokines in activated isolated spleen cells was measured. The Sandimmune® (i.p) treated mice had significantly reduced production of TNF-α (p<0.01) and IL-17 (p<0.05) relative to cells from the untreated and placebo treated mice. In mice treated with SmPill®-CyA the reduction in TNF-α and IL-17 release by cells was non-significant. The pro-inflammatory cytokine expression levels for Neoral® was between that of Sandimmune® and SmPill®-CyA.

**Conclusion:** The above study demonstrated that SmPill®-CyA conferred preferential local colonic efficacy with limited systemic activity, in effect, harnessing the local efficacy of CyA and reducing systemic side effect risks.

A SmPill®-CyA formulation, CyCol®, has progressed through human Phase I (PK) study in Canada and Phase IIB study in Ireland and the UK. A multi-centre Phase IIB study is being planned.

**ABSTRACT 37 (13B132)**

**POSTER PRESENTATION**

**Title of Paper:** Capsule Endoscopy In The Southern Trust-Initial Experiences

**Author(s):** Doyle JBM, McKee N, Murphy SJ

**Department(s)/Institution(s):** Department of Gastroenterology, Daisy Hill Hospital, Newry, Co Armagh, Northern Ireland

**Introduction:** Capsule endoscopy (CE) has been utilised for >10 years, commencing in the Southern Trust in 2010. We assessed our initial experiences with CE.

**Method:** Retrospective chart reviews of Southern Trust patients



referred for CE.

**Results:** The first 31 cases were available. Twenty-one (68%) were undertaken assessing for suspected Crohn's disease/stage existing Crohn's disease, nine (29%) for obscure GI bleeding (OGIB) and one (3%) for assessing polyp formation in a patient with FAP.

For OGIB patients, 6 (67%) had an OGD and Colonoscopy performed, 2 had no OGD, and one had no colonoscopy performed.

Eleven patients (35%) had an abnormal CE. Of these, 6 (55%) showed findings consistent with Crohn's disease. In 4 cases a new diagnosis was made, the other 2 cases helped guide treatment intensification with thiopurine/biologic therapy.

Of the five remaining abnormal CE's, 2 showed small bowel erythema of unclear significance. One showed duodenal erosions, one duodenal polyps, and one showed small bowel erosions which when biopsied was consistent with Cryptogenic-Multifocal-Ulcerating-Stenosing-Enteritis (CMUSE).

Two referrals for enteroscopy were made following an abnormal CE.

Twenty patients/(65%) had a normal CE. Nine/(45%) were discharged from clinic, five/(25%) had one final OPD review, two/(10%) were referred back to their referring Consultant, and four/(20%) had on-going review.

**Conclusion:** Overall, CE is a useful modality for diagnosis of small bowel disorders. It is useful in cases of diagnostic uncertainty regarding IBD, and guides treatment options. It leads to fewer follow up clinics, with 45% of patients with a normal CE being discharged, and 25% seen for one final clinic appointment.

**ABSTRACT 38 (13B133) POSTER PRESENTATION**

**Title of Paper:** Are Outcomes Following Laparoscopic Resection For Inflammatory Bowel Disease In Adults And Children Comparable?

**Author(s):** C McMullin, J Morton, S Vickramarajah, M Brennan, C Salvestrini, F Torrente, R Heuschkel, R J Davies

**Department(s)/Institution(s):** Cambridge Colorectal Unit and Department of Paediatric Gastroenterology, Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge Biomedical Campus, Cambridge, UK

**Introduction:** Inflammatory bowel disease (IBD) has prevalence in Europe of approximately 2.2 million, with evidence of increasing incidence in the paediatric population. Up to 40% of patients will require surgery for their disease, the majority within the first year of diagnosis.

**Aims/Background:** Since 2007, a single surgeon whose main practice is in adults has performed laparoscopic resectional surgery for IBD in adults and children within separate IBD multidisciplinary teams. Our aim was to assess short-term outcomes for adults and children following laparoscopic resectional surgery for IBD.

**Method:** Analysis of a prospectively collected database was carried out to include all patients who had undergone a laparoscopic resection for IBD (excluding stoma formation alone and ileoanal pouch surgery) under the care of one surgeon between December 2007 and July 2012.

**Results:** Fifty-nine patients underwent laparoscopic resections (28 children and 31 adults). Median age for children was 14 (range 8-16) years and adults 32 (range 21-63) years. The median BMI for adults was 23 (range 18-38) and 19.5 (range 13-29.5) for children ( $p=0.0006$ ). Operative times for adults and children were similar with a median of 210 and 165 minutes respectively ( $p=0.09$ ). Postoperative complication rates were not significantly different: 6 (19%) in the adult population and 4 (14%) in children ( $p=0.73$ ). Median length of stay was 5 days in adults vs 6 days in children ( $p=0.09$ ).

**Conclusion:** Laparoscopic surgery in children is safe when performed by an experienced surgeon whose normal practice is in adults, with acceptable outcomes when compared to adults.

**ABSTRACT 39 (13B134) POSTER PRESENTATION**

**Title of Paper:** Is availability of MR Enterography (MRE) reducing avoidable use of ionising radiation in diagnostic imaging for Crohn's Disease?

**Author(s):** A.E. Smyth, D.J. Gibson, D.J. Murphy, D. Keegan, G. Cullen, H.E. Mulcahy, D. Malone, G.A. Doherty

**Department(s)/Institution(s):** Departments of Gastroenterology and Radiology, St Vincent's University Hospital, Dublin, Ireland

**Introduction:** MRE has been increasingly adopted as the imaging modality of choice for patients with small bowel Crohn's disease, replacing barium studies and CT. MRE has similar sensitivity to CT for detection of small bowel inflammatory changes but has the advantage of no exposure to ionising radiation.

**Aims/Background:** We aimed to evaluate whether the availability of MRE has diminished or eliminated avoidable radiation exposure related to diagnostic imaging in this patient group.

**Method:** Retrospective analysis of a database of 3000 patients with IBD in a large tertiary referral hospital was performed. All patients diagnosed with Crohn's disease during the period of 01-01-2009 until 15-10-2012 were identified. A review was performed of all abdominal imaging done at the study centre – MRE, abdominal CT and barium small bowel studies.

**Results:** 122 patients had a new diagnosis of Crohn's disease. 58 (47.5%) were female. Median age at diagnosis was 28 years (IQR 23-40).

A total of 62 MRE studies were performed in 52 patients (42.6%). 26 patients (21%) had a barium small bowel examination.

A total of 83 abdominal CT studies were performed in 52 patients (42.6%). 35 (42%) of these were performed as an emergency investigation. 18 patients had 2 or more abdominal CT studies performed (range 2-6).

55 patients (45%) had an abdominal CT or barium examination performed in a non-emergency setting.

**Conclusion:** This study shows that there is still significant use of ionising radiation, sometimes performed repeatedly, in a non-emergency setting. 45% of this young patient cohort received avoidable radiation exposure related to diagnostic imaging.

**ABSTRACT 40 (13B135) POSTER PRESENTATION**

**Title of Paper:** Review of CT Colonography: Real-life Experience of One Thousand Cases in a Tertiary Referral Centre.



**Author(s):** A.E. Smyth, C.F. Healy, P. MacMathuna, H.M. Fenlon

**Department(s)/Institution(s):** Departments of Gastroenterology and Radiology, Mater Misericordiae University Hospital, Dublin, Ireland

**Introduction:** CT Colonography is increasingly being utilised to investigate patients with lower gastrointestinal symptoms and in screening for colorectal carcinoma in the at risk population.

**Aims/Background:** This review aimed to quantify results from a real life experience of 1000 CT Colonography examinations in a tertiary referral hospital campus.

**Method:** Data on patient demographics, indications and findings were analysed retrospectively from a dedicated database.

**Results:** Over a five year period (January 2008 - December 2012) 1000 CT Colonography examinations were performed. The median age was 70 years (IQR 60-79). Patients were symptomatic in 86% of cases, screening accounted for 7% and surveillance in patients with a history of polyps or colorectal cancer for 7%. In 45% of patients it was documented that the study was performed following an incomplete optical colonoscopy.

CT Colonography had normal or benign colonic findings in 75% of patients. 6% had incomplete examinations performed. Neoplasia was observed in 14%: colorectal carcinoma 6%, polyps >1cm in 3% and 5% were found to have <3 polyps of 6-9mm. 5% had findings of wall thickening or strictures that were suspected to be benign but required further endoscopy and biopsy.

There was an extracolonic finding that required further evaluation in 19% with 6% found to have a potentially clinically significant finding. There were no significant procedure related complications.

**Conclusion:** This review describes the real life experience of CT Colonography in a largely elderly, symptomatic patient group. In this patient group, CT Colonography safely confirmed the need for no further bowel tests in 75%, identified colorectal cancer in 6% and clinically significant extracolonic findings in 6% of cases without any significant complications.

**ABSTRACT 41 (13B136) POSTER PRESENTATION**

**Title of Paper:** The cost of colonoscopy – a worldwide view

**Author(s):** Dr Rebecca Haslam, Dr Sami El-Khassawneh, Dr Ulrike Sucher

**Department(s)/Institution(s):** Medical Services, Allianz Worldwide Care

**Introduction:** Allianz Worldwide Care is a private medical insurer, specialising in providing international (expatriate) health insurance for employees, individuals and their dependants, wherever they are in the world. Allianz Worldwide Care insure over 250,000 people in more than 150 countries. As an international insurer, we see a wide price variation in different regions of the world, for the same procedure.

**Aims/Background:** To assess the price differences for a colonoscopy +/- biopsies between different countries in the world. We aim also to highlight the differences in length of stay for this procedure around the world.

**Method:** We assessed all pre-authorisation Guarantees for full colonoscopy from 1st November 2011 to 1st November 2012. Each

procedure was assessed for costs, Country of treatment and length of stay. The costs included hospital and doctor fees. Colonoscopies with any intervention other than simple biopsy were excluded. Colonoscopies done in conjunction with any surgery, or that involved admission for complications, were excluded.

**Results:** Overall, we assessed 260 colonoscopies in 49 different countries. 246 met the study criteria. China, The United Arab Emirates, Brazil and the USA had the highest volumes of colonoscopies in the year.

The most expensive countries were The United States and Switzerland, with the average colonoscopy there costing €4,742 and €4,728 respectively. The most expensive colonoscopy was performed in the USA and cost €9,743. The least expensive countries for colonoscopy were Croatia and India with an average cost of €101, and €105 per procedure respectively.

**Conclusion:** There is a vast difference in costs for the same procedure, depending on the region of the world that the procedure is performed. The most expensive region being nearly 47 times as expensive as the cheapest region. We must ask ourselves what the difference in these costs relates to. What is it that Gastroenterologists in America and Switzerland are doing that equally qualified gastroenterologists in India are not?

**ABSTRACT 42 (13B137) POSTER PRESENTATION**

**Title of Paper:** A Prospective Study of Cognitive Performance in Irritable Bowel Syndrome: Visuospatial Memory Deficits as a Stable Feature

**Author(s):** Paul J Kennedy<sup>1,2</sup>, Gerard Clarke<sup>1,2</sup>, Andrew P Allen<sup>1,2</sup>, Ann O'Neill<sup>1</sup>, John A Groeger<sup>5</sup>, Eamonn MM Quigley<sup>1,3</sup>, Fergus Shanahan<sup>1,3</sup>, John F Cryan<sup>1,4</sup>, Timothy G Dinan<sup>1,2</sup>

**Department(s)/Institution(s):** 1Alimentary Pharmabiotic Centre, 2Department of Psychiatry, 3Department of Medicine, 4Department of Anatomy, University College Cork, Cork, Ireland. 5Department of Psychology, University of Hull, England

**Introduction:** The cognitive neurobiological model of IBS (Kennedy et al., 2012), a disorder of the brain-gut axis, proposes that key pathophysiological features, such as altered hypothalamic-pituitary-adrenal (HPA) axis function, or heightened immune activity, may lead to impaired cognitive performance. Recently IBS patients were found to exhibit visuospatial memory deficits (Kennedy et al., 2013). However, a prospective assessment is essential to confirm if cognitive dysfunction is a stable feature of IBS.

**Aims/Background:** To prospectively assess visuospatial memory performance in IBS, in comparison to disease controls [Crohn's disease (CD)] and healthy controls (HC).

**Method:** At baseline (Visit 1) and 6 months (Visit 2), IBS patients (baseline n=39; age (M): 28 yrs;IQ:105.5), matched CD patients (baseline n=18;age (M):32 yrs;IQ:103.4), and matched HC (baseline n=40;age (M):28 yrs;IQ:108.5), were assessed using a selection of cognitive tests from the CANTAB and Stroop test. Abdominal pain severity at time of testing was reported by IBS patients on a scale ranging from 0-100.

**Results:** At Visit 1 & 2, IBS patients displayed visuospatial memory deficits [Paired Associates Learning (PAL) test]; greater errors at the 6 pattern stage (baseline: p< 0.05), which also approached significance across Visit 1 & 2 (p=0.05); greater number of trials needed to complete the PAL [Visit 1 & 2 (p<0.05)]. Pain severity did not correlate with PAL performance (p>0.05).



**Conclusion:** Visuospatial memory dysfunction is a stable feature of IBS. These results may inform future management of this debilitating disorder in which there is a great unmet medical need.

#### References:

Kennedy P.J., Clarke G., Quigley E.M., Groeger J.A., Dinan T.G., Cryan J.F.(2012). Gut memories: towards a cognitive neurobiology of irritable bowel syndrome. *Neuroscience and biobehavioral reviews*. **36**: 310-40.

Kennedy, P.J., Clarke, G., O'Neill, A., Groeger, J.A., Quigley, E.M., Shanahan, F., Cryan, J.F., Dinan, T.G. (2012). An assessment of cognitive function in irritable bowel syndrome (IBS): Are deficits in episodic memory stress-related and mediated by tryptophan metabolism along the kynurenine pathway? *Digestive Disease Week, San Diego, USA, 2012*.

#### ABSTRACT 43 (13B138) POSTER PRESENTATION

**Title of Paper:** Factors influencing abnormal gland morphogenesis in colorectal cancer (CRC) - Translational studies

**Author(s):** Rebecca Topley, Ishaan Jagan, Ravi K Deevi, Aliya Fatehullah, Joshua Eves, Michael Stevenson, Maurice Loughrey, Kenneth Arthur, Frederick Charles Campbell.

**Department(s)/Institution(s):** Centre for Cancer Research and Cell Biology, Queen's University of Belfast, N. Ireland

**Introduction:** Disruption of colorectal gland formation characterizes high grade, aggressive CRCs but causal mechanisms remain unclear. Glandular morphogenesis can be modelled in three-dimensional (3D) culture systems that enable investigation of specific oncogenic signals. We have shown that the tumour suppressor PTEN regulates 3D glandular morphogenesis in a Caco-2 colorectal organotypic model system through effects on the Rho-GTPase cdc42. Cdc42 is activated by specific guanine nucleotide exchange factors (GEFs) and influences gland lumen formation by regulation of apical membrane (AM) assembly. PTEN knockdown inhibits cdc42, disrupts AM integrity and induces a vacuolar, multilumen glandular phenotype evocative of high grade CRC. While PTEN has catalytically -active or -inactive functional domains relevant to phosphatidylinositol 3-kinase (PI3K) activity, Caco-2 gland development was unaffected by PI3K signalling.

**Aims/Background:** Study aims were to investigate effects of PTEN PI3K catalytically -active or -inactive functional domains on 3D Caco-2 morphogenesis and to assess model fidelity to human CRC.

**Method:** We used wild type PTEN-expressing Caco-2 cells and isogenic stable PTEN knockdown Caco-2 (KD) clones in two- (2D) and three-dimensional (3D) cultures as model systems. Cell membrane localization of specific cdc42 GEFs was investigated by cell fractionation and immunoblot. Effects of catalytically -active or -inactive PTEN mutants on cdc42 activity and/or AM integrity during 3D morphogenesis were investigated by transfection and confocal microscopy. Apical membrane integrity was assessed in human CRC by semiquantitative score of the AM marker, NHERF-1. CRC gland morphology was assessed by a validated grading system.

**Results:** PTEN expression enhanced cell membrane recruitment of cdc42 GEFs with a specific role in 3D morphogenesis (Tuba, ITSN2). PTEN mutants containing an intact catalytically-inactive C2 domain enhanced cdc42 activity, restored AM integrity and rescued defective morphogenesis of 3D PTEN-KD Caco-2 cultures. Conversely, a C2 domain construct mutated at its CBR3 lipid-binding motif was

ineffective. Fundamental attributes of the model system viz, associations between AM integrity and gland morphology were conserved and had prognostic significance in human CRC.

**Conclusion:** PTEN deficiency impairs GEF membrane recruitment, cdc42 activation, apical membrane assembly and CRC glandular morphogenesis in a predictive colorectal cancer model system. Dissection of these networks may identify molecular targets for novel therapy, aimed at high grade CRC.

#### ABSTRACT 44 (13B139) POSTER PRESENTATION

**Title of Paper:** Inpatient endoscopy: Referral appropriateness and efficiency of service provision

**Author(s):** Wan Jean Tee, Grace Chan, Zuhair Ahmed, Oluwadamilola Jagun, Shane Brady, Maire Buckley, Shahzad Sarwar, Claire Smyth, Richard Farrell

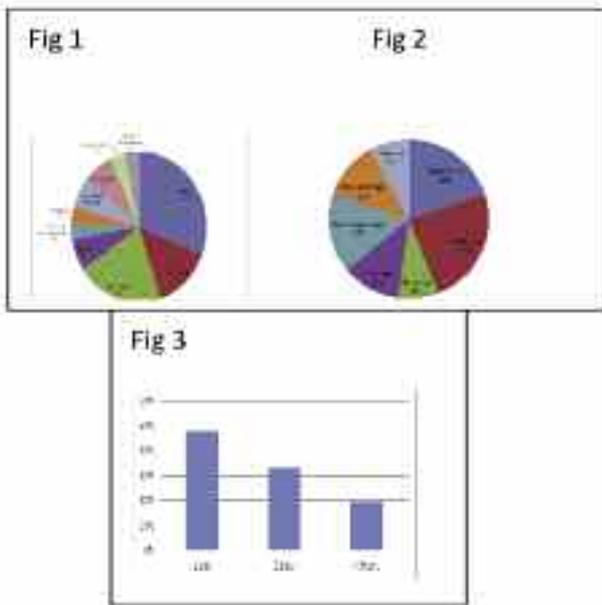
**Department(s)/Institution(s):** Gastroenterology Department, Connolly Hospital, Blanchardstown & RCSI

**Introduction:** There is an increasing burden on endoscopy units in Ireland to reduce waiting lists and to provide an efficient service. This is compounded by the introduction of the colorectal screening programme, the initiation of the medical assessment unit and the hiring freeze on endoscopy personnel. Therefore, it is essential that all inpatient endoscopy referral indications are appropriate and that provision is made to ensure that requests are dealt with efficiently, without delaying patient discharge.

**Aims/Background:** To evaluate the appropriateness of inpatient endoscopy requests as well as to assess the efficiency of inpatient endoscopy service provision.

**Method:** All inpatient endoscopy requests were included prospectively from 20th November 2012 to 21st January 2013. Appropriateness of referral indication was compared against the American Society of Gastroenterology guidelines as well as criteria pre-determined by gastroenterology consultants or registrars in the department. Efficiency of service was evaluated by reviewing the significance of endoscopic findings and if the endoscopic procedures facilitated earlier discharge from hospital.

**Results:** 30 requests for inpatient endoscopy were received over the study period, mean age 68.3±13.4 years. This accounted for a total of 5.7% endoscopic procedures performed during the period (30/527). 27/30 (90.0%) of the requests were thought to be appropriate. 2/30(6.7%) requests were cancelled by the gastroenterology team due to poor patient clinical status. 1/30 patient was cancelled due to poor indication as the patient had normocytic anaemia secondary to chronic renal failure. There were 11(40.7%) requests for oesophagogastroduodenoscopy (OGD), 3(11.1%) for colonoscopy, 5(18.5%) for OGD and colonoscopy, 6(22.2%) for percutaneous endoscopic gastrostomy(PEG) tube insertion and 2(7.4%) for sigmoidoscopy. Of the appropriate referrals, the most common indications were microcytic anaemia in 8/27(29.6%) patients, PEG insertion in 6(22.2%) patients and dysphagia in 4(14.8%) patients (figure 1). Almost all referrals originated from medical teams (25/27, 92.6%) (figure 2). 13(48.1%) patients underwent endoscopy within one day of referral and only 5(18.5%) waited for three or more working days (figure 3). Endoscopy yielded significant findings in 14(51.9%) patients. Early endoscopy facilitated more rapid discharge from hospital in 9(33.3%) of patients.



Figur  
endo:  
Figur  
endo:  
Figur  
endo:  
endo:

ient  
rral  
ient

**Conclusion:** Almost all of the inpatient endoscopy requests were thought to be appropriate, confirming that hospital doctors have good awareness for referral indications. The endoscopy service provided in our hospital is very efficient with more than half of patients undergoing their procedures within a day of referral.

**ABSTRACT 45 (13B140) POSTER PRESENTATION**

**Title of Paper:** The IRONY of anaemia in inflammatory bowel disease: Common but underdiagnosed and undertreated

**Author(s):** Grace Chan, Wan Jean Tee, Shane Brady, Zuhair Ahmed, Sami Backley, Oluwadamilola Jagun, Helen Martin, Maire Buckley, Shahzad Sarwar, Claire Smyth, Richard Farrell.

**Department(s)/Institution(s):** Gastroenterology Department, Connolly Hospital, Blanchardstown & RCSI

**Introduction:** Anaemia is a common systemic complication in inflammatory bowel disease (IBD). Iron deficiency anaemia (IDA) in IBD is often underdiagnosed and undertreated despite its impact on quality of life. There is poor awareness among physicians on the role of oral and intravenous iron replacement in anaemic IBD patients. Oral iron is a low cost treatment but has limited bioavailability and low tolerability. In contrast, intravenous iron appears to be well tolerated and is effective in the treatment of active IBD. Nevertheless, it does incur a strain on healthcare cost, human resources and infrastructure.

**Aims/Background:** To identify the prevalence of IDA in our cohort of IBD patients and to evaluate the adequacy of the treatment of their anaemia

**Method:** This was a single-centre, retrospective, cross sectional study. All IBD patients in the hospital were recruited. Data was collected by reviewing the IBD database, patient chart and contacting patients directly. IDA patients were identified and their treatment evaluated based on their last hospital admission or outpatient review. IDA was defined as haemoglobin(Hb) <13g/dL in

males or Hb <12g/dL in females in combination with either microcytosis (MCV < 78fl) or transferrin saturation < 20%. Active disease was defined as patients with symptomatic disease requiring steroids.

**Results:** Of the 606 IBD patients, only 510(84.2%) were eventually recruited due to incomplete dataset. There were 273(53.5%) males and 237(46.5%) females, median age 43.0 ± 15.6 years. 263(51.6%) patients had Crohn's disease (CD), 235(46.1%) had ulcerative colitis(UC) and 11(2.2%)had indeterminate colitis (IC). Of these, 98/510(19.2%) had anaemia of which 56/510 (11.0%) were classified as IDA. Of those with IDA, 33(58.9%) had CD, 21(37.5%) had UC and 2(3.6%) had IC, p = 0.325. 31(56.4%) received no oral replacement, 19(34.5%) received oral iron replacement and 5(9.1%) received intravenous iron replacement. Those who did not receive any iron replacement had a mean Hb of 11.3g/dL compared to 10.9g/dL in those who received iron replacement, p=0.209. In patients with active disease, only 4/18(22.2%) received intravenous iron replacement.

**Conclusion:** Less than half of our IBD patients with IDA are treated with iron supplementation. Also, only a fifth of those with active disease received intravenous replacement. This is unsatisfactory as oral supplementation in active disease is poorly absorbed. There needs to be more awareness among physicians for the role and route of iron replacement in IBD.

**ABSTRACT 46 (13B141) POSTER PRESENTATION**

**Title of Paper:** Adalimumab in the maintenance of remission for inflammatory bowel disease: Need for weight-based dosing?

**Author(s):** Grace Chan, Helen Martin, Richard Farrell.

**Department(s)/Institution(s):** Gastroenterology Department, Connolly Hospital, Blanchardstown & RCSI

**Introduction:** In inflammatory bowel disease (IBD), administration of adalimumab (ADA), unlike infliximab, is not weight based. Historically, patients with severe IBD, particularly CD are emaciated and typically have low body weight. Since the advent of biologic therapy, patients are started with aggressive therapy at an earlier stage of disease and most IBD patients are now of a normal or high body mass index (BMI). Epidemiological studies have demonstrated that the BMI of IBD patients have gradually increased over time. However, the impact of patient's weight on response to ADA is not known.

**Aims/Background:** To evaluate the impact of patient's weight on the efficacy of ADA in maintaining remission in IBD.

**Method:** All patients with IBD who received ADA were recruited retrospectively. Patients' weights prior to onset of ADA therapy were retrieved from file. Patients who did not achieve induction of remission with ADA were excluded. Remission was defined as a consistent Harvey Bradshaw score < 5 for CD and Mayo score <= 2 for UC. Treatment failure was defined as requiring escalation of therapy or surgical intervention.

**Results:** 7.4% of patients (43/585) with IBD (31 CD, 12 UC) received ADA. Of these, 6/43 (14.0%) patients were primary non responders while 3/43 (7.0%) patients discontinued therapy due to side effects. Both these groups were excluded. In the 34 patients who responded to ADA, there were equal numbers of male and female patients, with a mean age at diagnosis of 29.7±12.1 years.



The mean duration of ADA therapy was 25.4 months. Of those who initially responded to ADA, 11/34 (32.4%) subsequently required escalation of therapy in the form of reduced dosing interval (7/11), short term corticosteroid therapy (3/11) or surgical intervention (1/11). These patients who failed standard ADA therapy had a higher mean body weight of 79.6kg compared to 70.7kg in those who were successfully maintained in remission with fortnightly ADA,  $p=0.126$ .

**Conclusion:** Despite the higher mean body weight in IBD patients who fail ADA therapy compared to those who respond, the result did not achieve statistical significance. However, the study did demonstrate a trend towards treatment failure in patients with a higher mean body weight and would indicate that we should consider weight based adalimumab dosing. Other similar factors that may influence the need for weight based dosing include patients' BMI and abdominal girth.

### ABSTRACT 47 (13B142) POSTER PRESENTATION

**Title of Paper:** Clinical characteristics and risk factors for bile salt malabsorption

**Author(s):** K Sager, S Subramanian

**Department(s)/Institution(s):** Department of Gastroenterology, Royal Liverpool University Teaching Hospital

**Introduction:** Bile acid malabsorption (BAM) is a known cause of chronic diarrhoea. The condition is easily diagnosed by performing a selenium homocholic acid taurine (SeHCAT) test, with 7-day retention of <10% indicating BAM. BAM negatively impacts on quality of life but responds well to bile acid sequestrants. Patients with undiagnosed BAM are often labelled as diarrhoea-predominant IBS (IBS-D), especially those with idiopathic or type 2 BAM. We aimed to investigate the clinical characteristics of patients diagnosed with type 2 BAM.

**Method:** We performed a retrospective study of patients who underwent a SeHCAT scan for investigation of diarrhoea at the Royal Liverpool Hospital between 18/03/2009 and 03/01/2012. Clinical details including demographics and response to treatment were abstracted from electronic case notes.

**Results:** 161 patients who attended for SeHCAT scan for investigation for diarrhoea were reviewed. 60 patients had BAM with a 7 day Selenium retention of <10%.

22 of these patients had primary (type 2) BAM, of which 12 were female and 10 were male, median age 48.5 (range 23-68). 12 of these patients were labelled as IBS-D by their clinicians prior to the SeHCAT test. 19 received treatment with bile acid sequestrants. 13 had follow up data, 6 are awaiting clinic review and 3 patients were lost to follow up. 12 (92%) of the 13 patients reviewed in clinic responded well to treatment, taken as significant reduction in bowel frequency or dramatic improvement suggested by the patient. 1 (8%) patient did not respond despite 2 different bile acid sequestrants.

35 of the remaining 38 patients had secondary BAM due to ileal Crohn's (57%), cholecystectomy (20%), intestinal resection (8.5%), both cholecystectomy and ileal Crohn's (5.7%), coeliac disease (5.7%), and chronic pancreatitis (2.9%). Of these patients 23 were female and 12 were male, median age 45 (range 16-80). 30 patients received treatment with bile acid sequestrants. 23 had follow up data, and 7 are awaiting clinic review. 20 (87%) of the 23 patients reviewed in clinic responded well to treatment and 3 (13%) did not respond despite 2 different bile acid sequestrants.

**Conclusion:** BAM is a cause of chronic diarrhoea that can be easily managed with bile acid sequestrants. Patients with chronic diarrhoea and in particular those who have been labelled as IBS-D should be referred for a SeHCAT scan to rule out BAM. If the test is not available locally then referral to another centre should be considered.

### ABSTRACT 48 (13B143) POSTER PRESENTATION

**Title of Paper:** The impact of introducing a 24/7 emergency gastrointestinal (GI) bleeds service on reducing hospital stay and mortality in a District General Hospital

**Author(s):** Zia Ur Rahman, Saeed-Ur Rehman, Dr. Andrew Dixon

**Department(s)/Institution(s):** Gastroenterology, Care of the Elderly

**Introduction:** The impact of introducing a 24/7 emergency gastrointestinal (GI) bleeds service on reducing hospital stay and mortality in a District General Hospital.

**Aims/Background:** Upper GI bleed remains the commonest gastrointestinal emergency with a significantly high hospital mortality and prolonged hospital stay. The aim of this study was to audit any difference of the above parameters after the introduction of GI bleed rota in our trust.

**Method:** The data was collected from patient records and endoscopy database. Rockall score was used. Standard statistical methods were used for analysing and comparisons were made with an audit undertaken in 2005.

**Results:** The re audit undertaken was conducted and compared to a previous one which was done in 2005, after introducing local upper GI bleed guidelines and a 24/7 GI bleed rota.

A total of 107 patients (including both in- and outpatients) were referred for upper Gastrointestinal endoscopy with suspected upper GI bleed from 1st Jan to 30th June 2012. A sample of 39 patients were randomly (every third patient) included in the audit with 19 females and 20 males. The mean age was 69.6yrs (39-93). The time interval from presentation to therapeutic endoscopy was 35.35 hrs as opposed to 2.82 days according to 2005 audit data. Amongst the endoscopy findings 12.82% (5/39) patients had Gastrooesophageal varices versus no banding in 2005 audit data; there was no significant difference among other aetiologies in both audit samples. Thirty day mortality was 7.7% (3/39) as compared to 13.33% (4/30) in 2005. The length of hospital stay was found to be 10.7 days as compared to 12.32 days (2005).

**Conclusion:** 1) The mortality was reduced as the time delay to therapeutic endoscopy reduced.

2) The hospital stay has been shortened by a couple of days in this study sample. The estimated cost of 24/7 GI bleed rota is 15000 pounds per annum which can potentially save significant amount of funding by reducing hospital stay i.e. An investment worth spending on.

3) The incidence of variceal bleeding has increased significantly over the years.

### References

- 1) Rockall TA, Logan RFA, Devlin HB, et al. Incidence of and mortality from
- 2) acute upper gastrointestinal haemorrhage in the United Kingdom. *BMJ* 1995;311:222-6.



**ABSTRACT 49 (13B145)**

**POSTER PRESENTATION**

**Title of Paper:** Latent Eosinophilic Esophagitis (LEOE) is a unraveled novel clinical entity . A randomized open clinical pilot study

**Author(s):** P Patrick Basu MD, MRCP, FACP, AGAF1,2, N J Shah MD3, R Siriki MD2 ,K Mittimani MD2 , S Farhat MD2, L Ang MD2,S Win MD2,Md A Rahman MD2, S Atluri MD2

**Department(s)/Institution(s):** 1Columbia University College of Physicians and Surgeons, NY; 2 NSLIJHS/ Hofstra North Shore LIJ School of Medicine, NY, 3 James J. Peters VA Medical Center, Mount Sinai School of Medicine, NY

**Introduction:** EOE is an increasingly common clinical entity with recent prevalence of 6.4% in US adults. It's natural history is still not understood. Immune driven allergic diathesis in esophageal mucosa with a spectrum of clinical symptoms, intermittent food impaction, refractory reflux, heart burn, atypical chest pain with subtle mucosal changes to trachealisation of lumen on endoscopy. Intra epithelial eosinophils of 15/hpf is the standard diagnosis.

**Aims/Background:** This study unravels a novel entity of LEOE with symptomatic refractory heart burn, intra epithelial eosinophil count < 10/hpf with normal luminal and mucosal structure on endoscopy.

**Method:** Eighty seven (n=87) patients with GERD were recruited. Group A: 35/87(40%) Refractory Symptomatic heart burn, Group B: 30/87(34%) Non erosive Esophagitis (NERD), Group C: 22/87(25%) Non Ulcer Dyspepsia (NUD) with exclusion process, 24 hour Manometry, PH studies and GERD score mean >8, refractory to Proton Pump Inhibitors and Nortryptiline for 6 weeks. All groups underwent Pre and 3 months Post Endoscopy with Intra epithelial Eosinophil, Mast cells, and CD3, CD4, CD8 counts with special Immunohistochemical stain Interleukin 5 (IL5). Serum Tryptase, IgE, Interleukin (IL5), Total Eosinophils, Skin RAST, Stool for O&P were evaluated. All withdrew from PPI and Pro-kinetics for 3 months.

Group A: Mean Intraepithelial Eosinophil (IEE) Ct (5-10; Mean 8) with total 17/35 (48%) and 12/17 (70%) IL5 stain positivity. Further randomized into: A1 9/17 (53%) IEE- treated with Budesonide 4mg liquid and A2: IEE 8/17 (47%) with Placebo.

Group B: NERD, total IEE mean 6/30 (20%) and 3/6 (50%) IL5 stain positivity. Further divided into B1- 3/6(50%) with same regimen and B2- 3/6 (50%) placebo. Group C: NUD- Mean IEE 4/22 (18%) and 1/4 (25%) IL5 stain Positivity further subdivided into C1- 2/4 (50%) treated with above regimen and C2: 2/4 (50%) placebo. Pre and Post endoscopy were all evaluated in a single center with a dedicated pathologist.

**Exclusion:** Established EOE, Asthma, parasitic infestation, Vasculitis, Esophageal ulcer/Cancer/Varies, NSAID's, H pylori, HIV, pill or Infectious esophagitis, Drugs like Leukotrin, Steroids or Antihistamines

**Results:** Post treatment Biopsy with IL5 stain. Group A1- no IEE, Negative IL5, resolved GERD < 4 score. Group A2- IEE 5/8 (63%) Positive IL5 with GERD score 8. Group B1- no IEE with negative IL5 and GERD score <4. Group B2: 3/6 (50%) IEE with Positive IL5 and GERD score >8. Group C1- no IEE with negative IL5 and GERD score <4. Group C2-1/2 (50%) IEE with positive IL5 and GERD score >8. No side events were noted.

**Conclusion:** This study postulates a novel clinical entity of LEOE (Eos Count <15, range 5-10) confirmed with IL5 stain exists with RGERD. Further study to validate

**ABSTRACT 50 (13B147)**

**POSTER PRESENTATION**

**Title of Paper:** Novel Treatment of Refractory Seroma after Incisional Hernia Repair

**Author(s):** Martel G, Ahmad J, Taylor M

**Department(s)/Institution(s):** Department of General surgery, Mater Infirmorum, Belfast, N. Ireland

**Introduction:** Seroma formation is a common complication after repair of abdominal wall hernia, which can lead to significant morbidity. Despite new technologies the treatment of seroma remains a challenge. We present a case where a novel technique of percutaneous injection of a fibrin sealant was used, with subsequent full resolution.

**Aims/Background:** A 43 year old lady with a past history of previous laparoscopic incisional hernia repair presented with a recurrence. Following open repair, she developed an extremely symptomatic seroma which was refractory to traditional treatment with multiple drainages. Subsequently a drain was inserted, and the cavity allowed to empty until collapsed. A fibrin sealant was then injected into the cavity, and the drain removed.

**Method:** A full literature search was carried out, and any reported use of fibrin sealant in the setting of seroma formation documented. The patient was followed up a clinic one month following treatment, and clinically assessed.

**Results:** Clinical assessment at one month follow up revealed no evidence of seroma recurrence. After full literature research there were no previously reported cases where fibrin sealant had been used to treat refractive seroma following incisional hernia repair.

**Conclusion:** This case report presents the successful use of fibrin sealant to treat a resistant seroma after incisional hernia repair. This approach may prove to be effective in promoting resolution of troublesome seromas. Further studies are required to establish its efficacy.

**ABSTRACT 51 (13B148)**

**POSTER PRESENTATION**

**Title of Paper:** Romiplostim's Effect to Optimize SVR with Telaprevir, Ribavirin, And Peg Interferon-alfa 2a in Thrombocytopenic Cirrhotics with Chronic Hepatitis C. A Placebo Controlled Prospective Clinical Trial

**Author(s):** P Patrick Basu MD, MRCP, FACP, AGAF1,2, N J Shah MD3, R Siriki MD2 ,K Mittimani MD2 , S Farhat MD2, L Ang MD2,S Win MD2,Md A Rahman MD2, S Atluri MD2

**Department(s)/Institution(s):** 1Columbia University College of Physicians and Surgeons, NY; 2 NSLIJHS/ Hofstra North Shore LIJ School of Medicine, NY, 3 James J. Peters VA Medical Center, Mount Sinai School of Medicine, NY

**Introduction:** Treating CHC (Chronic hepatitis C) cirrhotic patients with thrombocytopenia is often challenging; requiring dose reduction or even discontinuation of treatment to avoid complications. Significant dose reduction affects the response guided therapy (RGT); adversely affecting outcomes. Thrombopoietin (TPO) agonists are used to avoid disruption or therapeutic failure to optimize SVR (Sustained Virological response).

**Aims/Background:** This study evaluated the use of TPO agonist in thrombocytopenia in cirrhotics with treatment experienced CHC-GT1 (CHC-Genotype 1) on treatment with Telaprevir, Ribavirin (RBV) and



Peg Interferon-alfa 2a (p-IFN $\alpha$ -2a).

**Method:** Total of Forty five (n=45) cirrhotic treatment experienced CHC-GT1 patients with a mean MELD of 16 and mean platelet count 95 thousand were recruited and subdivided into three groups. Group A- (n=15) Received placebo plus reduced dose of p-IFN $\alpha$ -2a with RBV and Telaprevir. Group B (n=15) Received Romiplostim 500 mcg lead in 1 month prior to initiation of therapy and SOC with Telaprevir. Group C (n=15) Received Elthrombopag 50mg orally daily lead in prior 15 days and SOC with Telaprevir for 12 weeks. RGT was analyzed with serial platelet counts, hemoglobin/hematocrit, absolute neutrophils count and platelet antibodies. HCV RNA quantitative count was measured at 1ST, 2ND, 4TH, 12TH 24TH, 36TH and 60th weeks for SVR.

**Results:** See table. ( VRVR- Very Rapid Virological Response, ETVR- End to treatment Virological Response, R- Relapser, PR- Partial Responder, BT- Break through )- file has been uploaded as a supporting file.

Group	n	VRVR (%)	ETVR (%)	R (%)	PR (%)	BT (%)	SVR (%)	Platelet count at 12 weeks (10 <sup>3</sup> /mm <sup>3</sup> )	Hb at 12 weeks (g/dl)	Hct at 12 weeks (%)	Neutrophils at 12 weeks (10 <sup>3</sup> /mm <sup>3</sup> )	Platelet antibodies at 12 weeks
Group A	15	0/15 (0%)	0/15 (0%)	0/15 (0%)	0/15 (0%)	0/15 (0%)	0/15 (0%)	100.0	12.0	35.0	0/15 (0%)	0/15 (0%)
Group B	15	0/15 (0%)	0/15 (0%)	0/15 (0%)	0/15 (0%)	0/15 (0%)	0/15 (0%)	100.0	12.0	35.0	0/15 (0%)	0/15 (0%)
Group C	15	0/15 (0%)	0/15 (0%)	0/15 (0%)	0/15 (0%)	0/15 (0%)	0/15 (0%)	100.0	12.0	35.0	0/15 (0%)	0/15 (0%)

**Title of Paper:** Resussey Leg Sytirome (RLS) is associated with Hepatic Encephalopathy (HE) in decompensated cirrhosis. A clinical pilot study

**Author(s):** P Patrick Basu MD, MRCP, FACC, AGAF1,2, N J Shah MD3, R Siriki MD2 ,K Mittimani MD2 , ,S Farhat MD2, L Ang MD2,S Win MD2,Md A Rahman MD2, S Atluri MD2

**Department(s)/Institution(s):** 1Columbia University College of Physicians and Surgeons, NY; 2 NSLIJHS/ Hofstra North Shore LIJ School of Medicine, NY, 3 James J. Peters VA Medical Center, Mount Sinai School of Medicine, NY

**Introduction:** The prevalence of RLS is close to 10% in the general population; which adversely affects the quality of life (QOL). Exact etiology of RLS is still unknown. Iron deficiency, small intestinal bacterial overgrowth (SIBO) and inflammatory bowel disease (IBD) have clear associations with RLS. Decompensated cirrhosis with portal hypertension has multi-organ involvement causing minimal and overt encephalopathy, sleep disturbances (dysnomia, parasomnia) and stupor; all of which has a clear association with sub acute bacterial peritonitis ( SBP ) which has a precipitating clinical state along with SIBO

**Aims/Background:** This clinical study evaluates the association of RLS in HE amongst decompensated cirrhotics.

**Method:** One hundred and eight (n=108) patients were recruited and subdivided into three sub-groups. Group A (n=36) - decompensated cirrhotic (mean MELD of 16, OHE 20/36 (55%), MHE 16/36 (44%), esophageal varices grade II 24/36 (67%). Group B (n=36) - chronic liver disease without cirrhosis with mean MELD 6: Alcohol related 9/36 (25%), NASH 12/36 (33%), HCV 12/36 (33%), HBV 1/36 (3%) and AIH 2/36 (6%). Group C (n=36) healthy controls. Initially all received Xifaxan 550mg orally twice daily for 10 days to eradicate co-existing SIBO. All underwent Methane breath test for SIBO. Baseline labs: Serum levels for renal function, ferritin, iron studies, hemoglobin and hematocrit, ammonia, Celiac and IBD serology, stool lactoferrin & calprotectin and urine for toxicology screening were collected. Groups A and B underwent neuro-psychometric and flicker testing for MHE and OHE and sleep testing for RLS (with Mayo RLS questionnaire).

**Exclusion:** Chronic iron deficiency, Celiac disease, IBD, major depression, IBS, benzodiazepines, narcotics, alcohol, anti-psychotics and use of illicit drugs.

**Results:** Group A 24/36 (67%) had RLS: [ OHE 16/20 (80%), MHE 8/16 (50%), esophageal varices 8/10 (80%), alcoholic cirrhotic 10/14 (71%), CHC 3/6 (50%), NASH 3/6 (50%) and SIBO 14/36 (39%) ]. Group B 1/36 (3%) RLS and SIBO 7/36 (19%). Group C : 2/36 (6%) RLS and SIBO 3/36 (8%). All individuals were confirmed by sleep study and RLS questionnaire. Serum ammonia has no impact on RLS.

**Conclusion:** This clinical trial postulates that decompensated cirrhotics with Hepatic encephalopathy have high incidence of RLS with portal hypertension. Larger trials will validate this finding.

**ABSTRACT 53 (13B150) POSTER PRESENTATION**

**Title of Paper:** Rifabutin, Omeprazole, Alinia and Doxycycline therapy for prior treatment failure Helicobacter Pylori (HP) population - A randomized open label clinical pilot study -ROAD Trial

**Author(s):** P Patrick Basu MD, MRCP, FACC, AGAF1,2, N J Shah MD3, R Siriki MD2 ,K Mittimani MD2 , ,S Farhat MD2, L Ang MD2,S Win MD2,Md A Rahman MD2, S Atluri MD2

**Department(s)/Institution(s):** 1Columbia University College of Physicians and Surgeons, NY; 2 NSLIJHS/ Hofstra North Shore LIJ School of Medicine, NY, 3 James J. Peters VA Medical Center, Mount Sinai School of Medicine, NY

**Introduction:** HP infection is a global problem with a large spectrum of clinical syndromes like Dyspepsia, Ulcer, MALT and Gastric Cancer. WHO considers HP a carcinogen. Multi bacterial regiments have been established to eradicate H Pylori. Treatment failure remains a clinical challenge due to microbial resistance, recrudescence or reinfection. Bacterial Genomic resistance confers a series of anti microbials with species specificity.

**Aims/Background:** This study evaluates the efficacy of a novel regiment against treatment failure population

**Method:** Seventy six patients (n=76) were recruited with treatment failure with Metronidazole (Mtz), Clarithromycin (Cltx), Amoxicillin (Amx), Levofloxacin (Lvx), Tetracycline( Tcx), with Bismuth, in non sequential therapy. Group A (n=36)-Mtz 30/36 (83%), Amx 29/36(80%), Cltx 30/36 (83%) and Bismuth 23/36 (64%), Tcx 21/36 (58%), NTZ 6/36 (16%), Dox 6/36(16%). Group B (n= 40): Mtz



31/40 (77%), Cltx 30/40(75%), Amx 32/40(80%), Tcx 13/40 (32%), Lvx 9/40(22%), NTZ 9/40 (22%), Dox 9/40 (22%), Bismuth 21/40(52%).

Group A received oral Rifabutin 300 mg QD, Alinia 500 mg BID, Dox 200 mg nightly and Omeprazole 40 mg prior to breakfast for 10 days. Group B received oral Macrochantin (Mcd) 300mg daily, Dox 200mg nightly, Alinia (Ntz) 500 mg bid and Omeprazole 40 mg for 10 days. All underwent endoscopy with four quadrant biopsies. H Pylori pre and post stool antigen. Group A- 9/36 (25%) Intestinal Metaplasia(IM), Antral erosion 3/36( 8%), Duodenitis 7/40(17%). Group B: 11/40 (28%) IM, Duodenal ulcer 2/40 (5%), Peptic ulcer 4/40 (10%). Exclusion: Pregnancy, Recent Clostridium Difficile infection, NSAIDs, Bismuth, PPI or any antibiotics use within two months, Gastric Cancer, any hypersensitivity to study drugs or recent chemotherapy.

**Results:** Group A- ROAD 29/36 (72%). stopped for itching 2/36 (8%) and 1/36(3%) atypical chest pain. 1/36(3%) took for 7 days. Side events in Group A: 11/36 (30%) Nausea, 3/36(8%) constipation, 4/36 (11%) headache, 2/36 (5%) diarrhea, 2/36 (5%) Vomiting, 1/36(3%) Dizziness, 1/36(3%) Abdominal pain, 1/36 (3%) Palpitations, and no skin rash. Group B-MOAD 21/40(52%) eradicated. Stopped: 4/40(10%). Side events- 13/40 (32%) Nausea, 2/40(5%) Dysgeusia, 3/40(7%)vomiting, 4/40(10%) Constipation, 2/40(5%) Diarrhea, 3/40(7%) Headache, 2/40(5%) dizziness, 2/40(5%) atypical Chest pain, 3/40(7%) abdominal pain, 2/40(5%) itching no skin rash and 2/40(5%) palpitations.

**Conclusion:** Optimal eradication of H Pylori is aimed to prevent MALT or gastric Cancer over time with significant morbidity and QOL. ROAD therapy has exceeded the eradication rate over MOAD in prior treatment experienced or failed therapy with symptoms. Larger trial to validate.

## ABSTRACT 54 (13B151) POSTER PRESENTATION

**Title of Paper:** Prevalence of small bowel bacterial over growth (SIBO) in decompensated cirrhosis with portal hypertension: An clinical pilot study

**Author(s):** P Patrick Basu MD, MRCP, FACP, AGAF1,2, N J Shah MD3, R Siriki MD2 ,K Mittimani MD2 , ,S Farhat MD2, L Ang MD2,S Win MD2,Md A Rahman MD2, S Atluri MD2

**Department(s)/Institution(s):** 1Columbia University College of Physicians and Surgeons, NY; 2 NSLIJHS/ Hofstra North Shore LIJ School of Medicine, NY, 3 James J. Peters VA Medical Center, Mount Sinai School of Medicine, NY

**Introduction:** Decompensated Cirrhosis is associated with portal hypertension and its complications; like spontaneous bacterial peritonitis (SBP), Hepato Renal Syndrome, Minimal and overt Encephalopathy (HE) which accelerate mortality and affect quality of Life ( QOL ). Portal hypertension causes transmural edema and Dysbiosis due to altered splanchnic hemodynamics promoting translocation of microbes across the bowel wall causing SBP and precipitating HE (with substantially reduced survival rates).

**Aims/Background:** This study evaluates the prevalence of SIBO in decompensated cirrhotics (without overt HE) and the recurrence of SBP; both leading to a challenging clinical course.

**Method:** Total of hundred twenty (n=120) patients were recruited. Group A- (n=30) healthy controls, Group B (n=45) chronic liver disease {( ALD 12/45(27%), NASH 5/45 (11%), HCV 18/45 (40%)}, Group C (n=45)- Decompensated Cirrhosis with mean MELD of 16. Laboratories studies included: Stool H pylori antigen, Ova and

Parasites, Initial Lactoferrin, Calprotectin, serum Ammonia, Anti Sacromyces Cervecesiae antibody IgA and IgG , Tissue Transglutaminase Antibody IgA and IgG, Endomysial Antibody IgA and IgG , de Aminated Gliadine Peptide IgG, Breath Testing for SIBO lactose - at base line and after three months. Group C underwent abdominal sonogram guided baseline paracentesis which was repeated in three months to evaluate the recurrence of SBP in SIBO. Exclusion: Diabetes Mellitus, Renal failure, IBS, Celiac, IBD, Parkinsonism, idiopathic dysmotility disorders, Hepatic Encephalopathy, TIPS and Drugs-Gut specific Antibiotics, anticholinergics, Tricyclics, Methadone, Narcotics and PPI's.

**Results:** Group A 2/30 (6%) were positive for SIBO on Breath Testing, 1/30(3%) ASCA IgA positive. Group B 5/45 (11%) were positive on breath testing, 4/45 (8%) were ASCA IgA positive. Group C: 33/45 (73%) were positive on breath testing and 38/45 (84%) were ASCA IgA positive. Recurrence of SBP was 28/33(85%).

**Conclusion:** This observational clinical trial reveals SIBO to be associated with decompensated Cirrhosis. SBP with SIBO has independent morbidity with recurrence. Prophylactic antibiotics should be considered to avoid recurrent SBP and Encephalopathy in Cirrhotics with SIBO. Larger study needs to validate the role of SIBO in decompensated cirrhotics with portal hypertension

## ABSTRACT 55 (13B152) POSTER PRESENTATION

**Title of Paper:** Telaprevir with Adjusted dose of Ribavirin in naive CHC-G1: Efficacy And Treatment in CHC in Hemodialysis population. TARGET C Trial- A Placebo Randomized Control Clinical Trial

**Author(s):** P Patrick Basu MD, MRCP, FACP, AGAF1,2, N J Shah MD3, R Siriki MD2 ,K Mittimani MD2 , ,S Farhat MD2, L Ang MD2,S Win MD2,Md A Rahman MD2, S Atluri MD2

**Department(s)/Institution(s):** 1Columbia University College of Physicians and Surgeons, NY; 2 NSLIJHS/ Hofstra North Shore LIJ School of Medicine, NY, 3 James J. Peters VA Medical Center, Mount Sinai School of Medicine, NY

**Introduction:** The prevalence of Chronic hepatitis C (CHC) in Hemodialysis population is 3%. Standard of care (SOC) offers reduced dose of Peg IFN Alfa (p-IFN $\alpha$ ) and reduced Ribavirin (RBV) doses eliciting sub optimal SVR of 27%. Morbidity and mortality of CHC has impact on liver kidney transplant and graft failure. Triple therapy is SOC in CHC patients. Telaprevir is not cleared renally and hence is safe in the hemo-dialysis population.

**Aims/Background:** This study evaluated the efficacy of triple therapy with Telaprevir, adjusted dose of RBV and p-IFN $\alpha$  in naive CHC-G1(CHC Genotype 1) individuals on hemodialysis as a Respond Guided Therapy (RGT)

**Method:** Total of thirty five (n=35) naive CHC-G1 were recruited and subdivided into two sub-groups.

Group A - (n=18): Received p-IFN $\alpha$  135mcg once weekly, Telaprevir 750mg two tablets – TID for four days and three tablets BID post dialysis for three days along with RBV 400mg daily for 12 weeks followed by p-IFN $\alpha$  135mcg plus RBV 400mg till 24weeks of duration

Group B- (n=17): Received p-IFN $\alpha$  135 mcg once weekly with Telaprevir 750mg two tablets – TID for four days and three tablets BID post dialysis for three days (same as Group A) with RBV 200mg for 12 weeks followed by p-IFN $\alpha$  135mcg with RBV 400mg till 48 weeks. The IL28B was evaluated for all individuals. Hematological, Liver and renal parameters were followed regularly during the trial. Viral load was followed to evaluate for response guided therapy



(RGT) in all individuals.

**Results:** See table (VRVR- Very Rapid Virological Response, ETVR- End to treatment Virological Response)- The table is attached as a supporting file

		VRV 1/2010	VRV 2 2011	VRV 4 2012	ETVR 12 2010	ETVR 18 2011	ETVR 20 2012	ETVR 48 2012	ETVR 60 2012	ETVR 72 2012
Group A n=15 USG	GLA E	10/10 (66.7%)	10/10 (66.7%)	10/10 (66.7%)	10/10 (66.7%)	10/10 (66.7%)	10/10 (66.7%)	10/10 (66.7%)	10/10 (66.7%)	10/10 (66.7%)
Group B n=11 USG	GLA E	4/10 (36.4%)	5/10 (45.5%)	5/10 (45.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)
Group C n=11 USG	GLA E	4/10 (36.4%)	5/10 (45.5%)	5/10 (45.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)
Group D n=11 USG	GLA E	4/10 (36.4%)	5/10 (45.5%)	5/10 (45.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)	6/10 (54.5%)

**Title of Paper:** Bile Acid Malabsorption. A Review Of SeHCAT Testing In Belfast

**Author(s):** JA Gray, M Robinson

**Department(s)/Institution(s):** Department of Gastroenterology, Royal Victoria Hospital, Belfast

**Introduction:** Bile acid malabsorption (BAM) is a recognised cause of diarrhoea. Failure of bile acid absorption in the terminal ileum leads to excess bile in the colon causing diarrhoea due to a water and electrolyte secretion imbalance. SeHCAT testing is the current method of diagnosis of BAM. Current treatments available include cholestyramine, colestipol and colesevelam.

**Aims/Background:** The aims of this study were to review over a three year period the frequency and indications for SeHCAT testing and to assess the prevalence of type II BAM in those with idiopathic chronic diarrhoea and diarrhoea predominant irritable bowel syndrome (IBS-D)

**Method:** A retrospective study was performed by reviewing both radiology records of SeHCAT tests and an electronic patient database.

**Results:** A total of 61 studies were performed over a 3 year period: 8 (2010), 13 (2011) and 40 (2012). Female to male ratio was 2:1 (41:20). 52.5% (32) of tests performed were positive (retention rate <15%). The indication for testing was Chronic diarrhoea/IBS-D 40 (65.4%), inactive Crohns disease (with or without previous TI resection) 6 (9.8%), Post cholecystectomy 11(18%) and miscellaneous 4 (6.6%).

Positive results by grouping were - Crohns disease 83.3% (3 severe, 1 moderate, 1 mild), post cholecystectomy 72.7% (4 severe, 4 moderate) and chronic diarrhoea/IBS-D 40% (9 severe, 4 moderate, 3 mild).

**Conclusion:** The use of SeHCAT testing in the assessment of chronic diarrhoea while remaining under utilised is increasing. BAM is prevalent in those with chronic diarrhoea/IBS-D and where found represents a potentially treatable condition.

**ABSTRACT 57 (13B155)**

**POSTER PRESENTATION**

**Title of Paper:** A Case Series Of Listeria Monocytogenes Infection In Inflammatory Bowel Disease Patients Treated With Anti-TNF $\alpha$  Therapy

**Author(s):** JA Gray, PB Allen, K Diong, M Kane, A Varghese

**Department(s)/Institution(s):** Department of Gastroenterology, Causeway Hospital, 4 Newbridge Road, Coleraine, N. Ireland

**Introduction:** Anti-TNF $\alpha$  therapy has had a huge impact on the treatment of inflammatory bowel disease. The inhibition of TNF $\alpha$  not only reduces inflammation but also increases the risk of opportunistic infections. Intracellular organisms such as Myobacterium tuberculosis and Listeria monocytogenes are particularly high risk. Much has been written on TB with infliximab therapy whereas Listeria has not received similar attention.

**Case Series**

We report 2 cases of Listeria bacteraemia observed with infliximab for IBD.

Case 1: A 65 year old male with known Crohns colitis presents with worsening diarrhoea & discharge. EUA and MRI confirm intersphincteric horsehoe fistula with moderate distal colitis. After failing steroid therapy he was commenced on infliximab. Ten days after his first dose he began to spike temperatures. Blood cultures confirmed Listeria monocytogenes bacteraemia.

Case 2: A 50 year old male with known ulcerative colitis maintained on 5-ASA therapy presents with a severe exacerbation. He was commenced on infliximab after failing steroid therapy. After initially responding well to treatment he re-presented with flu-like symptoms and temperatures. Blood cultures confirmed Listeria monocytogenes.

Both cases responded well to intra-venous amoxicillin.

Of significance both patients presented within the loading dose period and were also receiving azathioprine and corticosteroids. Currently only 17 cases of invasive Listeriosis secondary to anti-TNF $\alpha$  therapy have been observed in IBD patients.

**Conclusion:** We conclude that patients requiring anti-TNF $\alpha$  therapy should be informed of the risk of food borne infections and advised to avoid high risk foods. These cases highlight the need for strict guidelines and prescribing physicians to be aware of such complications.

**ABSTRACT 58 (13B156)**

**POSTER PRESENTATION**

**Title of Paper:** The Use of Cardiac Catheterisation in Pre-operative Work-up for Liver Transplantation

**Author(s):** CEM McClure, PW Johnston, WJ Cash, NI McDougall

**Department(s)/Institution(s):** Departments of Hepatology and Cardiology, Royal Victoria Hospital, Belfast, County Antrim, Northern







Ireland

**Introduction:** Significant cardiac disease may exclude patients from orthotopic liver transplantation (OLT) or may require intervention to make OLT feasible. Non-invasive methods of cardiac assessment (ECHO and cardiopulmonary exercise stress test (CPEX)) are used to help minimise the need for cardiac catheterisation (CC).

**Aims/Background:** To audit the use of CC in OLT assessments at a regional liver unit in Northern Ireland.

**Method:** All patients who underwent formal OLT assessment in RVH from January 2008 to June 2012 were included. Information was obtained from the RVH Liver Unit database and cross referenced with radiology and patient centre records. Patient records for all those who had CC were reviewed to determine outcomes.

**Results:** 188 patients underwent full OLT assessment, of whom 43 (23%) required CC. The indications for CC were: 22 had multiple CVS risk factors, 11 had abnormal ECHO, 3 abnormal MPI, 1 abnormal CPEX and 6 other. Overall, 31 (72%) of 43 CC patients had no significant cardiac disease detected. 12 (28%) patients had significant cardiac disease, of whom, 7 were not listed and 5 had intervention (3 PCI with stenting, 2 PFO closures (1 not listed)). 27 (62.8%) patients who underwent CC were listed for OLT. One patient suffered a fatal variceal haemorrhage immediately post CC (without PCI).

validating this scoring system. We aim to demonstrate the validity of the Glasgow Blatchford risk score by means of a prospective study.

**Method:** We prospectively calculated the Glasgow Blatchford score for all patients with acute upper GI bleeding admitted through the acute surgical take in a busy district general hospital from January 2013 to present. These patients were then followed up and their treatment documented on an anonymised, prospectively maintained database. Initial and complete Rockall score was also documented.

**Results:** 88 patients were admitted through the surgical assessment unit. 68 were male. Age range was 32 to 94 years, median age 65 years (mean 63). There were 32 admissions through A+E, 44 GP referrals and 10 ward referrals. 12 patients had a Glasgow Blatchford score of zero, 8 of whom had outpatient OGD, all 12 showed no active bleeding. 10 of these OGDs were reported as normal. 50 patients had a score of 6 or below, 38 patients had a score of more than 6. No patient with a score of less than 6 required blood product transfusion. Patients with a score of 7 or more required an average of 3 units packed red cells and 1 unit of FFP. 86% of patients with a GBS score of >6 required emergency endoscopy within 24 hours of admission.

**Conclusion:** The Glasgow Blatchford score is a valid assessment tool when considering the need for treatment in patients presenting with acute upper gastrointestinal bleeding. Patients scoring zero can be considered for safe early discharge as per NICE guidance and subsequent outpatient investigation. Scores of more than 6 are associated with the need for transfusion of blood products and urgent inpatient investigation.

**ABSTRACT 60 (13B158)**

**POSTER PRESENTATION**

**Title of Paper:** A Local Review Of The NCEPOD Audit Of Parenteral Nutrition - What Caused The 'Mixed Bag'?

**Author(s):** E. Murray; V Kalansooriya; R. Campbell; M. Green; T. Beattie; GB Turner.

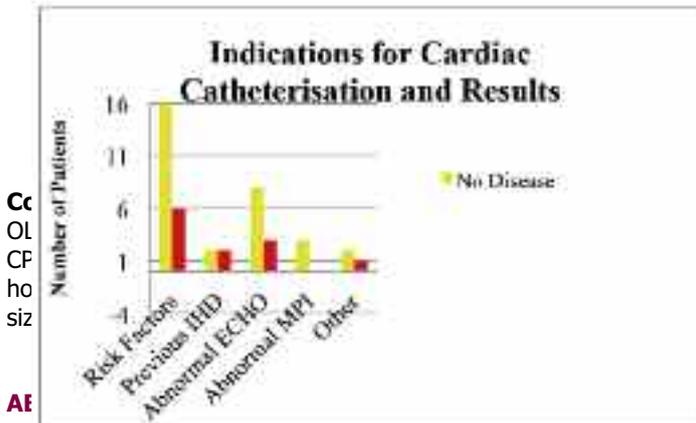
**Department(s)/Institution(s):** Nutrition Support Team, Royal Victoria Hospital, Belfast, N. Ireland

**Introduction:** The report, "A Mixed Bag", published by NCEPOD in 2010 was a review of Parenteral Nutrition (PN) in hospitalised patients. It demonstrated that only 19% of adults received care deemed to represent good clinical practice. Particular attention was drawn to poor documentation of nutritional issues.

**Aims/Background:** To audit the administration of Parenteral Nutrition within the RVH, Belfast in direct comparison with NCEPOD report and to identify where discrepancies existed.

**Method:** Consecutive patients started on PN at the time of the NCEPOD report were identified using pharmacy records. Each patient's medical, dietetic and nutrition nursing notes were independently reviewed using the NCEPOD PN Questionnaire.

**Results:** 27 patients were identified with patients excluded due to missing casenotes. No treatment goal was documented for 89% of patients. Twelve percent of patients had PN started at a weekend, refeeding risk was not documented for these patients but was for all others. The initial bag was inappropriate for patient needs in 17%, the majority of these started at the weekend. While combining records revealed good clinical monitoring, this was poor in medical notes compared with dietetic/nursing records. Metabolic complications occurred in 39%, similar to NCEPOD. There was a



**Title of Paper:** Validating the Glasgow-Blatchford Upper GI Bleeding Scoring System

**Author(s):** J. Stevenson, K. Bowling, J. Littlewood, D. Stewart

**Department(s)/Institution(s):** Wrexham Maelor Hospital, Betsi Cadwaladr University Health Board, North Wales

**Introduction:** The Glasgow Blatchford score is a risk scoring tool used to predict the need to treat patients presenting with upper gastrointestinal bleeding. NICE guidelines suggest patients with a score of zero can be considered for safe early discharge.

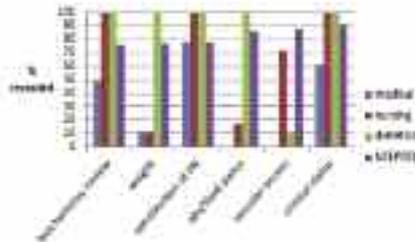
**Aims/Background:** As far as we know there are no UK studies



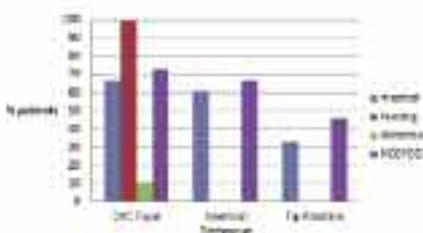
universal lack of documentation regarding central venous catheter insertion.

noted, even in this relatively young and small patient cohort. Going forward cardiovascular risk factors should be assessed and managed as part of a total care package in this patient group. Further studies are needed to evaluate the mechanism of this increase in BMI.

### Monitoring Deficiencies



### CVC Documentation



**Conclusion:** with partic started at The develo useful to id

:POD report, ns. Patients :umentation. list may be

### ABSTRACT

### PRESENTATION

**Title of Paper:** Crohn's Disease: Has the Phenotype Changed?

**Author(s):** E. Bredin, P. O'Leary, F. Shanahan

**Department(s)/Institution(s):** Department of Medicine, Cork University Hospital

**Introduction:** The long-held image of "the typical patient with Crohn's disease" is of undernourishment – the opposite of the elevated BMI state associated with higher incidence of adverse cardiovascular risk factors in population studies. Cardiovascular risk is increased in patients with a number of chronic inflammatory disorders. The importance of this in Crohn's disease is not generally addressed.

**Aims/Background:** The BMI and cardiovascular risk profile of a cohort of patients with Crohn's disease attending a specialist clinic in a tertiary referral hospital is evaluated.

**Method:** The BMI was measured in 75 out-patients with Crohn's disease over a 2 month period. Blood pressure, fasting lipoprotein profile and fasting glucose were also measured. Studied patients completed a questionnaire about their disease and its activity, their past medical history and smoking status.

**Results:** 49% of the patients had a BMI >25 - 33% overweight, 16% obese. Of the patients with an increased BMI, 10% were taking corticosteroids at the time of measurement. 15% of patients were either hypertensive or on antihypertensive medications, 23% were current smokers and 27% had a total cholesterol of >5mmol/l.

**Conclusion:** In this small study we have found that the prevalence of elevated BMI in patients with Crohn's Disease is common in contrast to the past. Additional cardiovascular risk factors are also

### ABSTRACT 62 (13B161) POSTER PRESENTATION

**Title of Paper:** Clostridium Difficile Enteritis Complicating Undiagnosed Coeliac Disease, A New Clinical Problem?

**Author(s):** JA Gray, F Mullan, PB Allen

**Department(s)/Institution(s):** Departments of Gastroenterology and General Surgery, Causeway Hospital, 4 Newbridge Road, Coleraine, N. Ireland

**Introduction:** Clostridium difficile (CD) represents the leading cause of health care associated infective diarrhea in the UK. Normally manifesting as infectious colitis, small bowel involvement known as CD enteritis is a very rare condition.

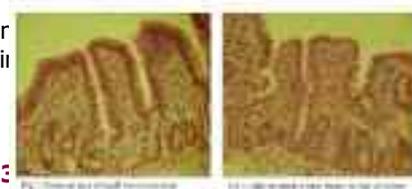
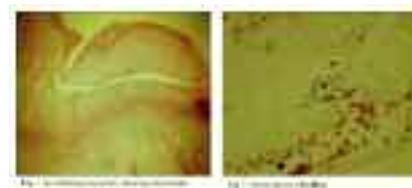
We present the first documented case in the literature of CD enteritis complicating previously undiagnosed coeliac disease.

A 63 year old male with no significant past medical history presented with a 3 month history of abdominal pain, bloating, weight loss, intermittent diarrhoea and night sweats. He was prescribed no regular medications, however had a course of antibiotics 6 weeks previous for a confirmed UTI. Blood results revealed WCC 49 (4-11), PLTs 597 (150-400), CRP 86 (0-5) and albumin 22 (35-50).

A CT scan of abdomen showed a short segment of small bowel thickening with adjacent lymphadenopathy. The differential diagnosis included Crohns disease, small bowel lymphoma and carcinoid tumour.

Due to worsening pain he underwent diagnostic laparotomy, with small bowel resection revealing severe mucosal ulceration and pseudomembranous lining. Histology identified gram-positive rods in the areas of marked ulceration with proximal subtotal villous atrophy and marked intra-epithelial lymphocytosis. Stool samples confirmed presence of CD toxin.

Coeliac serology revealed anti-TTG levels of 29.4 (0-15). Duodenal biopsies confirmed coeliac disease. The patient improved with a 14 day course of oral metronidazole and commencement of a gluten free diet.



**Conclusion:** extra-colonic r factors includi antibiotic use.

of considering ose with risk ) and recent

### ABSTRACT 63 POSTER PRESENTATION

**Title of Paper:** Clinical Audit On The Diagnostic Yield Of Brushing



Cytology In Biliary And Pancreatic Malignancy Detected On ERCP and EUS

1997;45:387-393

**Author(s):** S. Anwar, H. Mushtaq, N. Ullah, S. McKiernan

**Department(s)/Institution(s):** Department of Clinical Medicine & Gastroenterology Trinity College and St James's Hospital-Dublin

**Introduction:** Patients with suspected pancreatobiliary malignancy on radiological imaging are often referred for endoscopic investigations with a view to obtain a definitive histological diagnosis.

**Aims/Background:** To evaluate the diagnostic yield of brush cytology in biliary and pancreatic malignancy detected on ERCP and EUS.

**Method:** We collected data from 01/01/2012 to 31/12/2012. 56 patients in total had brushings done at ERCP. Most common indications for ERCP were malignancy(68%) CBD stones (23%) pancreatitis(7%) and cholangitis (2%). Out of these 56 patients 38 had EUS and 30 patients had FNA.

**Results:** 56 patients had ERCP brushings done, 30 were suspected of malignancy by radiology. Definite diagnosis of malignancy was in 23 patients, 6 had inflammatory stricture and one patient had PSC, of the remaining 26 patients 15 had CBD stones, five had chronic pancreatitis, three had cholangitis and three had stent insertion due to indeterminate stricture. The sensitivity of biliary brushings were 74% and specificity of 93% , 26% had false negative results and all these patients had positive FNA. 38 patients had EUS done eight had inflammatory changes and 30 patients had FNA done. FNA was positive in 18 patients so the sensitivity was 78% and specificity was 100%. Five patients had false negative FNA(Positive ampullary biopsies ) four had chronic pancreatitis, two had cholangitis and one had PSC.

**ABSTRACT 64 (13B165)**

**POSTER PRESENTATION**

**Title of Paper:** The Complications Of Bariatric Surgery In Northern Ireland

**Author(s):** Thompson RJ, Mullan MJ, Clements WB and Kennedy JA.

**Department(s)/Institution(s):** Royal Victoria Hospital, Belfast, N. Ireland

**Introduction:** Bariatric surgery has increased by 530% in the UK in the past 6 years. Benefits include weight reduction, improvement in weight related co-morbidities and cost-effectiveness compared to conventional weight reduction programmes.

**Aims/Background:** NICE clinical guidance 43 recommends that bariatric surgery be considered for patients with a BMI >40 or >35 with other co-morbidities. There are over 25,000 with a BMI >40 in Northern Ireland (NI). Bariatric surgery is not commissioned on the NHS in NI. Despite this, clinicians in NI increasingly have to treat its complications. This study was undertaken in order to review the complications of bariatric surgery that have presented to our hospital in the past 6 years.

**Method:** The hospital PAS system was interrogated for codes relating to emergency admissions due to complications following bariatric surgery between 2007 and 2012.

**Results:** There were 38 admissions across 32 female patients. Thirty had a gastric band, 1 bypass and 1 gastric balloon. Only one of the procedures was performed in NI. The mean length of stay was 6 days (range 1-20). The mean time since the procedure was 32 months (range 0-120). Complications included abdominal pain, vomiting, infected ports, internal hernia, infected bands, band erosion and gastric/oesophageal perforation. Twenty-five bands and 2 ports were removed.

**Conclusion:** It is anticipated that healthcare professionals in NI will continue to see increasing numbers of patients admitted with complications from bariatric procedures. Regardless of the current lack of commissioning for bariatric services, significant expertise and resources will continue to be required in order to manage these patients.

**ABSTRACT 65 (13B169)**

**POSTER PRESENTATION**

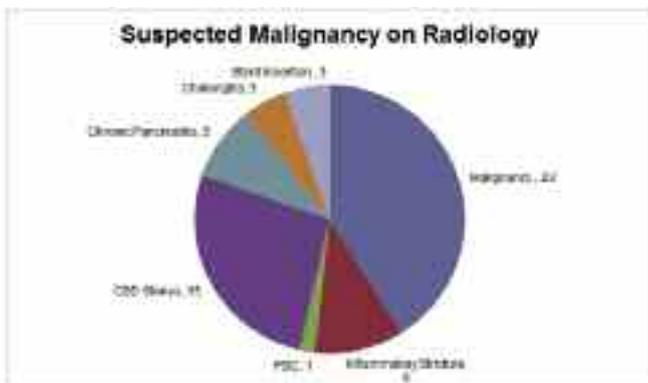
**Title of Paper:** Dual antiplatelet therapy and upper gastrointestinal bleeding risk: Do PPIs make any difference?

**Author(s):** Inamul Haq<sup>1</sup>, Steven Lindsay<sup>2</sup>, Sudantha Bulugahapitiya<sup>2</sup>

**Department(s)/Institution(s):** 1- SpR Gastroenterology, Diana Princess of Wales Hospital, Grimsby

**Introduction:** Dual antiplatelet therapy (DAT) with aspirin and clopidogrel is recommended up to one year following acute coronary syndrome (ACS). Gastrointestinal bleeding is the main hazard of this treatment. Proton pump inhibitors (PPIs) are often prescribed in selective patients to reduce this risk.

**Aims/Background:** Main purpose of this study was to analyse the effect of PPIs in reducing the subsequent risk of gastrointestinal



C  
r  
a  
p  
R  
1-  
b  
r  
d

1  
f  
f  
3

2-Stewart CJ, Mills PR, Carter R, et al. Brush cytology in the assessment of pancreatobiliary strictures: a review of 406 cases. J Clin Pathol. 2001;54:449-455

3-Eloubeidi MA, Chen VK, Jhala NC, et al. Endoscopic ultrasound-guided fine needle aspiration biopsy of suspected cholangiocarcinoma. Clin Gastroenterol Hepatol. 2004;2:209-213

4-Chang KJ, Nguyen P, Erickson RA, et al. The clinical utility of endoscopic ultrasound-guided fine-needle aspiration in the diagnosis and staging of pancreatic carcinoma. Gastrointest Endosc.



bleeding.

**Method:** The medical records of 177 consecutive patients, treated with dual antiplatelet therapy following ACS, were specifically reviewed for the study parameters given as above over a 12-month period.

**Results:** Mean age was 66 years (24-96) with median 68. 67% were males and 33% females, 74% Caucasians and 26% Asians. Patients were divided in two groups: PPI group (Patients on DAT & PPIs, n=91), Non-PPI group (Patients on DAT only, n=86, 55% on lansoprazole, 34% on pantoprazole and 11% on omeprazole).

Out of 177 patients, evidence of upper gastrointestinal bleeding was found in 10 patients. Mean age was 74 in PPI group and 53 in non PPI group. In PPI group (6 patients, 6.6%), endoscopy findings were gastritis-4, gastric ulcer-1, bleeding oesophagitis-1 whereas in non-PPI group (4 patients, 4.6%) 2 had gastritis, 1 gastric ulcer and 1 Mallory Weiss tear (Odds ratio 1.44, z statistics 0.55, p value 0.57). None of these patients had previous history of gastrointestinal bleeding.

**Conclusion:** Empirical prophylactic prescription of PPIs in patients on dual anti-platelet therapy following ACS is of no significant benefit in reducing predisposition to upper GI bleeding.

**ABSTRACT 66 (13B170) POSTER PRESENTATION**

**Title of Paper:** Hyperglycaemia within 14 days of liver transplantation predicts new onset diabetes after transplantation (NODAT)

**Author(s):** Turner A, Pierce A, Farne H, Kriese S, Shawcross DL, Heaton ND and Heneghan MA

**Department(s)/Institution(s):** Institute of Liver Studies, King's College Hospital

**Introduction:** New onset diabetes after transplantation (NODAT) is an important complication of liver transplantation associated with greater graft rejection, sepsis, renal impairment, and biliary complications. The aetiology of NODAT is unknown but recognized risk factors include calcineurin inhibitor immunosuppression and hepatitis C infection. There is limited evidence that hyperglycaemia within 14 days post-transplant may also contribute to NODAT.

**Aims/Background:** We sought to assess the risk factors associated with NODAT in liver transplant recipients at a major European transplant unit.

**Method:** We retrospectively studied 148 consecutive liver transplant recipients in 2009 at King's College Hospital. We gathered demographic and biochemical data, pre-transplant UKELD and MELD scores, aetiology of liver disease, daily glucose kinetics, total daily insulin requirement in the 14 days post-transplant, requirement for diabetes medications at 1 year, immunosuppression therapy (including steroids), intensive care and total hospital stay. Variables were analysed for their ability to predict NODAT using Fisher's exact test (categorical variables), unpaired t test (continuous variables), and logistical regression.

**Results:** Of the 148 patients identified, 58 had complete blood glucose data and were included in the analysis. 11/58 had pre-transplant diabetes; 7/58 developed NODAT and 40 did not. Key results are shown in the table. Of note, hyperglycaemia in the 14 days post-transplant was associated with NODAT (p=0.003), as was

hepatitis C (p=0.018) and lower average plasma tacrolimus concentration on days 1-6 post-transplant (p=0.005).

Median (range)	NODAT (n=7)	Non-NODAT, Non-DM (n=82)	p
Male	5	19	0.416
Age (years)	53 (38-59)	54 (19-73)	0.810
Hyperglycaemia in 14 days post-transplant (>15-220 mmol/L)	5	5	0.003
Hepatitis C	4	5	0.018
Tacrolimus concentration (ng/L, average day 1-6)	4.0 (2.0-6.6)	7.0 (2.7-17.9)	0.005

Conc demo trans mode daily) contr not. \ this

management in a timely fashion may reduce the incidence of and morbidity associated with NODAT.

te to post-only alone n but, rs did nt for aemic

**ABSTRACT 67 (13B171) POSTER PRESENTATION**

**Title of Paper:** Identification of CMV Infection In Inflammatory Bowel Disease - What Test Is Best?

**Author(s):** Kalansooriya V, Loughrey M, Feeney S, Coyle P, McCaughey C, Turner G

**Department(s)/Institution(s):** Royal Victoria Hospital Belfast

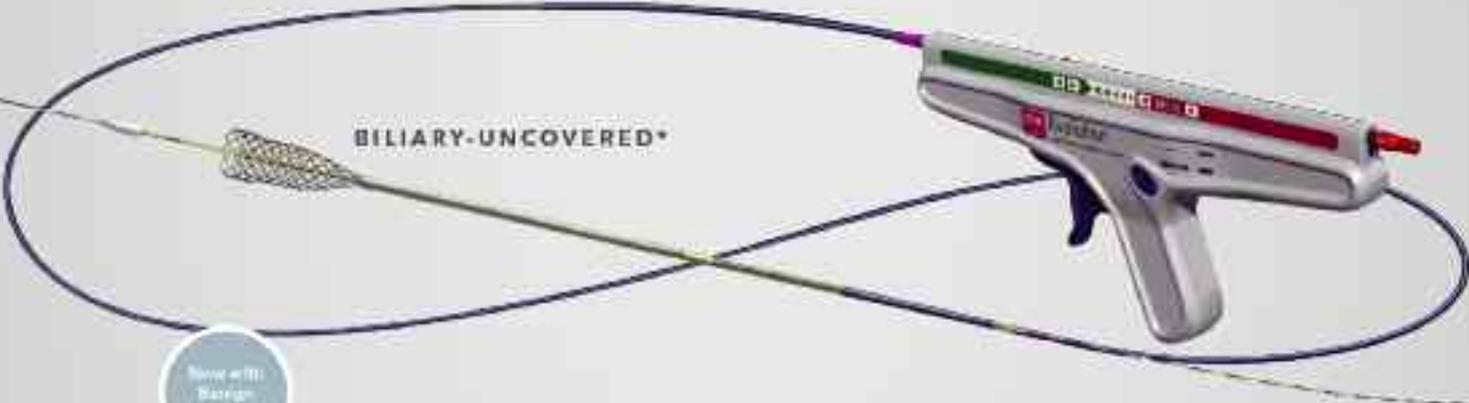
**Introduction:** There is uncertainty in the significance of CMV infection in exacerbations of Inflammatory Bowel Disease (IBD). As methods for determining the presence of CMV in inflamed mucosa improve, varying degrees of specificity and sensitivity make interpretation crucial.

**Aims/Background:** To assess the significance of known markers of CMV in the setting of IBD and to determine the best combination for identifying active infection.

**Method:** Blood PCR / IgM / IgG, faecal PCR, biopsy PCR and histology results were analyzed in samples received from July 2009 to 2012 at the Regional Virology Laboratory.

**Results:** Of 110 samples received, 14 were repeated samples leaving 96 patient episodes. 17 were positive out of 19 patients tested for IgG. Patients with negative IgG were negative for all other markers. Where there was a positive PCR /histology and IgG was tested, it was positive in all cases.

# Take complete control of all your GI stenting procedures.



BILIARY-UNCOVERED\*

Now with  
Stent  
Inflation



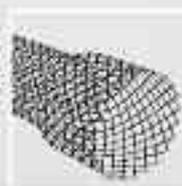
ESOPHAGEAL  
FULLY COVERED†



ESOPHAGEAL  
PARTIALLY COVERED



COLONIC  
UNCOVERED



DUODENAL  
UNCOVERED



BILIARY  
FULLY COVERED\*\*



BILIARY  
PARTIALLY COVERED\*\*

Warning: The safety and effectiveness of this device for use in the vascular system have not been established.

\*Pending S10(k), not for sale in the USA. \*\*Not for sale in the USA. †Benign indication not approved for sale in all jurisdictions.

## Evolution<sup>®</sup>

CONTROLLED-RELEASE STENT

When you have the precise control to deliver some of the most innovative metal stents throughout the GI tract, you can directly impact the quality of patient care. And that's what the Evolution family of stents gives you: the market's only delivery system with controlled release and recapturability. Now perform your esophageal, duodenal, colonic and biliary procedures with more control and precision than ever before.

Cook Medical—Delivering the clinical advantage.



Scan here for more information  
about the Evolution Colonic  
Controlled-Release Stent.

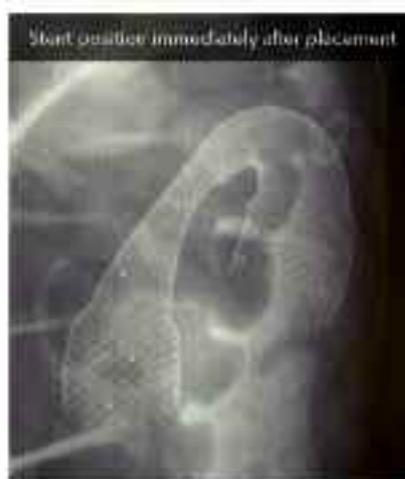


Image courtesy of Dr. Alessandro Repoli, Istituto Clinico Humanitas, Rozzano (Milano), Italy.



www.cookmedical.com



indications		Tested	Positive
IBD	unspecified	6	1
	UC	23	8
	Crohn's	11	3
Colitis		21	3
Steroid resistant colitis		3	3
proctitis		2	2
Other		3	1
Unknown		27	5
Total		96	28 (29%)

Of the ed:

**Conclusion:** Tissue PCR has the highest sensitivity. Overall, the incidence of CMV infection in this group was 29%. A negative IgG was associated with negative results for all other forms of testing while a positive IgG was associated with positive results for all other forms of testing. Further

Bloody PCR	Blood PCR	Faeces PCR	IgM	IgG	Histology
23	9	4	24	17	5

ABST ON

**Title of Paper:** Immediate and late outcomes after colorectal cancer surgery in extreme elderly patients

**Author(s):** McBride R, Dasari B, Epanomeritakis E, Mackle E

**Department(s)/Institution(s):** Craigavon area hospital

**Introduction:** A retrospective study was performed to evaluate the immediate and late results of colorectal surgery in extreme elderly patients.

**Aims/Background:** The aim of this retrospective study was to evaluate the results of immediate and late (2 years) outcomes of colorectal surgery in extreme elderly patients (over 80 years) at a district general hospital.

**Method:** A total of 577 patients underwent colorectal surgery for colonic or rectal cancer at Southern Health and Social Care Trust between 01/04/2007 and 31/08/2011. Of these, 96 patients were aged equal to or over 80 years (Group I). From the remaining 483 patients (<80yrs), 100 patients were randomly chosen using the Random function on microsoft excel (Group II). We were able to retrieve 60 and 54 charts from Groups I and II respectively that were included in data analysis. The charts were retrospectively reviewed for analysis of postoperative mortality, morbidity and 2 year survival rates. Comparative analysis between the groups was performed using SPSS.

**Results:** Both patient groups were well matched with respect to sex, co morbidities, the type of surgery. The median age was 83.5 (range, 80-96) years in Gr I and was 69 (range, 45 - 79) years in Gr II. While the patients in ASA grade 1 were significantly more in Gr II (p=0.002), patients in ASA grade 4 were significantly more in Gr I (p=0.001). The overall postoperative morbidity and mortality rates

were similar. Median duration of hospital stay was 14 days in Gr I and 9 days in Gr II. Colorectal cancer patients aged under 80 years at the time of surgery had statistically significantly higher observed survival than those aged 80 years or more (P<0.05)

	>=80	<80
1 yr	73%	83%
2 yr	58%	79%

**Conclusion:** In this retrospective review, there was no significant difference in the immediate postoperative mortality and morbidity between the < 80 years group and >/= 80 years group following colorectal cancer resectional surgery. However, the survival rates at 2 years follow up were much better in those under 80years group.

**ABSTRACT 69 (13B173) POSTER PRESENTATION**

**Title of Paper:** Colonoscopy and Biopsy practice in patients with diarrhoea

**Author(s):** (1) I Haq, (2) S Shah

**Department(s)/Institution(s):** (1) ST3 Gastroenterology, Diana Princess of Wales Hospital, Grimsby (2) Consultant Gastroenterologist, Pinderfields General Hospital, Wakefield

**Introduction:** Colonoscopy is often performed in patients undergoing investigation for unexplained diarrhoea. Obtaining colonoscopic biopsies for persistent diarrhoea is an auditable JAG standard.

**Aims/Background:** To determine the diagnostic yield of colonoscopy in patients undergoing investigation for diarrhoea (2) To determine the rate at which biopsies are undertaken in patients with a "normal" colonoscopy. (3) To assess for variations in biopsy sampling amongst endoscopists.

**Method:** An analysis was performed of all colonoscopies with the indication of diarrhoea, undertaken in 2010.

**Results:** A total of 609 patients were identified in whom the indication for colonoscopy was diarrhoea. Overall, biopsies were taken in 545/609 patients (89.5%). The median number of biopsies taken per procedure was 10.5 (range 1 - 22), with a median number of 5.5 from the left side of the colon and 4 from the right side. Colonoscopic appearances were abnormal in 295/609 (48.4%) patients with isolated proximal disease in 36/295 (12.2%). Of the 609 colonoscopies, 261 (42.9%) were referred as a 2-week wait urgent suspected cancer referral, yet a diagnosis of cancer was made in only 4 cases (1.53%). Of the 7 cancers detected, 6 (85.7%) were located in the left colon.

Of the 314 "normal" colonoscopies, biopsies were taken in 268 (85.4%) patients and histology confirmed microscopic colitis in 15 (4.77%) and mucosal inflammation in 26 (8.28%). There was variation in the frequency and number of biopsy specimens obtained: GI physicians 88.07% (median number 4), GI surgeons 74.73% (median number 6), Nurse/GP Endoscopist 93.33% (median number 8) and non-GI physicians/surgeons 78.75% (median number 5). Of the patients who did have biopsies performed, 121/268 (45.1%) had both right and left colon sampled, and in 51.1% samples were labelled as "random".

**Conclusion:** The vast majority of patients undergoing colonoscopy for symptoms of diarrhoea are having colonic biopsies performed. Although abnormal findings were not uncommon in this patient group (48.4%), the yield for cancer was low (1.1%). There is variation in practice among endoscopists in obtaining biopsy samples in the setting of diarrhoea and normal colonoscopy.



## ABSTRACT 70 (13B174)

## POSTER PRESENTATION

**Title of Paper:** Mantle Cell Lymphoma – Case Series and Review

**Author(s):** Kalansooriya V, Ozo C, Mainie I

**Department(s)/Institution(s):** Gastroenterology-Belfast City Hospital, Antrim Area Hospital

**Introduction:** Mantle cell lymphoma (MCL) of the colon may present with features mimicking inflammatory bowel disease. We present two cases of patients with a history of MCL presenting with lower GI symptoms undergoing colonoscopy.

**Aims/Background:** Colonoscopy findings of 2 cases discussed were consistent with inflammatory bowel disease; although immunohistochemical studies of tissue biopsies proved to be Mantle Cell Lymphoma.

**Method:** Patient records of two cases presenting with lower GI symptoms and colonoscopy findings of colitis were reviewed along with literature review of Mantle Cell lymphoma

**Results:** Median age for presentation of MCL as late 6th or 7th decade and to be extremely rare under 30 years, Extra nodal site involvement is very common with gastro intestinal tract being the most common. Patients with GI tract involvement largely remain asymptomatic although subset of patients (approximately 10%) present with the syndrome known as Multiple Lymphomatous Polyposis (MLP- polypoid tumour masses throughout GI tract excluding oesophagus and anus), can be associated with GI symptoms.

**Conclusion:** MCL's tropism for GI tract is recently recognized. Microscopic involvement of GI tract is found in patients free of GI symptoms. Findings consistent with the case described here, where initial diagnosis by endoscopist was of colitis, are rarely documented.

## ABSTRACT 71 (13B175)

## POSTER PRESENTATION

**Title of Paper:** The Role Of Oesophageal Stents In The Management Of Oesophageal Anastomotic Leaks And Benign Oesophageal Perforations

**Author(s):** B Dasari, D Neely D, A Kennedy, G Spence, P Rice, E Mackle, E Epanomeritakis

**Department(s)/Institution(s):** Belfast Health and Social Care Trust/ Ulster Hospital / Craigavon Area Hospital, Northern Ireland

**Introduction:** Endoscopic placement of oesophageal stent across the benign oesophageal perforation and postoperative oesophageal anastomotic leak might help to control the sepsis and reduce the associated mortality and morbidity.

**Aims/Background:** The aim of this review is to assess the safety and effectiveness of oesophageal stents in the management of benign oesophageal perforation and oesophageal anastomotic leaks.

**Method:** All the published case series reporting the use of metallic and plastic stents in the management of postoperative anastomotic leaks, spontaneous oesophageal perforations, iatrogenic oesophageal perforations were identified from MEDLINE, EMBASE and PUBMED (1990-2012). Primary outcomes assessed were

technical success rates and complete healing rates. Secondary outcomes assessed were stent migration rates, stent perforation rates, duration of hospital stay, time to stent removal and mortality rates. A pooled analysis was performed and subgroup analysis was performed for plastic vs metallic stents and anastomotic leaks vs perforations separately.

**Results:** 27 case series with 340 patients were included. Technical and clinical success rates of stenting were 91% and 81% respectively. Stent migration rates were significantly higher with plastic stents compared to metallic stents (40/148 vs 13/117 patients respectively;  $p=0.001$ ). Patients with metallic stents had significantly higher incidence of post procedure strictures ( $p=0.006$ ). There was no significant difference in the primary or secondary outcomes when stenting was performed for anastomotic leaks or perforations.

**Conclusion:** Endoscopic management of oesophageal anastomotic leaks and perforations with the use of oesophageal stents is technically feasible. It appears to be safe and effective when performed along with mediastinal or pleural drainage.

## ABSTRACT 72 (13B176)

## POSTER PRESENTATION

**Title of Paper:** Awareness of Adverse Effects of Azathioprine Among Patients with Inflammatory Bowel Disease

**Author(s):** Spence AD(1), Lee R(2), Keegan D(2), Doherty GA(2), Mulcahy H(2), O'Donoghue D(2), Murphy SJ(1)

**Department(s)/Institution(s):** (1) Department of Medicine, Daisy Hill Hospital, Newry, Northern Ireland. (2) Department of Gastroenterology, St Vincent's University Hospital, Elm Park, Dublin, Ireland.

**Introduction:** Azathioprine, an important immunomodulator in the management of Inflammatory Bowel Disease (IBD), has potential serious side-effects about which patients should have awareness.

**Aims/Background:** The aim was to assess understanding of side-effects of azathioprine in patients with IBD.

**Method:** A 10-question survey was completed anonymously by IBD patients attending St. Vincent's Hospital, Dublin. Information received prior to treatment, side-effect awareness and blood monitoring data were collated.

**Results:** 96 patients completed questionnaires (52% male, 48% female). Fifty-nine (61%) patients had Crohn's disease, 33 (34%) ulcerative colitis, and 4 indeterminate colitis. Sixty-two (65%) received information about azathioprine from their physician (23% written, 37% verbal, 39% written and verbal). 83 (93%) patients took their medication daily. 61 (71%) were aware of the complication of low WBC count. Eighty-nine (93%) had blood monitoring, but frequency varied. Awareness of other side-effects was lower (38% skin rash, 30% pancreatitis, and 36% lymphoma). Thirty-eight (40%) patients had felt unwell while taking azathioprine. 34% of patients who had felt unwell on azathioprine visited their GP; only one-third had blood tests.

**Conclusion:** Although compliance with azathioprine was high, only 65% of patients recalled receiving information on azathioprine side-effects. Most patients had monitoring for neutropenia, but frequency varied. Awareness of important side-effects (lymphoma) was low. These findings emphasize the importance of reminding patients of the side-effects of azathioprine, and blood monitoring. The use of smart phones with 'apps', in these young patients, may be helpful as reminders of adverse effects and blood monitoring.



## ABSTRACT 73 (13B177)

## POSTER PRESENTATION

**Title of Paper:** Outcomes Following Open Biliary Bypass For Benign Biliary And Pancreatic Diseases

**Author(s):** D McCartan, B Dasari, J Ahmad, C Jones, L McKie, MA Taylor, T Diamond

**Department(s)/Institution(s):** Mater Hospital, Crumlin Road, Belfast BT14 6AB

**Aims/Background:** The aim of this study was to evaluate the outcomes following open biliary bypass for benign biliary and pancreatic diseases.

**Method:** Sixty-four patients (M: F = 34:30) aged 15 to 89 years (median age: 54 years) underwent biliary bypass for benign diseases between 2001 and 2011. Indications for surgery were choledocholithiasis (n=18), chronic pancreatitis (n = 18), iatrogenic bile duct injury (n = 12), distal bile duct strictures (n = 11), choledochal cyst (n = 2) and other causes (n = 3). Thirty-eight patients (60%) had prior surgical or endoscopic intervention.

**Results:** Sixty hepaticojejunostomies and four choledochoduodenostomies were performed. Additional procedures during the same surgery included cholecystectomy (n=25), drainage of pseudocyst (n=4), gastroenterostomy (n=4), pancreatic biopsy (n=4), liver biopsy (n=4), cyst gastrostomy (n=2) and pancreatic necrosectomy (n=2). Postoperative complications were encountered in 12 patients – bile leak (n=2), bleeding (n=2), chest infection (n=2), MI (n =1), superficial surgical site infection (n=4) and superficial wound dehiscence (n=1). Three patients required further surgery – bile leak (n=1), bleeding (n=2). Two patients (3%) died of organ failure - one following biliary bypass for cholangitis; and one following ligation of a bleeding pseudo aneurysm. Five patients developed recurrent cholangitis requiring oral antibiotics.

**Conclusion:** In the era of minimally invasive options, open biliary bypass remains a very effective, reliable and safe option in the management of benign conditions of the biliary system and pancreas.

## ABSTRACT 74 (13B178)

## POSTER PRESENTATION

**Title of Paper:** Anal cancer management and outcomes in Northern Ireland 2002-2006

**Author(s):** K McElvanna\*, AJ Cole, RJA Harte, RM Park

**Department(s)/Institution(s):** Northern Ireland Cancer Centre, \*Royal Victoria Hospital

**Introduction:** Anal cancer is a relatively uncommon malignancy and requires a multidisciplinary management approach.

**Aims/Background:** The aim of this study was to review the surgical and oncological management and outcomes for anal cancer diagnosed in Northern Ireland between 2002-2006.

**Method:** Data was collected retrospectively from computerised records for patients diagnosed with anal cancer in Northern Ireland between 2002-2006. Patient demographics, radiological, histological, surgical and oncological data were recorded. Kaplan Meier estimates of overall survival were calculated.

**Results:** Eighty patients (43 female) were identified. Median age

was 57 years (27-85 years). Ninety-three percent had squamous cell carcinoma. Sixty-three patients (78.8%) were treated with curative intent. Of these, 44 (69.8%) had chemoradiotherapy (CRT). Completion rates of chemotherapy and radiotherapy were 72.3% and 97.8% respectively. Twenty-six patients (32.5%) had primary surgical treatment (16 local excisions, 9 APER, 1 panproctocolectomy). Eight patients had a salvage APER and 1 had a recurrence locally excised. Twelve patients had a defunctioning loop stoma fashioned (2 were reversed). Overall APER and permanent stoma rates were 22.5% and 36.3%. Forty-three patients (53.8%) had excisional or defunctioning surgery as part of their management. Median overall survival (OS) was 9.1 years, 2 and 5 year OS was 79% and 62% respectively. In the curative CRT group 2 year and 5 year OS were 90.1% and 76.2% respectively.

**Conclusion:** Chemoradiotherapy is the primary treatment modality for patients with anal cancer. However, many patients require either local, radical or defunctioning surgery. Survival outcomes for this 5 year cohort are comparable with published series.

## ABSTRACT 75 (13B179)

## POSTER PRESENTATION

**Title of Paper:** Bowel Wall Thickening on CT; its significance and relationship with endoscopic abnormalities.

**Author(s):** K. Hartery, N. Breslin

**Department(s)/Institution(s):** Dept Gastroenterology, Adelaide Meath Hospital, Tallaght, Dublin 24, Ireland

**Introduction:** Bowel wall thickening (BWT) is an increasing recognised entity seen on CT. Advances in technology and accumulated experience in image interpretation, even the most subtle changes affecting the bowel are now being detected.

**Aims/Background:** "Further endoscopic evaluation" often is suggested when BWT is identified on CT imaging, Is there clinical correlation?

**Method:** A retrospective analysis was performed on all abdominopelvic CT carried out in AMNCH, Tallaght from the 1st of January to 30st of June 2012. All patients with colonic BWT were included. Subsequently, Patients were excluded if they were under age of 18 years, history of Bowel Cancer and/or Prev colonic surgery, or if there was a specific CT finding related to the bowel other than BWT (mass, stricture, abscess, or confirmed cancer). Demographic information was obtained from KEY operating systems as well as Hb value, biopsy reports. Endoscopic reports were obtained from GI electronic reporting system as well as presence/absence of symptoms.

**Results:** In total, 2,211 abdominopelvic CT reports were reviewed. After exclusion criteria were applied, 95 patients with colonic BWT were analysed. Of these, 52 had follow-on endoscopy. Demographic information revealed that 24 were male, with mean age of 56.8 years. The most common site of BWT reported was the sigmoid colon (n=18), followed by descending colon (n=10), and transverse colon (n=7). Despite CT finding of BWT, 17 (32.6%) had normal endoscopies. Inflammation/Diverticulitis was found in 15(28.8%)/10(19.2%) endoscopies. 3 (5.7%) were found to be adenomatous polyps. While, a further 8 (15.3%) were colorectal cancer.

**Conclusion:** Correlation between BWT on abdominopelvic CT and abnormal endoscopy at the same site was 67.4%, in keeping with published studies.



## ABSTRACT 76 (13B181)

## POSTER PRESENTATION

**Title of Paper:** Surgeons-Don't Forget To Calibrate! Findings From A Sacral Nerve Test Stimulator

**Author(s):** K. Etherson<sup>1</sup>, A. Davidson<sup>1</sup>, Y. Yiannakou<sup>1</sup>, J. Mason<sup>2</sup>

**Department(s)/Institution(s):** 1 Department of Surgery, University Hospital of North Durham, County Durham and Darlington NHS Foundation Trust, County Durham, UK 2Wolfson Research Institute, Durham University, County Durham, UK

**Introduction:** Sacral nerve stimulation testing (TSNS) for chronic constipation is not accurately predictive of a long-term response<sup>1</sup>. The decision to implant a permanent device relies on these results.

**Aims/Background:** We recognised that the testing stimulator was an analogue device with potentially inaccurate dial settings. We sought verification of the output waveform.

**Method:** 19 test stimulators were connected to a cross-calibrated oscilloscope. The output Frequency (f), and Pulse Width (pw) of the waveforms generated were measured according to: run 1) the physician's best attempt to set the dials correctly (pw=210µSec, f=14Hz), and run 2) the closest dial increment to these settings (pw=200µSec, f=10Hz). Output Voltage (V) was measured in run 3 at dial increments of 0V, 1V, 2V, 5V, and 10V.

**Results:** We assumed an acceptable margin of error of 20% in runs 1 and 2, and 0.5V in run 3. There was a marked range of frequency values; run 1)10.6 to 29.0Hz(26% failed), and run 2)7.9 to 13.0Hz(11% failed). Findings for pulse width were similarly variable; run 1)242 to 326µSec(89% failed), and run 2)215 to 274µSec(63% failed). All devices had a residual positive voltage at zero(range:0.29 to 1.00V), and the failure rates at 0,1,2,5 and 10V were 53%, 100%, 100%, 68% and 47% respectively.

**Conclusion:** All fields of clinical practice and research have their instrumentation which requires calibration to provide verifiable readings. Failure to calibrate during TSNS results in patients receiving variable stimulation, potentially reducing the clarity of research findings, and may be a factor in the poor predictive power of testing in chronic constipation.

References:

1Kamm M. et al; Sacral nerve stimulation for intractable constipation:Gut,2010;59:333-340.

## ABSTRACT 77 (13B182)

## POSTER PRESENTATION

**Title of Paper:** Examination of the Efficacy of a Chronic Disease Self-Management Programme (CDSMP) for Patients with Inflammatory Bowel Disease (IBD): A Pilot Study

**Author(s):** M. Forry, E. Mc Donnell, J. Wilson O'Raghallaigh, O. Kelly, A O'Toole & S. Patchett

**Department(s)/Institution(s):** Department of Gastroenterology and Department of Psychology, Beaumont Hospital Dublin 9, Ireland

**Introduction:** The need for a psychosocial intervention for patients with IBD was recognised by multidisciplinary healthcare professionals working at a large Irish teaching hospital. CDSMP, developed by Stanford University, was identified as a leading model of psychosocial intervention. Run over 6 weeks in 2.5 hour weekly sessions and delivered by two people, one of whom must have a

chronic illness, the CDSMP focuses on action planning and goal setting, using brainstorming exercises to help develop self management techniques.

**Aims/Background:** To pilot the use of a CDSMP in patients with IBD

**Method:** A repeated measures design with wait list control (n=44) was utilised. Mood and general health related quality of life (HRQoL) were assessed using the Hospital Anxiety and Depression scale (HADS) and Rand 36-Item Health Survey (SF-36). The Short Inflammatory Bowel Disease Questionnaire (SIBDQ) was used to measure physical, social, and emotional status in patients with IBD. Qualitative descriptions of problems caused by chronic disease were noted the beginning and end of the six week intervention.

**Results:** 44 patients participated in the pilot study, 11 male (25%) and 33 female (75%). Significant improvement in mood was achieved in treatment group with paired sample t-tests indicated significant reduction in levels of depression on the HADS (p=0.05). At baseline, 14% of the treatment group displayed mild depression. Post-intervention no clinical levels of depression were evident in the treatment group compared to 17% of waitlist control who displayed mild to severe levels of depression. Significant improvement was noted in the SF-36 on the factor of emotional well-being (p=0.04). There was also an improvement in the qualitative descriptions of problems related to chronic disease. Of note, 14% of the treatment group were experiencing relapses in their condition at the end of the CDSMP.

**Conclusion:** The results of this study indicate that CDSMP appears to be an effective psychosocial intervention for patients with IBD. Implementation of a CDSMP in hospital and community settings in Ireland for this patient group should be considered.

## ABSTRACT 78 (13B183)

## POSTER PRESENTATION

**Title of Paper:** Diagnostic yield of focused Endoscopic Ultrasound Examination of The Biliary tree in a Tertiary Referral Centre

**Author(s):** A.Alakkari, R. Leen, N. Breslin, B. Ryan.

**Department(s)/Institution(s):** Gastroenterology Department, Tallaght Hospital, Dublin

**Introduction:** Endoscopic ultrasound (EUS) provides detailed examination of bile ducts where other imaging modalities have failed to identify an abnormality or when dilated ducts have been identified on imaging, but no cause found

**Aims/Background:** This audit reviews the results of focused EUS of the biliary tree performed in Tallaght hospital over a 16 month period.

**Method:** Data was collected on patients who underwent EUS examinations of the biliary tree between October 2011 and February 2012. Patients with known pathology prior to EUS, like pancreatic mass or bile duct stone identified on prior imaging were excluded.

**Results:** Of a total of 477 EUSs, 126 were focused diagnostic procedures for possible biliary pathology, 87 (69%) female and 39 (31%) male. Median age was 57.5 years. Indications were: 47 (37%) for abnormal bile ducts on imaging, 41 (32%) abdominal pain, 28 (22%) query gallstones, and 7 (9%) jaundice/ abnormal liver function tests (LFTs). Patients were age stratified into group A (< 60 years) and group B (> 60 years). Chi-square test was used for statistical analysis. On EUS, Group A compared to group B had less dilated bile ducts (43% vs 61%, p 0.056), dilated pancreatic



ducts (12% vs 17%, p 0.045) and less pathology (28% vs 51%, p 0.001). Patients with abnormal LFTs had more pathology compared to normal LFTs (48% vs 21.6%, p 0.002). Following age stratification, this was only significant in group A (38% vs 9%, p 0.004). Therefore, abnormal LFTs were a predictor of pathology in younger patients but not older ones. More pathology was diagnosed in patients with dilated bile ducts on EUS who did not have previous cholecystectomy, regardless of age (19% vs 76%, p < 0.001). Duodenal diverticulum was diagnosed in 4 patients in group B. This is likely under diagnosed due to diagnostic limitations of EUS.

**Conclusion:** EUS is high yield in young patients with abnormal LFTs and older patients regardless of LFTs when their presentation suggests biliary tree disease. The corollary is that young patients with normal LFTs are unlikely to have pathology. Investigators should be vigilant of periampullary diverticuli (Lemmel's syndrome) in older patients with unexplained bile duct dilatation.

**ABSTRACT 79 (13B185) POSTER PRESENTATION**

**Title of Paper:** Audit of the appropriateness of Hepatoma surveillance in a cohort of patients attending a dedicated Haemochromatosis clinic.

**Author(s):** A. Alakkari, Y. Gammell, H. O'Connor, D. McNamara, N. Breslin, B. Ryan.

**Department(s)/Institution(s):** Gastroenterology Department, Tallaght Hospital, Dublin.

**Introduction:** Hereditary Haemochromatosis (HH) remains the commonest genetic disorder in populations of northern European origin with a prevalence of 1 per 220-2501. The HH service in Tallaght hospital is an expanding nurse delivered service.

**Aims/Background:** This audit reviews the service in terms of patient demographics, investigations and hepatocellular carcinoma (HCC) surveillance.

**Method:** Data was collected on patients attending the HH service in 2011 who underwent genetic testing.

**Results:** A total of 140 patients were identified; 107 (76%) were male and 33 (24%) female. Median age at diagnosis was 48 and 56 years, respectively. Their genetics were; 101 (74%) C282Y homozygote, 6 (4%) H63D homozygote, 20 (14%) compound heterozygote, 5 (3%) C282Y heterozygote, 2 (1%) H63D heterozygote and 6 (4%) had normal genetics. Mean ferritin and transferrin saturations at diagnosis were 980 µg/l and 75%, respectively. Liver function tests (LFTs) were abnormal at diagnosis in 93(66%) patients. Liver biopsy was performed on 45 patients according to established selection criteria for biopsy. Histology revealed mild fibrosis in 5 patients, bridging fibrosis in 4 and cirrhosis in 4. Patients received monitored weekly venesections as tolerated to achieve a target ferritin < 50 µg/l, followed by 3 monthly ferritin monitoring longterm. Patients with cirrhosis and advanced fibrosis were not receiving the recommended HCC surveillance as per AASLD guidelines<sup>2,3</sup>.

**Conclusion:** Appropriate HH management including HCC surveillance for cirrhotic patients and those with advanced fibrosis in accordance with AASLD guidelines requires close patient monitoring and long term follow up. A specialist dedicated nurse delivered service helps to provide this.

**References:**

1. Phatak PD, Bonkovsky HL, Kowdley KV. Hereditary hemochromatosis: time for targeted screening. *Ann Intern*

*Med.* 2008;149:270–272.

2. Bruix J, Sherman M. Management of hepatocellular carcinoma. *Hepatology.* 2005;42:1208–1236.

3. Bruce R Bacon, Paul C Adams, Kris V Kowdley, Lawrie W Powell, Anthony S Tavill. Diagnosis and Management of Hemochromatosis: 2011 Practice Guideline by the American Association for the Study of Liver Diseases. *Hepatology.* 2011 July; 54(1): 328–343.

**ABSTRACT 80 (13B186) POSTER PRESENTATION**

**Title of Paper:** The Crohn's Life Impact Questionnaire (CLIQ): The First Patient-Reported Outcome Measure (PROM) Specific To Crohn's Disease (CD)

**Author(s):** J Wilburn, SP McKenna, J Twiss, K Kemp, S Campbell

**Department(s)/Institution(s):** Galen Research Ltd, Manchester, UK & Department of Gastroenterology, Manchester Royal Infirmary, Manchester UK

**Introduction:** To determine the impact of Crohn's Disease (CD) and its treatment from the patient's perspective a high quality CD-specific PROM is required. This must have; a meaningful theoretical basis, relevant, well-targeted content derived from CD patients and unidimensional, reliable and valid scales.

**Aims/Background:** This study describes the development of the CLIQ that is shown to meet these criteria. The CLIQ adopted the needs-based model of Quality of Life (QoL) and the World Health Organisation classification of functioning.

**Method:** The 3 key development stages were; item generation from qualitative patient interviews, assessment of face and content validity in further patient interviews and item reduction and evaluation in a postal survey. Respondents also completed the Nottingham Health Profile (NHP), Unidimensional Fatigue Impact Scale (UFIS) and a demographic questionnaire. Approximately a third of the sample completed the CLIQ again, two weeks later, to determine test-retest reliability (reproducibility).

**Results:** Thirty qualitative interviews identified 3,000 statements concerning CD and its treatment. Draft scales were assessed by 15 CD patients who found them easy to complete, comprehensive and relevant. The CLIQ was then administered to 273 patients (34.4% male; aged 16-79 (SD 15.1) years. Rasch analyses identified unidimensional scales of QoL and Activity Limitations. Psychometric analyses showed these scales to be reproducible and to have construct validity.

**Conclusion:** The CLIQ is the first PROM specific to CD. The scientifically rigorous methodology employed ensures that it patient-based outcome accurately and that it will prove valuable in clinical practice, trials and audit.

**ABSTRACT 81 (13B187) POSTER PRESENTATION**

**Title of Paper:** Alcohol withdrawal recognition, screening and prescription practices in the acute medical setting

**Author(s):** N. Moran, E. Jones, A. O'Toole, S. Patchett, G. Harewood, F. Murray

**Department(s)/Institution(s):** Department of Gastroenterology



and Hepatology, Beaumont Hospital, Dublin

**Introduction:** Delirium tremens (DT) is defined by hallucinations, tachycardia, hypertension, fever, agitation, and diaphoresis in the setting of acute reduction or abstinence from alcohol. DT is a medical emergency associated with a 5% mortality rate.

There are established hospital guidelines available to guide the management of alcohol withdrawal and validated screening tools available to assess and treat patients.

**Aims/Background:** To assess practices surrounding alcohol withdrawal screening and appropriate prescribing in acute medical admissions in a University Hospital.

**Method:** In the emergency department, we obtained details of all non-elective admissions during one week from 6th-10th February 2013. We reviewed admission notes to classify patients according to risk of alcohol withdrawal. We recorded whether alcohol consumption was recorded, if screening tools to assess for withdrawal risk were used, if withdrawal was managed appropriately and if the alcohol liaison nurse was consulted. In addition we noted if refeeding syndrome risk was monitored.

**Results:** 110 patients were included; 57 female (52%) and 53 male (48%). Median age was 67 (range 19-88 years). 82.5 % had alcohol consumption documented. Of these 67.5 % were expressed in units per week. 8% (n=6) were identified as being at risk of alcohol withdrawal, of these 50 % were treated with IV Thiamine and Chlordiazepoxide. 33% (2/6) were referred to the alcohol liaison services. 1 patient had routine electrolyte measurement. No patients developed DT.

**Conclusion:** 8% of all patients were at risk of alcohol withdrawal. The appropriate management and alcohol liaison referral was prescribed in less than 50%.

**ABSTRACT 82 (13B188) POSTER PRESENTATION**

**Title of Paper:** The appropriateness of ppi prescription in a general medical cohort

**Author(s):** N. Moran, E. Jones, A. O'Toole, S. Patchett, G. Harewood, F. Murray

**Department(s)/Institution(s):** Department of Gastroenterology and Hepatology, Beaumont Hospital, Dublin

**Introduction:** Proton pump inhibitors (PPIs) are one of the most commonly prescribed groups of drug in Ireland, and at great expense. In addition PPIs are associated with side effects. Anecdotally, many patients receive regular PPI treatment for poorly defined reasons and for conditions where PPIs have not been shown to be of benefit.

**Aims/Background:** To assess practices surrounding PPI prescription in acute medical admissions in a tertiary referral centre.

**Method:** In the emergency department, we obtained details of all non-elective admissions during one week from 6th-10th February 2013. We reviewed admission notes to document PPI prescription prior to admission and questioned patients as to whether they knew the duration and indication of their PPI treatment.

**Results:** In total, 102 patients were included, 54 female (53%) and 48 male (47%). The median age was 67 (range 19-88 years). 35.4 % (n=36) were on a PPI on admission. The indication for PPI treatment was documented in 8.3 % of patients. 7.8 % (n=8) were

commenced on a PPI on admission. Following patient interviews, 35% (n=12) identified a reason for ongoing PPI use. 65% (n=24) were unclear as to why they were taking a PPI regularly. Indications included GI protection and subjective symptoms of dyspepsia.

**Conclusion:** As PPI use has become more widespread, and in particular with the recent advent of OTC formulations, doctors are less likely to question the original indication for patients' prescription. In fact, patients themselves are often unaware of why they are taking these particular medications.

**ABSTRACT 83 (13B189) POSTER PRESENTATION**

**Title of Paper:** Rapid and cost effective interventions in the nutritional management of patients at a large district general hospital lead to significant improvements in service and patient care

**Author(s):** DR D J TATE, DR C BLACK AND DR C HOLLYWOOD

**Department(s)/Institution(s):** Department of Gastroenterology, Gloucestershire Royal Hospital, Gloucestershire

**Introduction:** We anecdotally observed a lack of good practice amongst healthcare staff in identifying and managing patients at risk of nutritional deficiency admitted to the Gloucestershire Royal Hospital.

**Aims/Background:** We aimed to assess the compliance with NICE guidelines regarding MUST (Malnutrition Universal Screening Tool) scoring of patients as well as the action that was taken as a result of these scores. Through the use of targeted, rapid interventions including staff education, streamlined documentation and creation of a nutrition team we sought to improve the management of these patients

**Method:** A snapshot case note audit of the patients on a 28 bedded gastroenterology ward was undertaken in November 2012. This showed poor rates of MUST scoring, few dietetic referrals and long duration from referral to review, and inappropriate diet provided to patients with complex nutritional needs e.g. liver disease. In response, we created a nutrition learning tool for the nursing staff and junior doctors highlighting the importance of screening, the nuances of nutritional management of liver patients and the benefits of good nutritional management in terms of recovery from illness and length of stay. We created an action plan with the nursing staff to improve compliance with MUST scoring and we further raised awareness by presenting our findings at a grand round meeting. We created a diet sheet to educate staff about nutrition in liver disease and created a patient information leaflet. We then re-audited in January 2013.

**Results:** 28 patients were assessed on initial audit; only 36% had an admission MUST screen completed and of these 60% were deemed medium or high risk of malnutrition. Only 2/3 of these patients had a management plan to improve nutrition documented in the notes. Referral to a dietician of eligible patients was often delayed. There were 3 patients with a BMI of less than 18 who had not had their MUST screening completed. A significant improvement in these indices was noted on re-audit in January 2013.

**Conclusion:** We have demonstrated that rapid, cheap interventions can make a major difference to the management of patients with nutritional deficiency. Our next step is to roll-out our approach across the hospital whilst maintaining the improvements we have seen. To this end we plan to take the data forward to the trust board in an attempt to secure funding for extra specialist nurse presence in nutrition and extra PAs in consultant job plans to create a nutrition team for the hospital. With the NHS being under financial pressure currently, cheap and rapid improvement projects such as this will be



important in driving service development.

**ABSTRACT 84 (13B190) POSTER PRESENTATION**

**Title of Paper:** Evaluation of the Efficacy and Safety of Single Dose Iron Infusion in Clinical Practice

**Author(s):** Claire J. Grant, Robert A. Scott, Geraldine Mortimore and Andrew S. Austin

**Department(s)/Institution(s):** Department of Gastroenterology, Royal Derby Hospital, Derby, United Kingdom

**Introduction:** Total dose iron (TDI) infusion therapy has been utilised for several years in our hospital but has previously necessitated multiple admissions or an overnight stay. Shorter duration agents have been introduced to try to alleviate this significant cost burden.

**Aims/Background:** Having recently introduced a short duration TDI infusion (Monofer®) as first-line parental iron therapy in our hospital, we undertook an audit to examine its efficacy and safety.

**Method:** We audited the notes of those who had received short duration TDI since its introduction. TDI doses had been calculated by an experienced pharmacist from baseline haemoglobin (Hb), ideal body weight and target Hb according to SPC guidance.

**Results: Efficacy Data**  
40 consecutive patients received a TDI between May 2012 and January 2013. Pre-infusion Hb was 9.50 [8.75-10.1] (median [IQR]). For the 25 patients who had an Hb taken at 3-5 weeks post infusion, Hb was 11.6 [10.6-12.1], significantly higher than prior to infusion (p<0.001), with an increment of 1.8 [1.35-2.70].

**Safety Data**  
Of the 40 patients who received Monofer, 4 had adverse reactions within 5 minutes of commencement which led to discontinuation of the infusion (10%). 3 patients experienced an allergic-type reaction with facial swelling and dyspnoea. 1 patient experienced profuse vomiting and diarrhoea. No delayed reactions were observed.

**Title of Paper:** Determinants of recurrent hepatocellular carcinoma after liver transplantation

**Author(s):** A. Abu Shanab, N. Starr, Z. Hutchinson, J. Hegarty, A. Mc Cormick, R. Merriman

**Department(s)/Institution(s):** Liver Unit, St.Vincent's University Hospital, Dublin, Ireland

**Introduction:** The outcome of orthotopic liver transplantation (OLT) for hepatocellular carcinoma (HCC) depends significantly on pre-OLT radiologic stage. Other putative factors such as Lymphovascular invasion (LVI), peak pre-OLT AFP level, the need for down-staging and short waiting times on OLT list are less well-defined.

**Aims/Background:** To characterize the factors associated with recurrent HCC in patients after OLT with short waiting times.

**Method:** Retrospective cohort data analysis of patients with HCC who had OLT in a single centre from 2002 – 2011. Pre- and post-OLT variables were studied that included clinical characteristics, pre-OLT radiologic staging, explant pathological stage, tumour markers, use of ablative therapy and waiting times.

**Results:** Sixty-eight patients with HCC had OLT for HCC from 2002 – 2011  
Recurrent HCC occurred in 8/68 patients (11.7%), male (6), mean age 60. For these with recurrent HCC, the median waiting time was 2.5 months. Pre-OLT locoregional therapy occurred in 50%. All patients had stage T2 HCC pre-OLT (without downstaging). Three of 8 patients had an elevated AFP >500 pre-OLT. Pathological staging was pT2 in 62.5%, (two pT3, one pT1) that were moderately differentiated in 56% and with LVI in 25%. All 3 patients with high AFP and two without high AFPs pre-OLT developed high AFPs with recurrent HCC. No significant differences in waiting times and a pre-OLT AFP >500.

**Conclusion:** Recurrent HCC is uncommon for patients transplanted within Milan criteria. We were unable to demonstrate an effect of short waiting time or high AFP level pre-OLT on the likelihood of recurrent HCC.

**ABSTRACT 86 (13B192) POSTER PRESENTATION**

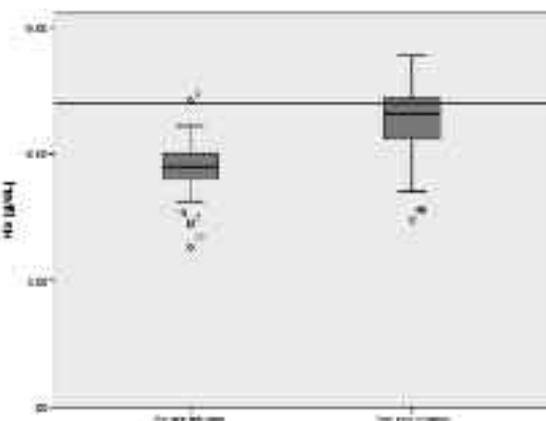
**Title of Paper:** Anti-Deamidated Gliadin Peptides Rapid Test (Simtomax) as a Simple and Quick Measure of Compliance to Gluten Free Diet in Patients with Celiac Disease

**Author(s):** YY Hong, C Kiat, V Byrnes

**Department(s)/Institution(s):** Department of Gastroenterology, University Hospital Galway

**Introduction:** Celiac disease (CD) is an immune-mediated enteropathy, characterised by intolerance to dietary gluten. Compliance to gluten free diet (GFD) is essential to minimise the risk of celiac-related complications. All too often dietary indiscretions, inadvertent or otherwise, as determined by serological testing may not become evident until several weeks after the patient has left the clinic, necessitating recall of the patient for dietician review. Anti-deamidated gliadin peptides (anti-DGP) Rapid Test (Simtomax) is a validated point-of-care (POC) serology test for screening of celiac disease with high sensitivity and negative predictive value. It is a non-invasive test, providing immediate results, facilitating instant feedback and counselling regarding compliance to GFD.

**Conclusion:** A sub-group of adverse reactions reported in those patients. In



**ABSTRACT 86 (13B192) POSTER PRESENTATION**



**Aims/Background:** To evaluate the reliability of Anti-DGP (Simtomax) in determining compliance to GFD when compared to that of serum IgA anti tTG and self reporting.

**Method:** Patients with known CD were recruited from CD clinics at UCHG from November 2012 to January 2013. Patients' compliance to GFD was recorded by the attending doctors. Anti-DGP (Simtomax) tests and IgA anti-tTG were performed on the day of the clinic visit on all patients. Patients with IgA deficiency were excluded. The results of both serology tests and patient's compliance to GFD were examined.

**Results:** Out of 55 patients recruited to date, 24 (43.6%) tested positive for anti-DGP and 31 (56.4%) were negative. 12 (50%) patients who tested positive for anti-DGP also had an elevated serum IgA anti-tTG. Of the remaining 12 (50%) who tested positive, 3 (12.5%) had serum IgA anti tTG <1 U/ml and 9 (37.5%) had IgA anti tTG level ranging from 3 to 9 U/ml. Normal reference range for IgA anti tTG (0-10 U/ml). All patients who tested negative for anti-DGP had normal IgA anti tTG level (IgA anti tTG <10 U/ml).

If serum IgA anti tTG is used as a measure of compliance to GFD, then the sensitivity of anti-DGP in predicting dietary compliance was 100%, with a specificity of 72% and a negative predictive value of 100%. When compliance was determined based on patients' self-reporting during the consultation, 11 (20%) patients were documented as not fully compliant to GFD. 8 (72.7%) of these were anti-DGP positive and had elevated serum IgA anti tTG, and 3 were anti-DGP positive with IgA anti-tTG level in the normal range (with their IgA anti tTG level ranged between 3 to 9 U/ml). Four (7.3%) patients reported compliance to GFD but had positive anti-DGP tests and elevated IgA anti tTG levels.

**Conclusion:** The high sensitivity and negative predictive value of Anti-DGP point-of-care test is in concordance with previous studies. In routine annual CD clinic setting, anti-DGP performed marginally better than IgA anti-tTG in determining gluten ingestion with the added benefit of an instantaneous result, thereby facilitating immediate feedback and education regarding dietary compliance.

**ABSTRACT 87 (13B193)**

**POSTER PRESENTATION**

**Title of Paper:** Dysregulation of the protein secretory pathway in Oesophageal Cancer progression

**Author(s):** AM Byrne, Dermot Kelleher, Aideen Long

**Department(s)/Institution(s):** Clinical Medicine/ Institute of Molecular Medicine

**Introduction:** Oesophageal adenocarcinoma commonly arises from a premalignant lesion known as Barrett's oesophagus. Many patients are asymptomatic and present to the clinic with very advanced disease and poor prognosis. Deoxycholic acid (DCA) is a component of gastric refluxate, implicated as a tumour promoter for oesophageal adenocarcinoma. We had previously demonstrated that DCA disrupts Golgi structure and consequently impairs protein secretion and glycosylation processes. Impairment of these fundamental cell processes are implicated in metaplasia, dysplasia and carcinogenesis. To exploit this phenomenon in order to identify a novel biomarker we used an informatic approach. We identified a Golgi-associated protein, GOLPH2 whose expression is elevated in tissue from patients with Barrett's oesophagus and oesophageal adenocarcinoma.

**Aims/Background:** GOLPH2 is localised to the Golgi and is not

normally secreted. It has been found to be secreted and detected in serum from patients with hepatocellular carcinoma. We hypothesised that DCA disruption of the Golgi structure would result in cleavage and secretion of GOLPH2 thus acting as a potential serum biomarker. The localisation of GOLPH2 to the Golgi membrane suggests it functions in protein processing.

We sought to determine the expression and localisation of GOLPH2 in patient tissue and to elucidate the mechanisms of secretion in oesophageal cell line models of squamous, metaplasia dysplasia and adenocarcinoma.

**Method:** Golgi structure and GOLPH2 expression were examined in tissue from patients with Barrett' metaplasia, high grade dysplasia (HGD) and adenocarcinoma by immuno fluorescence.

GOLPH2 expression, localisation and secretion was assessed in normal squamous, Barrett's oesophageal and adenocarcinoma cell lines in response to DCA To determine the mechanism of GOLPH2 secretion, GOLPH2 mutant constructs were used.

**Results:** The Golgi structure was intact in normal oesophageal and metaplastic tissue but fragmented in dysplastic and adenocarcinoma tissue. GOLPH2 was localised to the Golgi in normal and metaplastic tissue whereas localisation of GOLPH2 with the Golgi was lost in dysplastic and adenocarcinoma tissue. GOLPH2 expression was up-regulated in areas of differentiation and invasion in tissue from Barrett's patients.

GOLPH2 was localised to the Golgi in all oesophageal cell lines but endogenously secreted by Barrett's oesophagus and adenocarcinoma cell lines only. DCA altered cellular localisation of GOLPH2 and caused secretion from normal oesophageal cells. To determine the mechanism of GOLPH2 secretion, GOLPH2 mutant constructs were used and the cleavage site was identified as the Pro-protein convertase (PC) site.

**Conclusion:** In conclusion, altered expression, localisation and secretion of GOLPH2 in Barrett's oesophagus and oesophageal adenocarcinoma suggests its potential use as a serum biomarker to identify asymptomatic patients with oesophageal disease. Up-regulation of GOLPH2 expression at sites of differentiation and invasion suggests a role in these processes in progression of this disease.

**ABSTRACT 88 (13B195)**

**POSTER PRESENTATION**

**Title of Paper:** Our Experience of Transient Elastography and Fibrotest® in Monitoring Patients Taking Methotrexate for Psoriasis

**Author(s):** M Lynch, E Higgins, PA McCormick, B Kirby, A Lally, S Rogers, A Vellinga, H Omar, P Collins

**Department(s)/Institution(s):** Dermatology Dept, St Vincent's University Hospital, Dublin, Ireland. Liver Transplant Unit, St Vincent's University Hospital, Dublin, Ireland. General Practice Dept, National University of Ireland

**Introduction:** Frequent evaluation of liver enzymes, procollagen III peptide (PIIINP) levels, and periodic liver biopsy are used to assess liver toxicity during methotrexate therapy for psoriasis, but some patients who proceed to biopsy do not have fibrosis or cirrhosis.

**Aims/Background:** Our study aimed to evaluate transient elastography (TE) (Fibroscan®, Echosens, Paris) and Fibrotest® (Biopredictive, Cambridge) in patients taking methotrexate for psoriasis.

**Method:** Chi square test was used for the comparison of dichotomous variables, and Mann-Whitney U test for continuous



variables.

**Results:** Forty-five patients (26 female, 58%), mean age 55 ( $\pm$  sd 14.6) years, had TE assessments. The median cumulative methotrexate dose was 3.3g (range 0.125-17.5). The mean body mass index (BMI) was 28.7 ( $\pm$  sd 7.2) kgm<sup>-2</sup>, and 62% were overweight or obese. Three (7%) patients had type 2 diabetes mellitus, and 13 (29%) had psoriatic arthritis (PsA). No patients reported excessive alcohol intake. Twenty-seven (60%) TE results were valid. The risk of TE failure was significantly higher in patients with a higher BMI ( $p < 0.01$ ). Of the 27 valid TE results, 6 (22%) were abnormal ( $\geq 7.1$ kPa). Of 21 patients with normal TE results, 4 had persistently elevated PIIINP levels, and did not have PsA. Twenty-nine patients had Fibrotest®, three (10%) of whom had abnormal results ( $\geq 0.31 / >F1$ ). Five liver biopsies were done because of persistently elevated PIIINP levels, and showed mild or moderate steatosis. Three of these could have been avoided based on normal TE or Fibrotest® results. Older age was associated with an abnormal TE result ( $p < 0.05$ ). Older patients, those on methotrexate for a longer duration, and with a higher cumulative dose were more likely to have an abnormal Fibrotest® result ( $p < 0.05$ ).

**Conclusion:** We suggest that unnecessary liver biopsies may be avoided if abnormalities in at least two tests (PIIINP, TE or Fibrotest®) are required prior to biopsy. This strategy will need to be evaluated in prospective studies. Funding for Fibrotest® was received from "City of Dublin Skin and Cancer Hospital Charity".

#### ABSTRACT 89 (13B196)

#### POSTER PRESENTATION

**Title of Paper:** Outcomes of Upper GI Bleeding Managed in the Acute Medical Assessment Unit

**Author(s):** O'Connor A, Bains J, Plunkett R, Silke B

**Department(s)/Institution(s):** Acute Medical Assessment Unit, St James's Hospital, Dublin

**Introduction:** Acute upper gastrointestinal bleeding is a common medical emergency that has a 10% hospital mortality rate. Despite changes in management, mortality has not significantly improved over the past 50 years. Care in an acute medical assessment unit (AMAU) offers streamlined, high turnover, focussed delivery of care and has been shown in our hospital to reduce mortality among acute medical admissions.

**Aims/Background:** 1. To see what the causes and mortality were among Upper GI Bleeds admitted to the AMAU  
2. To identify factors that predicted mortality  
3. To assess if time to endoscopy was a predictor of mortality

**Method:** We retrospectively analysed all admissions to the AMAU where haematemesis or melaena was reported at admission and obtained the endoscopy report. Eligible patients were analysed using the STATA data analysis and statistical software tool.

**Results:** 438 patients were admitted to the AMAU with upper gastrointestinal bleeding in the study period. This accounted for 1.41% of total admissions to the unit. 63.5% (n=278) were male. Mean age was 56.8 years (Range 16-96 years). In 34.0% (n=149) of cases no cause was identified at endoscopy. 21.7% (n=95) had bleeding from peptic ulcer disease (50 had bleeding duodenal ulcers and 45 had bleeding gastric ulcers). 20.8% (n=91) had portal hypertensive bleeding (64 had oesophageal varices and 27 had gastric portal hypertensive bleeding). 9.1% (n=40) had bleeding

from severe gastritis (n=38) or severe duodenitis (n=2). 4.8% (n=21) had bleeding from oesophageal ulceration and 5.5% (n=24) had Mallory-Weiss tears. Overall 30-day mortality for upper GI bleeding was 5.02% (n=22). This is comparable with overall mortality for admission to AMAU, which is 5.3%. Among those who died, a logistic regression showed that advanced age, elevated Charleston index, low albumin, elevated troponin and the requirement for more than one blood transfusion all significantly predicted mortality. The AUROC for the logistic regression is 0.9346. 16.4% (n=72) required endoscopic interventions to control bleeding. Admission haemoglobin and time to endoscopy were not significantly associated with increased mortality. Time to endoscopy did significantly reduce length of stay.

**Conclusion:** Upper GI bleeding is a serious condition with a mortality comparable to all other causes of medical admission to hospital. The mortality among this series admitted to an AMAU compares favourably to international norms for in hospital mortality among upper GI bleeds. Endoscopy usually reveals the diagnosis. Interventions such as therapeutic endoscopy and blood transfusion are frequently required. Advanced age, elevated Charleston index, low albumin, elevated troponin and the requirement for more than one blood transfusion all significantly predict mortality.

#### ABSTRACT 90 (13B197)

#### POSTER PRESENTATION

**Title of Paper:** Autologous Stem Cell Transplantation, for Refractory Coeliac Disease Type II: A Promising Therapeutic Option - The Irish Experience

**Author(s):** C Kiat(1), I Feeley(2), YY Hong(1), P Maheshwari(2), C Mulder(3), A Hayat(1), C Goulding(2), V Byrnes(1)

**Department(s)/Institution(s):** (1)UHG, Galway, (2)Midwestern Regional Hospital, Limerick, (3)VU University Medical Centre, Amsterdam, The Netherlands

**Introduction:** Refractory Coeliac disease (RCD II) is a rare but serious complication of celiac disease and is characterized by non-responsiveness to a gluten free diet in the presence of a clonal population of T lymphocytes within the small intestine. The risk of progression from RCD II to enteropathy-associated T-cell lymphoma (EATL) is estimated at 60-80% and is associated with a very poor survival.

**Aims/Background:** Therapeutic options for RCD II are limited. Immunosuppressions with corticosteroids, thiopurines and infliximab have been used with disappointing results and may indeed promote the progression to lymphoma. To date, the use of a novel therapeutic approach of high-dose chemotherapy followed by autologous stem cell transplant (ASCT) in a small cohort of patients with RCD II has stimulated great interest world wide with promising results.

**Method:** We describe the clinical presentations and courses of two very different patients with RCD II who received an ASCT.

**Results:** Case 1: 36-year-old female with an 8 year history of CD who presented with a weight loss of 8kgs over the course of 3 months in conjunction with abdominal pain, bloating, and diarrhoea (8-10 times/day). She was fully compliant with a GFD and her anti-tTG was  $< 1$ units/L. Investigations included a panendoscopy which revealed severe ulcerative jejunitis. Duodenal biopsies revealed loss of CD8-positive cells and T cell clonality consistent with RCD type II. Abdominal CT revealed abnormal thickening of her jejunum to her mid ileum with mesenteric lymphadenopathy. Extensive investigation



for overt lymphoma proved negative. She was unable to maintain adequate nutrition via the enteral route and had a nadir albumin of 7g/L. She was commenced on total parenteral nutrition (TPN). She was initially treated with intravenous cortico-steroids followed by high dose chemotherapy in the form of cladribine but failed to respond clinically with ongoing severe malabsorption. In light of this she proceeded to ASCT in July 2012 and in spite of a stormy post transplant course is currently doing well clinically, with resolution of her symptoms and continues to thrive on an oral GFD

Case 2: 67-year-old female with a one year history of celiac disease on a background of osteoporosis and hypothyroidism. Her symptoms had begun 3 years earlier and failed to improve on a gluten free diet (GFD). At presentation she weighed 37kg. Coinciding with this she also experienced progressive ataxia which was deemed to be associated with CD. Panendoscopy revealed severe villous atrophy with ulcerative jejunitis. Small bowel biopsies revealed abnormal phenotypic expression of T-lymphocytes with loss of CD8-positive cells with T-cell clonality consistent with RCD type II. MRI small bowel follow through and PET scan proved negative for overt lymphoma. She was commenced on cortico-steroids and azathioprine (AZA) which was associated with a clinical improvement and a weight gain of 10kg. However, in spite of this repeat small bowel biopsies confirmed that >70% of her T lymphocytes were monoclonal and her ataxia continued to progress. In light of this she proceeded to ASCT in December 2011. Post transplant she has maintained her weight and her ataxia has remained stable.

**Conclusion:** RCD II is a potentially lethal complication of CD and remains very difficult to treat. In the absence of published randomized clinical trials, evidence is growing for the safety and feasibility of ASCT in this disease.

Since 2004, 24 patients worldwide (including the 2 described here) have received ASCT for this condition and only one patient to date has developed lymphoma (4 years post ASCT). Our 2 patients are the first and only patients in Ireland and the UK to receive an ASCT for RCD II. In the future multicentre randomized trials or trials with historical control groups will be needed to consolidate this treatment but for now we encourage consideration of ASCT for a subgroup of patients with RCD II who would heretofore have a very high mortality risk from sepsis or lymphoma.

**ABSTRACT 91 (13B198) POSTER PRESENTATION**

**Title of Paper:** Who Nose? Transnasal gastroscopy might be best – A pilot feasibility, safety and acceptability comparative study

**Author(s):** B Hall1, G Holleran1, S Lawson2, J Regan2, M Murphy2, B McMahon3, D McNamara1

**Department(s)/Institution(s):** 1Department of Clinical Medicine, AMNCH, Trinity College Dublin 2Department of Speech and Language, AMNCH, Dublin 3 Department of Medical Physics and Clinical Engineering, AMNCH, Dublin

**Introduction:** Standard upper endoscopy (SE) is an integral aspect of diagnostic and therapeutic gastroenterology. Patients frequently request conscious sedation as they perceive the procedure may cause pain or discomfort. Administration of sedation incurs additional costs and risks. Transnasal endoscopy (TNE) has the potential to overcome these issues as it does not induce the pharyngeal reflex and does not require conscious sedation.

**Aims/Background:** To compare the feasibility, safety and tolerance of TNE as a viable alternative to SE.

**Method:** Patients scheduled for routine upper endoscopy were prospectively recruited and invited to undergo a non-sedated TNE procedure. A further group of patients scheduled for non-sedated SE were invited to participate as a control group. The SE procedures were performed using standard protocol with topical application of oral Xylocaine 10-30mgs and a standard size Olympus gastroscope. All TNE procedures were performed using a Pentax EG-1690K 5.4mm transnasal gastroscope via the nasal floor following application of instillagel nasally and topical oral Xylocaine 10-30mgs. Post procedure fasting (1 hour) and recovery advice was the same for both groups. The indication, duration and complications of each procedure were recorded. A visual analogue scale was used to assess overall patient tolerance and tolerance for each of the following parameters; pain, gagging, choking and anxiety graded on a 0-10 scale. All results were expressed as a mean and compared with a student T-test using SPSS 19. A P value of <0.05 was considered significant.

**Results:** To date, 22 patients, 12 men, mean age 56 years (range 35-74) have been enrolled, 12 in the TNE group and 10 in the SE group. Indications were GORD (n=7, 31%), dysphagia (n=6, 27%), epigastric pain (n=5, 22%) and nausea (n=4, 18%). All procedures were completed with intubation to D2. There were no complications. There were no differences in mean procedure duration for either TNE or SE (TNE 9.3 mins; SE 9 mins). Both procedures were well tolerated with VAS scores of 2.3 and 3.4 for TNE and SE respectively (p<0.03). However, there was a significant advantage for TNE versus SE for choking on intubation (3.2 vs 5.4, p<0.03 95% CI 1.4-4.9), gagging on intubation (2.4 vs 5.1, p<0.03 95% CI 1.2-3.8) and gagging during the procedure (1.8 vs 4.1, p<0.03 CI 1.2-2.9).

**Conclusion:** Our pilot study suggests that TNE may be useful as a tool in diagnostic upper endoscopy. It is reliable, safe and better tolerated by patients compared to SE. Potential added advantages included improved views, reduced length of stay and fewer complications. Ongoing recruitment will be required to address this.

**ABSTRACT 92 (13B199) POSTER PRESENTATION**

**Title of Paper:** High Prevalence Of Influximab related Lupus Like Syndrome In Irish IBD cohort- Real Life Prevalance Or Random Cluster?

**Author(s):** Jackson LM, Stack WA, Mc Carthy Joanne, Lannin U, O Keefe Jo,

**Department(s)/Institution(s):** Gastroenterology Department Bon Secours Hospital (BSH), Cork

**Introduction:** Lupus like syndrome is a rarely reported adverse event for Anti TNF therapies (1) We noted a significant number of adverse events in particular drug induced SLE like syndrome (DILE) amongst our IBD patients receiving infliximab.

**Aims/Background:** The aim of this study was to quantify the real life prevalence of significant side effects and in particular lupus like syndrome to infliximab therapy.

**Method:** We reviewed retrospectively notes of all patients receiving infliximab therapy between Sep 2009 and Sep 2012 in GI unit.

**Results:** 327 no of infusions was given to 39 patients (16 Crohns /23 UC, M:F ratio 21:18) over study period. 24/37 (64.8%) patients stopped therapy in that period after a median of 4(1-12) infusions. 30.4% (7/23) patients stopped therapy in setting of clinical remission. 17.4% ( 4/23) patients stopped therapy because of treatment failure.



(11/37 (29.7%) patients stopped treatment because of significant side effects. (3/37 8.1%) experienced acute infusion reaction, 1/37 (2.7%) MS. 5/37 (13.5%) patients manifested lupus like syndrome, 2/37(5.4%) hilar adenopathy on CXR with strongly pos. ANA and antidsDNA. Older age at diagnosis (47 vs. 32) yrs. predicted increased risk of developing lupus like syndrome ( $p<0.05$ ) as did history of previous azathioprine intolerance (100 vs. 43) % ( $p<0.05$ ).

**Conclusion:** We report a higher than previously reported prevalence of DILE with anti-TNF therapy in an Irish cohort of IBD patients. Future studies are required to determine if this represents a cluster or predicts a real life higher prevalence in Irish population.

**ABSTRACT 93 (13B200) POSTER PRESENTATION**

**Title of Paper:** Rolling Out ECCO Guidelines For Opportunistic Infections Into Day To Day Practise- Still A Way To Go!!!

**Author(s):** Jackson LM, Stack WA, Mc Carthy Joanne, Lannin U, O Keefe Jo,

**Department(s)/Institution(s):** Gastroenterology Department Bon Secours Hospital (BSH), Cork

**Introduction:** Best practise guidelines recommend that all patients starting Anti-TNF therapies should be pre-screened and vaccinated to reduce risk of opportunistic infections (ECCO guidelines 2009) and should be counselled re potential risks and benefits of treatments.

**Aims/Background:** To review documentation of anti-TNF therapy information provision and compliance with ECCO guidelines in prevention of opportunistic infections.

**Method:** We reviewed retrospectively the notes of all patients receiving infliximab therapy between Sep 2009 and Sep 2012 in BSH GI unit, Cork.

**Results:** 327 no of infusions was given to 39 patients (16 crohns/23 UC, M:F ratio 21:18) over study period. Discussion re treatment risks was clearly documented in 32/37(86%) patients, in 84% cases by IBD specialist nurse. Screening for opportunistic infections was incomplete. TB screening was undertaken in 100% (37/37) of cases but HIV testing was not routinely undertaken. 65%(24/37) patients had Hep B immunity status assessed but none were referred for vaccination programme. Varicella immunity was checked in 46% (17/37) patients, 2/17(11.8%) patients non-immune! New tick-box proforma designed.

**Conclusion:** Rolling out of new guidelines which incorporate new practise is challenging and difficult to coordinate. In an effort to standardise approach we have designed a tick box proforma to use as part of our initial assessment of IBD patients. Our aim is to screen all patients at point of diagnosis of illness rather than at point of prescribing therapy so that vaccination can be coordinated when necessary in anticipation of requirement of therapies. Further studies will be required to look at success of this measure.

**ABSTRACT 94 (13B201) POSTER PRESENTATION**

**Title of Paper:** Mucosal Healing in patients treated with infliximab in Crohn's disease and ulcerative colitis

**Author(s):** Jason Boyd, Lennard Lee, Sandro Lanzon-Miller

**Department(s)/Institution(s):** Department of Gastroenterology, Milton Keynes General Hospital

**Aims/Background:** Infliximab (IFX) is a chimeric monoclonal antibody effective for inducing and maintaining remission in Crohn's disease (CD) and ulcerative colitis (UC). The efficacy of IFX in achieving clinical remission has been well demonstrated. However, data regarding mucosal healing based on duration of therapy is limited.

**Method:** A retrospective cohort study of patients with CD and UC who had been treated with IFX at Milton Keynes General hospital. Patients were identified from the Planned Care Unit "infliximab diary" and their records were reviewed. Patient details, duration of therapy and results of endoscopic investigations were extracted into a standardized form. Mucosal healing was defined as no active inflammation on endoscopy. Patients who underwent a colonoscopy or sigmoidoscopy within one year of their last IFX dose were included in the study.

**Results:** 21 patients (10 male) were studied with a median age of 37 years (range: 20-68 years).  
 CD (17/21)  
 % ileal disease 12% (2/17)  
 % ileocolonic 76% (13/17)  
 % colonic disease 12% (2/17)  
 UC (4/21)  
 % colonic disease 100% (4/4)  
 4 patients had induction therapy at 0, 2 and 6 weeks only. In this cohort mucosal healing was achieved in 50% [(2/4) both CD]. 17 patients had induction therapy followed by 8-weekly maintenance infusions. The median duration of therapy was 24 months (range: 5-62 months). In this cohort mucosal healing was achieved in 29% (5/17).

**Conclusion:** IFX was successful in achieving mucosal healing for a high proportion of patients. The proportion of patients who had mucosal healing immediately after induction therapy of IFX was not statistically significant from the proportion of patients who had mucosal healing with maintenance therapy. This may be representative of the different disease characteristics of the two groups and we aim to investigate this further with a larger sample.

**ABSTRACT 95 (13B202) POSTER PRESENTATION**

**Title of Paper:** Withdrawal of maintenance infliximab therapy

**Author(s):** Lennard Lee, Jason Boyd, Sandro Lanzon-Miller

**Department(s)/Institution(s):** Department of Gastroenterology, Milton Keynes General Hospital

**Aims/Background:** Infliximab (IFX) is a chimeric monoclonal antibody effective for inducing and maintaining remission in Crohn's disease (CD) and ulcerative colitis (UC). Long term therapy is efficacious for maintaining clinical remission; however, infliximab-use is associated with significant side effects and considerable costs. NICE recommends that patients be assessed for cessation of therapy on a yearly basis. This audit analyses our ability to withdrawal infliximab for patients established on maintenance therapy.

**Method:** A retrospective cohort study of patients with CD and UC on infliximab at Milton Keynes General hospital were included in this study. Patients were identified from the infliximab database and the medical records were reviewed. The duration of infliximab therapy was recorded along with the ability to withdraw therapy at yearly review.

**Results:** Forty-five patients were included for analysis of which 58% were male. The median age was 36.6 years. The majority of patients



had a diagnosis of Crohn's disease (42/45). The mean follow up period of patients was 1.6 years (range 0-4 years). Mucosal healing was noted in 33.3% of patients. Six patients were able to stop Infliximab therapy of which 66.6% were stopped within the first two years of therapy. None of these patients required repeat infliximab therapy. There was no correlation between disease duration/age of patient or disease location in our ability to stop infliximab therapy.

**Conclusion:** Infliximab is very successful at inducing mucosal healing and inducing clinical remission. When patients were assessed at year 1, the vast majority were not able to stop infliximab due to poor symptom control or ongoing endoscopic disease. Significantly more patients were able to stop therapy by the second year of therapy. We conclude, that from our experience, the ideal point to consider stopping infliximab therapy is within the first two years of therapy and this correlates very well with the soon to be published European consensus recommendations (EPACT-2).

## ABSTRACT 96 (13B203) POSTER PRESENTATION

**Title of Paper:** A 1 year audit of Endoluminal Ultrasound- guided Fine Needle Aspiration cytology investigations (EUS-FNA) : Diagnostic efficacy and input of on-site cytological assessment

**Author(s):** S Hegarty<sup>1</sup>, T Lioe<sup>1</sup>, M.Mitchell<sup>2</sup>, A McNeice<sup>2</sup>, I Mainie<sup>2</sup>

**Department(s)/Institution(s):** Department of Tissue Pathology<sup>1</sup> and Gastroenterology<sup>2</sup>, Belfast City Hospital, Lisburn Road, Belfast, Northern Ireland

**Introduction:** EUS-FNA as an investigative technique for pancreatic lesions and deep-seated lymphadenopathy is now well established. We carried out an audit of our practice, in particular the decrease in insufficient or non-diagnostic specimens when adequacy is assessed at the time of procedure.

**Aims/Background:** A total of 91 patients underwent EUS-FNA over a one-year period at the Belfast City Hospital where there are 2 weekly sessions performed by Gastrointestinal endoscopists on consecutive days one of which is attended by a consultant cytopathologist +/- cytotechnician for on-site cytological assessment.

**Method:** The cytology reports from those patients who underwent an EUS-FNA in our institution were retrieved from the files of the Cytology Department, and assessed for diagnosis, adequacy, and necessity for further investigations.

**Results:** Overall, 19/94 (20.2%) of the cases were reported as benign while 31/94 (33%) were malignant. 9.5% (9/94) were equivocal and 20% of samples were inadequate for diagnosis. However the inadequate sample rate fell from 33% to 7% when one session was attended by cytologist assessing the sample on-site. Three quarters of the cases were of abdominal lesions including a majority of pancreatic masses and surrounding lymph nodes. 2 were of intramural gastric and 2 liver lesions. The remaining quarter were of mediastinal lesions or lymphadenopathy. 5 cases of granulomatous lymphadenitis and 1 case of malignant lymphoma were diagnosed cytologically.

**Conclusion:** EUS-FNA is a well-tolerated investigative technique to obtain a tissue diagnosis for further management decisions but the presence of on-site cytological assessment to provide immediate feedback ensures a higher diagnostic yield and increases the cost-effectiveness of the procedure.

## ABSTRACT 97 (13B204) POSTER PRESENTATION

**Title of Paper:** Minding The Gap – Drop-out of Hepatitis C PCR Positive Patients Between Diagnosis And Attendance At The Liver Clinic

**Author(s):** A McCurley<sup>1</sup>, S Murray<sup>1</sup>, Dr M McCartney<sup>1</sup>, Dr P Coyle<sup>2</sup>, Dr N McDougall<sup>3</sup>, Dr I Cadden<sup>3</sup>

**Department(s)/Institution(s):** The Liver Unit, 1st Floor East Wing, Royal Victoria Hospital, Grosvenor Road, Belfast, Co Antrim, Northern Ireland

**Introduction:** In 2009 we identified a sizeable gap between those diagnosed with Hepatitis C (HCV) and those seen at clinic. The Northern Ireland Managed Clinical Network (MCN) has reviewed all polymerase chain reaction (PCR) positive cases with respect to referral to/attendance at clinic.

**Aims/Background:** To review referral to/attendance at Liver Clinic for confirmed HCV PCR positive cases.

**Method:** Confirmed cases between September 2009 and June 2012 were cross-referenced with the Patient Administration System to assess clinic attendance. In cases why patients were not referred, the originator of the test was contacted, for an explanation and to encourage referral to the clinic.

**Results:** 219 cases were confirmed. 118 (53%) cases were referred before MCN intervention. After this, 193 referrals were received (88%). 26 (12%) individuals were never referred.

6 persons died following referral, leaving 187 referred cases. 149(77%) individuals currently attend the liver clinic; 1 awaits appointment. 42% of referrals were from ethnic minority groups. Annual non-attendance rates dropped from 22% in 2009 to 16% in 2011.

37 patients referred did not attend clinic; 18 from ethnic minority backgrounds. 19 were from UK/Northern Ireland.

There was no significant difference between non-attendance rate amongst ethnic minority groups (22.8%) and for those with a UK/Northern Ireland origin (17.9%) (Fishers Exact Test; p= 0.46).

**Conclusion:** Involvement of the NI Hepatitis B&C MCN has increased rates of referral of HCV PCR positive patients for assessment. Surprisingly, ethnic background did not impact upon the rate of clinic non-attendance

## ABSTRACT 98 (13B205) POSTER PRESENTATION

**Title of Paper:** Clostridium difficile in IBD: An under diagnosed cause of disease relapse?

**Author(s):** B Hall<sup>1</sup>, G Holleran<sup>1</sup>, C Flannery<sup>2</sup>, D McNamara<sup>1</sup>

**Department(s)/Institution(s):** 1 Department of Clinical Medicine, AMNCH, Tallaght, Dublin 24 2 School of Medicine, University of Dublin, Trinity College, Dublin

**Introduction:** Clostridium difficile (CDI) is the leading cause of infectious nosocomial diarrhoea in industrialised countries. Patients with IBD, both Crohn's Disease (2-fold increase) and Ulcerative Colitis (3-fold increase) have an increased incidence of developing CDI, up to 6% in Ulcerative colitis (UC) with only slightly lower rates in Crohn's disease (CD). Presentation of CDI, in IBD patients, can



often be difficult to distinguish from a flare of disease. Furthermore, they also have worse outcomes than the general population when infected with *Clostridium difficile*, including length of stay and colectomy rates. Recent guidelines from the European Crohn's and Colitis Organisation recommend routine CDI testing in symptomatic relapse.

**Aims/Background:** To assess both testing and detection rates of CDI in a cohort of relapsing IBD patients who require hospital admission.

**Method:** A single centre retrospective review of patients admitted with a relapse of IBD was undertaken. Patients were retrospectively identified using available HIPE data for the period December 2011 to December 2012. HIPE codes employed included IBD unclassified, UC and CD. Patients diagnosed with other forms of colitis including infective gastroenteritis were excluded. A review of laboratory investigations for each patient was performed to check whether a sample for *Clostridium difficile* testing had been sent and if sent the result was recorded. Only liquid samples were processed and the routine testing method employed was the enzyme immunoassay (EIA) test. Laboratory investigations during the hospital admission plus a 6 month window prior to admission were included in the data. In positive cases, notes were reviewed and medication history noted.

**Results:** In total, 50 patients were admitted with a relapse of IBD over one year. Of these, 26 (53%) were male and the mean age was 39 years (range 18-81). Within the cohort, 26 (51%) had CD, 14 (28%) had UC and 10 (20%) had IBD unclassified. Testing rates overall were high at 73% (n=36). Testing rates (85%, n= 12) were highest in the UC subgroup and lowest in those with CD (56%, n=14). Only two patients (4%) were diagnosed with CDI within the entire cohort, both patients had Crohn's colitis. Our disease specific prevalence rates were 7.6% and 0% for CD and UC, respectively. Neither patient had prior steroid exposure within 3 months of presentation and one of our two CDI positive patients was on a biologic for greater than 3 months prior to diagnosis. In total, 6 (12%) patients required a colectomy during admission. Of our CDI patients one failed to respond to antibiotic therapy and required a colectomy. Therefore, our colectomy rates were 50% and 10% for CDI positive and CDI negative groups (p<0.04), respectively. Overall, there was no difference in length of stay between groups.

**Conclusion:** A high clinical suspicion should be maintained for CDI in IBD patients. Our test rate of 73% is very good. The prevalence of CDI in our cohort is in keeping with other reported data, although there is a preponderance in CD. As expected there was a higher colectomy rate associated with CDI infection in this cohort of patients with significant disease requiring admission. The majority of IBD patients with relapse are treated as outpatients and it would be interesting to see if our testing rates remained high in this cohort.

## ABSTRACT 99 (13B206) POSTER PRESENTATION

**Title of Paper:** The Curious Case of the Right Sided Inguino-Scrotal Hernia [POSTER]

**Author(s):** Brendan L Skelly, Adrian K Neill

**Department(s)/Institution(s):** Department of General Surgery, Daisy Hill Hospital Newry, N.Ireland

**Introduction:** Inguinal hernia often presents as an emergency with obstruction and subsequent strangulation. We report an interesting case where an inguino-scrotal sliding type hernia contained the hepatic flexure as its lead point, resulting in acute colonic obstruction and caecal wall perforation.

**Aims/Background:** A 63-year-old gentleman admitted with abdominal distension and vomiting had a large, tense irreducible inguino-scrotal hernia on the right side which was non-tender, with concomitant tenderness in the left iliac fossa. Radiographic findings were of acute colonic distension.

**Method:** At laparotomy the hepatic flexure on an abnormally long mesentery, formed the lead point of an inguino-scrotal hernia bringing with it the greater omentum, distal ascending and proximal transverse colon. The dilated caecum was found in the left iliac fossa, within its wall an ischaemic serosal tear and a single 'pistol shot' perforation laterally, with surrounding faecal contamination. A right hemicolectomy with side-to-side stapled anastomosis was performed and the patient made an uncomplicated recovery.

**Results:** This is an extremely rare variant of the complete inguino-scrotal sliding type hernia. A detailed anatomical sketch of the encountered pathology is included, with correlation to the plain radiographic imaging.

**Conclusion:** Acute presentation of an inguinal hernia with intestinal obstruction requires emergency surgery with a mid-line laparotomy incision most appropriate. When confronted with a patient who has colonic obstruction and abdominal tenderness, proceeding to emergency laparotomy is prudent.

## ABSTRACT 100 (13B207) POSTER PRESENTATION

**Title of Paper:** Review Of Hospital Patients With ALT>1000IU/L

**Author(s):** A. McDonough, Z. Galvin, J. Ryan, MT. O'Neill, H. Fitzpatrick, S. Stewart

**Department(s)/Institution(s):** Centre for Liver Disease, Mater Misericordiae University Hospital, Dublin, Ireland

**Introduction:** There are many potential causes for an ALT>1000IU/L, the commonest being ischaemia, drug induced liver injury (DILI) and viral hepatitis. There are however many other potential causes, and, more recently, acute endemic hepatitis E (HEV) has been identified in some of these patients.

**Aims/Background:** Our aim was to establish the causes of ALT>1000 IU/L in patients in a large teaching hospital. We also wanted to determine the number of patients in whom a cause was not found, and how many of these had been checked for HEV.

**Method:** All ALT values over a two-year period (2010/11) were examined. Those with an ALT>1000IU/L were identified and their investigations/notes reviewed. All data was anonymised and recorded in a dedicated electronic database.

**Results:** 182 patients (57%male and 43%female) with an ALT>1000IU/L were identified. The mean age for males versus females was 47+/-18 years versus 62+/-18 years (p=0.001). The most common causes of an ALT>1000IU/L were ischaemic hepatitis, (n=111,(61%)), DILI, (n=30,(16.5%)) and viral hepatitis, (n=22,(12.1%)). The remaining causes included choledocholithiasis (n=8) and autoimmune hepatitis (n=3). No cause was identified for 8 patients. Of these, none had HEV IgM checked. 35.7%(n=65) died during this admission, 54.9%(n=100) were discharged home and 9.3%(17) were not admitted.



**Conclusion:** This review confirms that ischaemic liver injury is the commonest cause of ALT>1000IU/L in hospital inpatients. Ischaemia, DILI and viral hepatitis account for almost 90% of presentations. Only 5% of patients had no aetiology identified. This number may be significantly lower if all had had HEV IgM checked.

**ABSTRACT 101 (13B208) POSTER PRESENTATION**

**Title of Paper:** Usefulness of fecal calprotectin in clinical practice in a district general hospital

**Author(s):** Dr Ahsan Malik, Dr Ian Rees

**Department(s)/Institution(s):** Gastroenterology, Prince Philip Hospital, Llanelli, South Wales

**Introduction:** Calprotectin is a calcium and zinc binding protein, mainly contained in neutrophils. If present in stools it is a marker of bowel inflammation.

**Aims/Background:** We evaluated the diagnostic value of fecal calprotectin (FC) as a non-invasive marker of bowel inflammation in routine out-patient gastroenterology clinic.

**Method:** A retrospective study was conducted of patients who had fecal calprotectin evaluated for various indications in out-patient gastroenterology clinic over a 12 month period. Presenting symptoms, FC results and the endoscopic findings were recorded. FC level more than 50 µg/gm was considered positive.

**Results:** FC was requested for 72 patients. 44 were female (mean age 44 years) and 28 were male (mean age 47 years). FC was requested for various symptoms including chronic diarrhoea, abdominal pain, abdominal distension and per rectal bleeding. Patients were divided into 3 groups based on clinical practice of gastroenterologist.

In the first group FC alone was requested initially as a screening test to assess bowel inflammation. 31 patients fell in this group, 21 of 31 had negative FC and no further investigations were done, while 10 of 31 had positive FC (mean 150.3 µg/gm). Out of these 5 had no further investigations as symptoms settled on subsequent clinic visit and 5 went on to have further investigations (Colonoscopy +/- Capsule endoscopy) which were all normal.

In the second group both FC and colonoscopy were requested on initial out-patient review. There were 23 patients in this group. 13 of 23 had normal FC and colonoscopy and no further investigations were done. 2 of 23 had abnormal FC (mean 271.5 µg/gm) and colonoscopy. Both were diagnosed with IBD. 8 of 23 had raised FC (mean 171.25 µg/gm) but a normal colonoscopy. 5 of 8 had no further investigations done while 3 had small bowel investigations which were normal. 1 patient of these 3 was treated for presumed small bowel Crohn's due to raised FC despite normal capsule endoscopy with good effect.

In the third group colonoscopy was the initial investigation of choice and was found to be normal but FC was done later in view of persistent symptoms to look for small bowel inflammation. 18 patients fell in this group. 12 of 18 had normal FC and had no further investigations. 6 of 18 had raised FC (mean 114.33 µg/gm). 3 patient's with raised FC had small bowel investigation done and all were normal.

**Conclusion:** In conclusion FC was beneficial when negative. It provided reassurance to the clinicians and helped avoid invasive investigations. However when FC was positive clinical judgment and patient symptoms dictated the need for further investigations. None

of the patients diagnosed with IBD had a negative FC.

**ABSTRACT 102 (13B209) POSTER PRESENTATION**

**Title of Paper:** Efficacy of helicobacter pylori eradication therapy

**Author(s):** Dr Ahsan Malik, Dr Ian Rees

**Department(s)/Institution(s):** Gastroenterology, Prince Philip Hospital, Llanelli, South Wales

**Introduction:** Helicobacter pylori (HP) is a Gram-negative, microaerophilic, curved or spiral bacillus found in the stomach. It is one of the most common infections worldwide and is associated with chronic gastritis (usually antral but corpus predominant gastritis being increasingly recognized), peptic ulcer disease and gastric malignancy. Prevalence is higher in the developing world with crowded living conditions, poor hygiene, large families and low socio-economic status associated with high rates of H. pylori infection. Important virulent factors of HP are motility, urease activity and association with gastric mucosal cells. Treatment of HP involves triple therapy which is a combination of two antibiotics and one proton pump inhibitor (PPI).

**Aims/Background:** To evaluate the efficacy of HP eradication therapy

**Method:** A prospective study was carried out to establish efficacy of HP eradication therapy. Patients who had open access endoscopy for dyspepsia and were found to be HP positive on CLO test were selected. It was established that patients had complied with the one week course of HP eradication therapy and they were four weeks post eradication therapy. Eradication therapy involved combination of amoxicillin, clarithromycin and a PPI, unless patients were allergic to amoxicillin in which case metronidazole was used instead of amoxicillin. Efficacy of eradication was evaluated with urea breath test.

**Results:** 41 patients were tested for HP eradication with urea breath test. 24 were male (range 23 to 87 years, mean age 62 years) and 17 were female (range 23 to 89 years, mean age 65 years).

Out of 24 males 21 had a negative breath test and 3 (mean age 59) had a positive breath test. Of the 17 females, 14 had negative breath test and 3 (mean age 59) had a positive breath test.

**Conclusion:** This study demonstrates that eradication therapy was successful in 35 out of 41 patients. The success rate in males was around 87% and success rate in females was around 82%. The overall success rate of HP eradication therapy was 85%.

**ABSTRACT 103 (13B211) POSTER PRESENTATION**

**Title of Paper:** Quality of care for acute severe colitis. Much done, more to do.

**Author(s):** Gibson DJ, Rafter N, Keegan D, Byrne K, Martin S, O'Connell PR, Winter DC, Hyland JM, Mulcahy HE, Cullen G, Doherty GA

**Department(s)/Institution(s):** Centre for Colorectal Disease, St Vincent's Hospital and School of Medicine, University College Dublin (UCD)

**Introduction:** Optimal management of in-patients with Ulcerative Colitis (UC) is important, as it is associated with morbidity and



mortality. The national IBD audit in the UK has defined quality standards for the care of acute colitis.

**Aims/Background:** To assess whether our management of patients with acute UC complies with suggested quality standards and identify areas for quality improvement.

**Method:** This was a retrospective review of all patients admitted with a principle discharge diagnosis of UC in a tertiary referral centre between January 2010-November 2011. Patients admitted electively either for endoscopy or UC related surgery were excluded.

**Results:** 91 patients were identified with a principal discharge diagnosis of UC; 39 patients were excluded (elective admission for surgery or endoscopy). 52 patients hospitalised with acute severe colitis were considered eligible for further study. M:F ratio=36:16. Median age was 47.0 (+/- 17.68). Median length of stay was 8 days. 44 patients were admitted medically and 8 were admitted surgically. Stool sample for culture and sensitivity and C Difficile toxin was sent in 40 of 52 cases (76.9%). 40 patients (76.9%) underwent flexible sigmoidoscopy within 4 days of admission. 48 patients (92.3%) received steroids, of whom 72.9% were prescribed bone protection. VTE prophylaxis was prescribed in 46/52 (85.7%). 37/52(53.8%) patients were assessed by a dietician during their admission. Medical teams were more likely to send stool samples (81% vs 50%) and prescribe bone protection for those on steroids (73% vs 38%), whereas rates of VTE prophylaxis prescription were comparable (89% vs 88%) between medical and surgical admissions.

**Conclusion:** This study highlights good practice in the care of patients with acute severe colitis but identifies areas for quality improvement. All patients should have a stool sample sent at admission and should receive VTE prophylaxis. The use of an intergrated care pathway for patients with acute severe colitis may assist in ensuring quality standards are optimized.

#### **ABSTRACT 104 (13B212) POSTER PRESENTATION**

**Title of Paper:** Predictors of colectomy in hospitalised patients with acute severe colitis

**Author(s):** Gibson DJ, Rafter N, Keegan D, Byrne K, Martin S, O'Connell PR, Winter DC, Hyland JM, Mulcahy HE, Cullen G, Doherty GA

**Department(s)/Institution(s):** Centre for Colorectal Disease, St Vincent's Hospital and School of Medicine, University College Dublin (UCD)

**Introduction:** 20-30% of patients with ulcerative colitis (UC) will have a colectomy during their disease course. This percentage increases to 40% in patients admitted with acute colitis.

**Aims/Background:** To assess if clinical or laboratory parameters on admission can identify patients who will require colectomy on that hospital admission.

**Method:** This was a retrospective review of all patients admitted with a principle diagnosis of UC in a tertiary referral centre between January 2010-November 2011. Patients admitted electively either for endoscopy or UC related surgery were excluded.

**Results:** 91 patients were identified with a principal discharge diagnosis of UC; 39 patients were excluded (elective admission for surgery or endoscopy). 52 patients hospitalised with acute severe colitis were considered eligible for further study. The majority were male; M:F ratio=36:16. Median age was 47.

13 of 52 patients required colectomy during that admission(25%). 17 patients had thrombocytosis (platelets>400) on admission. 25 patients were anaemic (males Hb<13, females Hb<11.5) on admission and 22 patients had albumin level <30 on admission. Neither thrombocytosis (p=0.42) nor anaemia (p=0.56) were predictive of need for surgery. However, in patients who were significantly hypoalbuminaemic (albumin <30) on admission, colectomy was more likely (p=0.026), by Fisher's exact test. Mean CRP on admission was statistically higher in those requiring surgery(103.1 vs 46.9 p=0.03). 2/3 patients who had a CRP>50 combined with albumin<30 at admission required colectomy.

**Conclusion:** In our cohort, raised CRP and significant hypoalbuminaemia on admission were associated with need for colectomy on the same hospital admission. These markers help to categorise patients into high risk who warrant early surgical assessment

#### **ABSTRACT 105 (13B213) POSTER PRESENTATION**

**Title of Paper:** Peliosis Hepatis in a Patient with Coeliac Disease and on Oral Contraceptive Pill: A Case Report

**Author(s):** C Kiat(1), YY Hong(1), C Connolly(2), V Byrnes(1)

**Department(s)/Institution(s):** (1)Department of Gastroenterology, University Hospital Galway, (2)Department of Pathology, University Hospital Galway

**Introduction:** Peliosis hepatis (PH) is a rare vascular condition which can be seen in a variety of settings. It is characterized by the presence of cystic blood-filled cavities distributed throughout the liver parenchyma. The epidemiology and pathophysiology of PH is not completely understood since most patients are asymptomatic and remain undiagnosed. It is usually an incidental finding on abdominal imaging or autopsy. No cause was found in 20-50% of cases but PH has been found to be associated with a variety of diseases, such as coeliac disease (CD), malignancy, diabetes mellitus, infection in patients with AIDS and haematologic disorders, and drugs such as oral contraceptives pills (OCP), azathioprine and methotrexate amongst others.

**Method:** We report a patient who was diagnosed with peliosis hepatis whilst on OCP with concurrent new diagnosis of coeliac disease and dermatitis herpatiformis

**Results:** 27-year-old female presented to the medical assessment unit with 5-day history of flu-like illness and worsening pruritic skin rash affecting both ankles. She was previously well with no significant past medical history or family history of note. She has been on OCP regularly for at least one year. She was a non-smoker and consumed alcohol minimally. She also had a travel history to Australia and Southeast Asia two months prior to presentation. She has no other risk factors such as tattoo, piercing or intravenous drug use. Physical examination was non-contributory apart from symmetrical erythematous lesions on both ankles. Routine laboratory investigations revealed mixed-picture liver function test (LFT) derangement with normal full blood count (FBC), urea and electrolyte (U&E), coagulation, and albumin level. She was further investigated with liver autoimmune screen (ANA, AMA, ASMA, anti parietal cell antibodies, anti LKM antibodies) and viral screen (HBsAg, Anti-Hep C, EBV IgM, anti-CMV IgM, HIV) which were negative. She was managed conservatively and referred to gastroenterology outpatient clinic for further review.

Further laboratory investigations revealed elevated anti-tTG



antibodies and P-ANCA were positive but with a low titre. Ultrasound of liver showed dilated hepatic ducts and this prompted further investigation with MRCP which showed widespread minimal variable intrahepatic ducts dilatations. She also had biopsy performed for the skin rash and this confirmed to be dermatitis herpetiformis. The initial impressions were CD and probable primary sclerosing cholangitis. Liver biopsy however showed massive peliosis of the liver parenchyma with marked distention of the hepatic sinusoids. The liver specimen showed no evidence of inflammation, granulomata, fibrosis, cirrhosis or malignancy.

As CD and OCP have been showed on literature review to be associated with PH, she has been advised to stop OCP use and to be strictly compliant with GFD. She is being followed in the gastroenterology outpatient clinic regularly for LFT monitoring.

**Conclusion:** Management of peliosis depends on the cause. When a causative agent is suspected, withdrawal of that agent may result in resolution. If seen in the setting of HIV/AIDS, then treatment with antibiotic may be effective in eradicating *B. henselae*. If focal and haemorrhagic, resection may also be beneficial. In our case, patient is no longer on OCP and is strictly compliant with GFD. Currently, her LFT remains stable and skin rash has improved

## ABSTRACT 106 (13B214) POSTER PRESENTATION

**Title of Paper:** Concurrent Enteropathy-Associated T-cell Lymphoma and Jejunal Adenocarcinoma in Patient with Coeliac Disease: A Case Report

**Author(s):** L Cunningham(1), C Kiat(2), YY Hong(2), C Connolly(3), F Quinn(4), A Hayat(1), V Byrnes(2)

**Department(s)/Institution(s):** (1)Department of Haematology, (2)Department of Gastroenterology, (3)Department of Pathology, University Hospital Galway, (4)Cancer Molecular Diagnostics, St James's Hospital, Dublin

**Introduction:** Although coeliac disease (CD) is classically associated with malabsorption and the attendant complications arising from it, population studies have shown that patients with celiac disease (CD) are at increased risk of malignancy especially lymphoproliferative malignancy and gastrointestinal cancer. This risk is especially higher in patients with refractory celiac disease (RCD) type II, for enteropathy-associated T-cell lymphoma (EATL), and in patients who are not compliant with gluten-free diet (GFD).

**Aims/Background:** There have been a number of case reports of either EATL or small bowel cancer arising in patients with CD. Review of available literature reveals small number of cases in which both EATL and small bowel cancer occur concurrently in CD

**Method:** We report a patient with known celiac disease who was diagnosed post-humously with concurrent enteropathy-associated T-cell lymphoma, jejunal adenocarcinoma and refractory celiac disease (RCD) type II.

**Results:** This is a case of 65-year-old female with osteoporosis who was diagnosed with CD in 2008. She had dietetic input at her regional hospital due to initial difficulties adhering to strict GFD. Two years following her diagnosis, she had a CT-scan of the abdomen to investigate microcytic hypochromic anaemia and this revealed extensive reactive mesenteric lymphadenopathy and minimal circumferential regular wall thickening in the small bowel. She also had a small bowel follow-through and colonoscopy which did not identify any significant lesions. A follow-up CT scan in January 2011 showed resolution of the lymphadenopathy but a mildly thickened

small bowel loop.

She then developed right inguinal mass with CT-scan showing solitary focus of presumed lymph node enlargement in the right thigh. Biopsy of this mass indicated a peripheral T-cell lymphoma (CD30+ ALK negative) diagnosis and she was treated with six cycles of CHOEP chemotherapy regime with end of treatment in April 2012. Follow-up imaging (CT PET) showed reduction in the size of the inguinal nodal mass but there were FDG-avid involvement of the small bowel. She presented acutely in July 2012 with sepsis and CT of the abdomen performed on admission showed small bowel mass in the left flank with mural thickening and multiple faint hypodensities scattered throughout the liver. Whilst being investigated for this mass, during the same inpatient stay, she deteriorated (upper gastrointestinal bleeding, coagulopathy, intra-abdominal haemorrhage) which necessitated urgent laparotomy with resection of the mass. She had a difficult course post-operatively. Decision was made to withdraw escalated care as she remained unwell despite maximum supports. Patient then died.

Histology of the resected jejunal mass was reported post-humously. Sections of the jejunal tumour confirmed moderately differentiated adenocarcinoma. The morphology and immune-profile of the surrounding lymph nodes, including review of the right inguinal mass specimen, were consistent with EATL. Immunohistochemistry performed on non-neoplastic adjacent jejuna mucosa showed expression of CD3 lymphocytes and loss of CD8 lymphocytes consistent with RCD type II.

**Conclusion:** This case is one of the few cases reported in literature of concurrent EATL, in the gastrointestinal tract and peripherally, and adenocarcinoma of the small bowel in patients with CD. It highlights the importance of close follow-up of patients with CD who are still symptomatic despite GFD.

## ABSTRACT 107 (13B215) POSTER PRESENTATION

**Title of Paper:** Guesstimating body mass index (BMI): How good are we, really?

**Author(s):** Oluwadamilola Jagun, Grace Chan, Wan Jean Tee, Zuhair Ahmed, Shane Brady, Zahrah Elsafty, Helen Martin, Maire Buckley, Shahzad Sarwar, Claire Smyth, Richard Farrell.

**Department(s)/Institution(s):** Gastroenterology Department, Connolly Hospital Blanchardstown and RCSI.

**Introduction:** According to the World Health Organisation definition, the body mass index (BMI) is a simple index of weight-for-height that is commonly used to classify overweight and obesity in adults. Although it has its limitations it provides the most useful population-level measure of overweight and obesity as it is the same for both sexes and for all ages of adults. Visual estimation of BMI is routinely used in the clinic setting to direct lifestyle advice. Identifying the correct BMI is particularly important in gastroenterology as we frequently manage patients with malabsorption, chronic inflammatory diseases and liver disease.

**Aims/Background:** To evaluate and compare the positive predictive value (PPV), negative predictive value (NPV) sensitivity and specificity of prediction of overweight/obese in gastroenterology patients among doctors and nurses. Also, to assess for individual bias in the physicians making the judgements based on their own BMI calculations.

**Method:** For the purposes of our study, BMI was defined as <18 = underweight, 18-24.9 = normal, 25- 29.9 = overweight and >30 = obese. All consecutive patients attending the gastroenterology clinic



in the month of December 2012 were recruited prospectively. The patients' BMI were measured using Seca weight and height measuring devices in clinic. BMI estimation sheets were distributed to the four junior doctors and the clinic nurse at each clinic over a one-month period. The estimations between the two groups were blinded as to prevent any bias.

**Results:** In total, 80 patients were recruited of which there were 48(60%) males and 32(40%) female patients, mean age 46.4±14.6 years. The mean weight was 77.3±17.0kg and the mean height was 163.9±9.4cm. The mean BMI was 29.3±4.3kg/m<sup>2</sup> in males and 28.4±6.7kg/m<sup>2</sup> in females, p=0.500. There were 2(2.5%) patients who were underweight, 19(23.8%) who had a normal BMI, 24(30.0%) who were overweight and 35(43.8%) who were obese. The PPV, NPV, sensitivity and specificity for the prediction of overweight/obese patients were 90.0%, 73.7%, 91.5% and 70.0% respectively for nurses compared to 94.0%, 60.0%, 79.7% and 85.7% for doctors. It was also found that if doctors were of a normal BMI, they were less likely to predict the correct patients' BMI compared to those who were overweight, 44.7% vs 100%, p=0.31.

**Conclusion:** Healthcare professionals were poor at predicting patients' BMI in the setting of gastroenterology outpatients. There was a trend, particularly among doctors to underestimate patients' weight. This trend was more common among doctors who were of a normal BMI. Worryingly, approximately three quarter of our patients are overweight or obese, higher than previously reported prevalence by the department of health. To allow for accurate lifestyle and dietary advice, it is important that all patients have their weight and height measured in clinic.

**ABSTRACT 108 (13B216) POSTER PRESENTATION**

**Title of Paper:** Spleen Stiffness Is Lower When Measured In The Right Lateral Position Compared To The Supine Position

**Author(s):** J. L. Chin, G. Chan, J. D. Ryan, P. A. Mc Cormick

**Department(s)/Institution(s):** Liver Unit, St Vincent's University Hospital, Elm Park, Dublin 4

**Introduction:** Spleen stiffness has been shown to correlate with hepatic venous pressure gradient and can predict oesophageal varices. At present, no valid criteria or standardized method for spleen stiffness measurement exist.

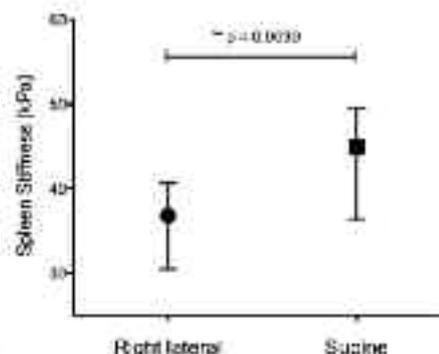
**Aims/Background:** This study investigated the influence of different lying positions on spleen stiffness measurements.

**Method:** Twelve spleen stiffness measurements were performed in 5 patients using Fibroscan® before and after liver transplantation. For spleen stiffness, ultrasonography was first used to confirm splenic position prior to elastography. Spleen stiffness was measured in the right lateral and supine positions. Criteria for valid liver stiffness [ $>10$  successful measurements, interquartile range (IQR) $<30\%$ , success rate  $>60\%$ ] were applied to spleen stiffness.

**Results:** Three spleen stiffness measurements were prior to liver transplantation and nine measurements were done at different time intervals after transplant. Prior to liver transplantation, all spleen stiffness measurements reached the maximum detection limit of the Fibroscan® and were excluded from analysis of different lying positions. Measuring spleen stiffness in the right lateral position yielded significantly lower stiffness compared to measurements in the supine position, with a median difference of 16.7% (IQR 14.6-23.7%) (n=9; p<0.01). When spleen stiffness measured in the right lateral decubitus was compared to the supine position, no significant

differences were observed in IQR/Median [0.08(0-0.19) versus 0.10(0.04-0.19); p=0.76] or success rate (n=12; p=0.59).

Figure 1. Spleen stiffness (kPa) versus the position.



**Conclusion:** Spleen stiffness is lower in the right lateral position compared to the supine position.

**ABSTRACT 109 (13B217) POSTER PRESENTATION**

**Title of Paper:** The Effect of Smoking on Anastomotic Stricture Rates following Oesophagectomy

**Author(s):** Burnside N, Beattie R, Gambardella I, McManus KG

**Department(s)/Institution(s):** Department of Thoracic Surgery, Royal Victoria Hospital, Belfast, Northern Ireland

**Introduction:** Anastomotic stricture following oesophagectomy causes a significant morbidity and often necessitates repeated dilation or even revision surgery. Smoking has been identified as a cause of microvascular disease associated with ischaemia.

**Aims/Background:** Previously identified as an independent cause of anastomotic stricture following colorectal surgery, this study assessed the effects of smoking on stricture rates following all stomach-to-neck type oesophagectomies in oesophageal cancer patients.

**Method:** 66 sequential patients had oesophagectomy for oesophageal cancers by a single surgeon. Multiple cancer types were included in the analysis. All medical records were reviewed and a multivariate analysis was carried out to identify risk factors. Patients were divided into current smokers, smoking within six weeks of the surgery, ex-smokers, those with a significant smoking history, and non-smokers.

**Results:** The rate of anastomotic strictures in current smokers was 52% (11 of 21 patients), in ex-smokers was 9% (4 of 44 patients), and in patients who had never smoked was 0% (0 of 1 patients). The data was analysed and the difference stricture rates in current smokers and ex-smokers was found to be statistically significant (p-value 0.0002).

**Conclusion:** Active smoking within six weeks of surgery is an independent extremely significant risk factor for anastomotic strictures following stomach to neck oesophagectomy.

**ABSTRACT 110 (13B219) POSTER PRESENTATION**



**Title of Paper:** Open Repair of Paraesophageal Hernia – Is there still a role?

**Author(s):** Burnside N, Mhandu P, C d’Silva, McGuigan J, McGonigle N

**Department(s)/Institution(s):** Department of Thoracic Surgery, Royal Victoria Hospital, Belfast, Northern Ireland

**Introduction:** Laparoscopy has become the standard repair in paraesophageal hernias as it is safe, with good symptomatic control. However several reports have demonstrated recurrence rates as high as 42%. This high recurrence rate has led us to question whether this procedure is more advantageous than the tradition open approach particularly in the elderly patient in whom reoperation at a later date may not be an option.

**Aims/Background:** The subgroup of multiple co-morbidity patients, present a specific problem, as many that might tolerate the laparoscopic approach would present significant risk when dealing with symptoms as a result of procedural failure. We questioned whether open gastropexy with or without antireflux procedure might be beneficial in these patients.

**Method:** This study looked at our recent experience with paraesophageal hernia repair using a small upper midline laparotomy. Forty patients, 9 male and 31 female, underwent a reduction of hernia, crural repair, and either anterior gastropexy or antireflux procedure. We elected not to resect the peritoneal hernial sac. All patients were followed up for recurrence of their symptoms and hernia.

**Results:** Mean age of 63 years (27-82 years) 50%. All patients had significant co-morbidity and half of the patients (20/40) had a significantly limited exercise tolerance preoperatively, with one patient critically unwell and ventilated. Two patients developed a recurrence of their hernia (5%), one at day two post operatively and the other seven years post operatively following a road traffic collision. Operative mortality was 5% (2/40), the first patient was ventilator dependent in Intensive Care preoperatively and the procedure was performed to assist with ventilator weaning. The second patient died at home suddenly following discharge, post-mortem was non diagnostic.

**Conclusion:** Symptom control was excellent with only one patient (2.5%) developing recurrence of symptoms post operatively. The higher rate of recurrence demonstrated in laparoscopic surgery is not mirrored in open surgery. We believe these data demonstrate potentially superior results when performing open repair in higher risk patients.

#### **ABSTRACT 111 (13B220) POSTER PRESENTATION**

**Title of Paper:** Influence Of Female Gender In Surgically Treated Oesophageal Cancer: 5-Years Review Of Single Institution Study

**Author(s):** Bassel Al-Alao, Haralabos Parissis, Igor J. Rychlik, Alastair Graham, and Jim McGuigan

**Department(s)/Institution(s):** Department Of Cardiothoracic Surgery - Royal Victoria Hospital - Belfast - United Kingdom

**Introduction:** Oesophageal cancer is more commonly described in male patients, and there are far fewer women affected. Gender differences have not been fully investigated.

**Aims/Background:** This report explores such differences in clinico-pathologic features, long-term outcome and disease recurrence in women in comparison to those in men.

**Method:** A total of 169 patients with oesophageal cancer were surgically treated between 2005 and 2010 (43 [25.4%] females and 126 males). Gender differences in these patients were retrospectively investigated.

**Results:** Ninety-six patients (57%) survived at end of follow up. Median survival rate was 52 months and a 5-years survival rate was 50%. Median follow up for the whole cohort was 25 months (0 – 79). Fifty patients (30%) developed recurrence at end of follow up. Median disease free progression (DFP) rate was 33 months and 5-years DFP rate was 20%.

Data on co-morbidities were only available in 120 patients. Females were more likely to be non smokers (58% vs. 27%;  $p < 0.007$ ) and non drinkers (55% vs. 36%;  $p < 0.05$ ).

Recurrence was less likely in women (19% vs. 35%;  $p < 0.03$ ), and Clinico-pathologic features significantly associated with female gender were: squamous cell type (42% vs. 17%;  $p < 0.001$ ), complete resection (82% vs. 62%;  $p < 0.01$ ), clear circumferential margins (80% vs. 62%;  $p < 0.02$ ), smaller tumor size (32 vs. 39 mm,  $p < 0.02$ ) and higher FDG uptake of tumor on pre-operative PET scan (SUVmax 14.4 vs. 10.5;  $p < 0.02$ ).

Female gender did not seem to influence overall outcome or disease recurrence and did not independently predict survival or disease recurrence.

**Conclusion:** Our data support the fact that common known risk factors for oesophageal cancers are less encountered in females, however certain tumour characteristics were significantly associated with female gender. Esophageal cancer causes the same symptoms and progresses in the same way in both men and women.

#### **ABSTRACT 112 (13B222) POSTER PRESENTATION**

**Title of Paper:** Bowel Cancer Screening – Are The Patients Truly Asymptomatic?

**Author(s):** J.Somerville, P.Lynch, C.Rodgers, G.Jacob, D.McCrory

**Department(s)/Institution(s):** Northern Health and Social Care Trust

**Introduction:** Bowel Cancer Screening (BCS) was launched in 2010 in Northern Ireland, with screening colonoscopy lists starting in the Northern Trust in May 2010. Screening is offered every two years to all men and women aged 60 to 71.

**Aims/Background:** To determine the number of colorectal cancers diagnosed within the BCS programme in the Northern Trust, and of these, to identify any who were symptomatic at the time of entry to the screening programme.

**Method:** Patients diagnosed with colorectal cancer within the BCS programme in the Northern Trust up to the end of January 2013 were identified from records kept by the Specialist Screening Practitioners. Data from endoscopy, radiology, pathology and MDM reports were then gathered for analysis, and symptomatology identified from the patient history in the pre-assessment documentation.

**Results:** 68 patients (20 female, 48 male) have been diagnosed with colorectal cancer within the Northern Trust BCS programme. 62



of these tumours were diagnosed by colonoscopy and 6 by CT colography. Only 3 patients had evidence of distant metastases on completion of staging investigations.

For 21 patients, the pre-assessment documented the recent onset of alarm symptoms – 1 iron deficiency anaemia, 4 PR bleeding, 15 changes in bowel habit and 1 faecal leakage. Only one had previously sought medical advice for these symptoms.

**Conclusion:** The BCS programme is effective in the early detection of colorectal carcinoma. Although designed for screening asymptomatic patients, nearly a third of patients diagnosed with colorectal cancer within the programme complained of pre-existing alarm symptoms.

**ABSTRACT 113 (13B223) POSTER PRESENTATION**

**Title of Paper:** A Review of Gastric Ulcer Follow-up Practices in a Tertiary Care Gastroenterology Service

**Author(s):** S. McGlacken-Byrne, C. Lahiff, P. MacMathuna and J. Leyden

**Department(s)/Institution(s):** Gastrointestinal Unit, Mater Misericordiae University Hospital, Dublin 7

**Introduction:** The Joint Advisory Group (JAG) guidelines<sup>1</sup> recommend follow-up gastroscopy within 12 weeks for patients with gastric ulcers at index gastroscopy.

**Aims/Background:** This study reviews current practice in relation to gastric ulcer follow-up at a tertiary care university hospital.

**Method:** We conducted a retrospective review of over 700 gastroscopies performed in a four month period from June to September 2012. Patients with newly diagnosed ulcers (n=29) were included in our primary analysis. Those undergoing follow-up endoscopy for previously identified gastric ulcers (n=8) were also included.

**Results:** Gastric ulcers were found in 29 patients during the study period. Twenty three (79%) patients had biopsies taken. A plan for follow up gastroscopy was stated in 14 (48%) reports. Of these, 12 patients (86%) had follow up procedures booked and 9 (64%) attended for repeat gastroscopies. Median time to follow-up in this group was 61 days (range 3-194) and all patients had either healed (n=3) or healing (n=6) ulcers at follow up. Of patients undergoing gastroscopy for ulcers diagnosed prior to the study period (n=8), persistent mucosal abnormalities were noted in 7 (88%) of patients. Of these, 4 patients (50%) had biopsies taken. Two of these patients (25%) had a third gastroscopy booked for follow-up.

**Conclusion:** The data suggests that follow-up practices for gastric ulcers are not currently meeting standards set out by JAG guidelines. The performance of follow-up gastroscopy earlier than the recommended interval may result in higher prevalence of persistent mucosal abnormalities, with increased resource use accruing in terms of biopsies taken and further endoscopy.

**References:**

1. Valori, BSG Quality and Safety Indicators for Endoscopy, March 2007

**ABSTRACT 114 (13B224) POSTER PRESENTATION**

**Title of Paper:** Should a Visit to the Radiology Department be the First Step in the Diagnosis of Active Inflammatory Bowel Disease?

**Author(s):** M. Cotter, B. Christopher, S. Jadhav, S. Sengupta, J. Keohane

**Department(s)/Institution(s):** Department of Gastroenterology, Our Lady of Lourdes Hospital, Drogheda, Co Louth, Ireland

**Introduction:** CT is the most commonly used method of imaging in the diagnosis and management of Inflammatory Bowel Disease. However, for those patients admitted with typical symptoms, does imaging accurately identify Crohn's Disease (CD) and Ulcerative Colitis (UC) prior to direct visualisation and histological diagnosis at endoscopy?

**Aims/Background:** To assess the correlation between the findings of contrast CT (abdomen or enteroclysis) and colonoscopy results in patients with a suspected diagnosis of IBD.

**Method:** A retrospective study was performed on 27 patients between September 2009 and January 2013, the majority of whom had been referred for endoscopy to confirm the results of their initial CT. Histopathological results and macroscopic findings at colonoscopy were compared to features of active inflammation as noted on contrast CT.

**Results:** There were 19 female and 8 male subjects. The average age at time of CT was 51 (female) and 32 (male) with a range of 19 to 86 years. The most common clinical indication for performing CT was abdominal pain (74%). Of note, 21 patients had a plain film of abdomen prior to CT, 19 of which were reported normal. Ct enteroclysis was performed on 4 patients. 27 patients had CT findings suggestive of IBD on CT whereas only 17 (63%) had confirmed CD or UC at endoscopy.

**Conclusion:** This study suggests that in a cohort of patients likely to be exposed to high doses of radiation, such as those with IBD, a visit to the endoscopy room could be more worthwhile in their initial diagnosis.

**ABSTRACT 115 (13B225) POSTER PRESENTATION**

**Title of Paper:** Streamlining Inpatient Colonoscopy in a Tertiary Care GI Service

**Author(s):** K. Murphy, C. Lahiff, P. MacMathuna and J. Leyden

**Department(s)/Institution(s):** Gastrointestinal Unit, Mater Misericordiae University Hospital, Dublin 7

**Introduction:** Greater than 20% of all colonoscopies are associated with suboptimal bowel preparation<sup>1</sup>, resulting in lower caecal intubation rates, longer procedure times, decreased adenoma detection rates and higher costs<sup>2</sup>. Inadequate bowel cleansing is more common in hospitalized patients<sup>3</sup>.

**Aims/Background:** To critically analyse the utilisation of inpatient colonoscopy in a tertiary care university hospital.

**Method:** We performed a retrospective review of our electronic database for inpatient colonoscopies over a two month period from September to October 2012. Patient demographics, clinical details and key performance indicators were reviewed. Univariate and bivariate statistical analyses were performed using Mann Whitney and Fisher's exact tests, where appropriate.

**Results:** Fifty six inpatient colonoscopies were performed during the study period. Twenty colonoscopies (36%) were normal and polyps were found in 15 (27%). There were 2 cancers (4%) and one



high grade adenoma (2%). Fourteen (25%) colonoscopies were incomplete. Bowel preparation was suboptimal in 31 (56%) of cases. The reason for admission to hospital related primarily to a GI complaint in 23 (41%) of cases. These patients had significantly shorter median overall lengths of stay (10 versus 18 days,  $p=0.007$ ) and time to colonoscopy (4 versus 10 days,  $p<0.0001$ ) when compared with patients admitted for non-GI reasons. No difference was seen in rates of pathology encountered in these patients but there was a trend towards better cancer detection rates (3/23, 13% versus 0/33, 0%;  $p=0.06$ ).

**Conclusion:** We observed very high rates of inadequate bowel preparation and relatively low caecal intubation rates for inpatient colonoscopy. Cancer detection rates may be higher in patients admitted with GI complaints, although this needs to be confirmed by expansion of the cohort. The data suggest inpatient colonoscopy should be used sparingly and perhaps reserved for patients with primary GI complaints.

**References:**

1. Harewood, Gastrointest Endosc 2003
2. Ness, Am J Gastroenterol 2001
3. Reilly, Gastroenterol Nursing 2004

**ABSTRACT 116 (13B226) POSTER PRESENTATION**

**Title of Paper:** Optimising screening for opportunistic infection prior to anti-TNF therapy

**Author(s):** C Judge, C DeGascun, D Keegan, K Byrne, HE Mulcahy, G Cullen, GA Doherty

**Department(s)/Institution(s):** Centre for Colorectal Disease, St Vincent's University Hospital and National Virus reference Laboratory/School of Medicine and Medical Science, University College Dublin

**Introduction:** Anti-TNF agents are highly effective for treatment of IBD but are associated with an increased risk of infection. ECCO consensus guidelines have defined screening measured which should be undertaken prior to commencing anti-TNF therapy.

**Aims/Background:** We evaluated how screening practices have changed in recent years, what gaps exist in our approach to screening and how frequently infection risks are identified.

**Method:** A retrospective study of patients who commenced biologic therapy identified from a prospectively maintained database of >3,000 patients with IBD attending a single centre over a 3 year period.

**Results:** n=225 patients were identified who commenced treatment with either infliximab (IFX, n=144) or adalimumab (ADA, n=81) for treatment of inflammatory bowel disease in a 3 years period from 2010 to 2012. 65% of patients had Crohn's disease, 30% had ulcerative colitis and 5% had IBD-U, undetermined. The proportion of patient who had evidence of screening for Hepatitis B using surface antigen testing (HBsAg) increased significantly from 23% in 2010 to 82% in 2012. However, even in 2012, only 12.5% had antibodies to Hepatitis B core antigen (HBcAb) measured. No patient had a positive HBsAg but 1/13 patients tested had a positive HBcAb. The frequency of screening for latent TB using the quantiferon release assay (QFT) increased from 5% in 2010 to 74% in 2012. 1/64 (1.6%) of the QFT tests was positive resulting treatment for latent TB. One patient who had not undergone QFT testing developed active TB on IFX treatment.

**Conclusion:** This study highlights significant improvements in screening for Hepatitis B and latent TB in patients commencing anti-TNF therapy. Screening for Hepatitis B should incorporate measurement of both HBsAg and HBcAb. Use of a customised request form for screening requests might be valuable in ensuring both assays are performed. The findings also highlights the utility of QFT as a screening test for latent TB.

**ABSTRACT 117 (13B227) POSTER PRESENTATION**

**Title of Paper:** Magnetic Resonance Cholangiography – An Overused Investigation In Patients With Symptomatic Gallstones?

**Author(s):** Mullan MJ(1), Connolly M(1), Thompson R(1), Kennedy R(1), Gillespie S(2), Kennedy JA(1)

**Department(s)/Institution(s):** (1)Department of Upper GI Surgery, Royal Victoria Hospital, Belfast. (2)Department of Radiology, Royal Victoria Hospital, Belfast.

**Introduction:** The incidence of choledocholithiasis with symptomatic gallstones has been estimated to be 10-15%. Pre-magnetic resonance cholangiography (MRC), the common bile duct (CBD) was selectively imaged with intra-operative cholangiogram in patients with – (i) deranged liver function (II) a history of jaundice or acute pancreatitis (iii) a dilated CBD.

**Aims/Background:** The aim of this study was to assess the appropriateness of MRC in patients being assessed for choledocholithiasis.

**Method:** The medical records of all patients undergoing pre-operative MRC for a 12 month period (Jan2011–Dec2011) were identified. Data analysis included: indication for imaging, age, gender, WBC, CRP and liver function tests.

**Results:** One hundred and twelve (112) MRC investigations relevant to the study were performed, 35 had positive findings (31%).

Diagnosis	No. Scans	+
Choledocholithiasis		
Gallstone pancreatitis	23	4 (17%)
Biliary colic	29	8 (28%)
Acute Cholecystitis	60	23 (38%)

Regarding patients with choledocholithiasis: Sixteen of 35 had a Bilirubin >30 $\mu$ mol/L. Those with pancreatitis were all >55 years and 3 had severe pancreatitis. Patients with biliary colic all had liver transaminases >twice the upper limit of normal. Analysis of patients with acute cholecystitis found 70%(n=16) were >55 years and 14 had a bilirubin >30 $\mu$ mol/L.

**Conclusion:** A selective policy towards imaging the CBD yielded choledocholithiasis in 31% of cases. Pre-operative imaging allows both efficient scheduling of operating lists and ensures a surgeon with the necessary skills to perform laparoscopic bile duct exploration is available in theatre. This is significant as surgical units move toward immediate cholecystectomy for symptomatic gallstones.

**ABSTRACT 118 (13B228) POSTER PRESENTATION**

**Title of Paper:** Is CT Of Abdomen A Reliable Indicator For Significant Colonic Pathology?



**Author(s):** P Maheshwari , U Jilani ,C Goulding

**Department(s)/Institution(s):** Department of Gastroenterology  
Midwest Regional Hoospital Limerick

**Introduction:** We have noticed in our endoscopy unit that abnormality on abdominal CT is becoming a frequent indication for colonoscopy

**Aims/Background:** The primary aim of this retrospective study was to compare the gold standard of colonoscopy with CT findings

**Method:** Using the Unisoft database of our endoscopy unit we retrospectively reviewed all colonoscopies done over a consecutive 6 months period from July to December. We analysed this data looking at colonoscopy results of those whose indication was abnormal CT scan and the CT scan results of those patients with abnormal colonoscopy. Statistical analysis was performed using Chi square and Fishers exact test on SPSS. A P- value of 0.05 was taken as significant.

**Results:** 856 colonoscopies were performed within the study time period, of these 88(9.62%) also had CT scans performed within the same month. 46 (52%) CT scans were performed before the colonoscopy. 33 CTs had been reported as showing colitis and 46 as showing tumour. Of 33 with colitis on CT scan only 16 (57%) had colitis confirmed on colonoscopy and 14(48%) were normal (P=0.0003 Chi square, P=0.0005 Fishers exact test) . Of 46 patients with colonic tumour reported on CT scan, 32(70%) had tumour confirmed on colonoscopy, 12(26%) were normal (P=0.0034 on chi square, P=0.0053 Fishers exact test).While 9 CT scans were reported as normal , on colonoscopy, 6 of these had large colonic tumour and 3 had colitis.

**Conclusion:** This study suggest that CT scan over diagnose colitis but more importantly may under diagnose colonic tumours.

#### **ABSTRACT 119 (13B229) POSTER PRESENTATION**

**Title of Paper:** Outcomes of dose escalation with adalimumab (ADA) in inflammatory bowel disease

**Author(s):** Audrey Dillon, Cathy Rowan, David Gibson, Denise Keegan, Kathryn Byrne, Hugh Mulcahy, Garret Cullen, Glen Doherty

**Department(s)/Institution(s):** Centre for Colorectal Disease, St Vincent's University Hospital and School of Medicine and Medical Science, University College Dublin

**Introduction:** Anti-TNF therapy is highly effective for induction and maintenance of remission in IBD. Subcutaneous agents such as adalimumab are licensed with a fixed dosing schedule irrespective of body weight.

**Aims/Background:** We aimed to study the frequency and outcomes of dose escalation with adalimumab and evaluate any relationship to patient body weight.

**Method:** A retrospective study of patients who commenced ADA therapy identified from a prospectively maintain database of >3,000 patients with IBD attending a single centre

**Results:** n=143 patients were identified who received adalimumab (ADA) for treatment of inflammatory bowel disease. 25 patients were excluded from the final analysis due to insufficient data. Data on n=118 patients were analysed (99 patients with Crohn's Disease,

18 patients with UC, one patient with IBD-U). 62/118 (53%) were male.

43/118 (36%) required dose escalation of ADA from every other week to weekly therapy. The median interval from initiation to dose escalation was 366 days (IQR 153 to 731). The mean body weight at initiation of therapy was similar between both groups (69.5 versus 69.9kgs, p=ns). The time to dose escalation was not significantly associated with the use of concomitant immunomodulator therapy or with smoking history (current versus ex/never). 28/43 (65%) of patients who received dose escalation responded and 90% remain well on therapy with a median follow up of 1430 days (3.9 years). 15/43(35%) failed to respond to dose escalation of whom 9 patients underwent surgery and 3 switched to another anti-TNF agent. The mean CRP at dose escalation was higher in the non-responders to to dose escalation than in the responder group (mean CRP 25.2 versus 9.1mg/dL, p=0.05).

**Conclusion:** Dose escalation with ADA is required in over a third of IBD patients but results in a sustained clinical response in the majority of cases. The study results suggests that an ADA dosing strategy based on measurement of ADA levels or inflammatory biomarkers rather than a weight based dosing strategy might help optimise results of therapy.

#### **ABSTRACT 120 (13B230) POSTER PRESENTATION**

**Title of Paper:** An Audit Of The Last 500 Bowel Cancer Screening Procedures Within The Northern Trust

**Author(s):** J.Somerville, P.Lynch, C.Rodgers, G.Jacob, D.McCrory

**Department(s)/Institution(s):** Northern Health and Social Care Trust

**Introduction:** The Bowel Cancer Screening Programme (BCS) in Northern Ireland offers screening every two years to all men and women aged 60 to 71. An FOB (faecal occult blood) kit is sent to the patient's home, with FIT (faecal immunochemical testing) testing if inconclusive or unsuitable test. All patients with positive tests are then offered screening with CT colography or colonoscopy.

**Aims/Background:** To assess the detection rate of pathology during the last 500 procedures performed on patients entering the Northern Trust BCS programme and the percentage requiring follow-up procedures or surveillance.

**Method:** Data was collected and analysed from patient records kept by the BCS Special Screening Practitioners in Whiteabbey Hospital.

**Results:** Data was collected from the 11th January 2012 to 20th February 2013 inclusive. Of the last 500 screening procedures, 396 were colonoscopies (caecal intubation rate 93.4%), 68 CT colographies and 36 flexible sigmoidoscopies.

8% (40 patients) had a cancer detected and 48.6% (243 patients) had polyps excised.

Bleeding was recorded as a complication following polypectomy in 2% (10 patients). Poor preparation complicated 5.8% (29 procedures). 22 procedures were abandoned – 19 a decision by the colonoscopist, 3 at patient request.

91 (18.2%) patients required further investigation for screening completion - 41 required colonoscopy, 31 flexible sigmoidoscopy, 17 CT colography and 2 patients surgery for complex polyps. 131 will require a follow-up surveillance colonoscopy – 38 at 1 year and 93 at 3 years.



**Conclusion:** The BCS programme has a high pathology detection rate and many patients require further procedures to complete screening and follow-up procedures for surveillance.

## ABSTRACT 121 (13B231) POSTER PRESENTATION

**Title of Paper:** Radiologic Pattern Of Pulmonary Embolism In Patients With Cirrhosis

**Author(s):** A. Abu Shanab, N. Starr, Z. Hutchinson, J. Hegarty, A. Mc Cormick, R. Merriman

**Department(s)/Institution(s):** Liver Unit, St.Vincent's University Hospital, Dublin

**Introduction:** The liver plays the key role in haemostasis both primary and secondary. Pulmonary embolism (PE) has been observed in patients with cirrhosis despite associated coagulopathy. The radiologic pattern and risk factors of PE in patients with cirrhosis are poorly characterised.

**Aims/Background:** To study the radiologic pattern and possible risk factors of PE in cirrhotic patients.

**Method:** Retrospective cohort data of patients with PE and cirrhosis in a single center from was collected from our HIPE (Hospital Inpatient Enquiry) department between 2002-2012. Patients with active malignancy, recent (within 90 days) fracture or surgery or pregnancy were excluded. Clinical variables included severity of cirrhosis, symptoms of PE and laboratory tests and radiologic patterns were studied.

**Results:** Ten cirrhotic patients, M:F 1:1 with average age 59 years old, had PE during this period. Dyspnea was the predominant symptom in 90% of patients while chest pain or haemoptysis was present in only 20% and 10% respectively. The average platelet count and INR was 126 and 1.4 respectively. Sixty per cent had bilateral radiologic findings, 30% had PE in the right side while only 10% had left sided PE. Lower lobes emboli were significantly more common than upper lobe PEs ( $p=0.03$ ). Pleural effusion was present on the ipsilateral side of PE in 60% while the rest did not have pleural effusion.

**Conclusion:** PE tends to occur bilaterally and mainly in lower lobes, particularly the right if unilateral. The presence of a measurable coagulopathy in a cirrhotic patient does not absolutely protect against PE.

## ABSTRACT 122 (13B232) POSTER PRESENTATION

**Title of Paper:** The effects of endoscopic severity and biologic treatment on levels of depression and disability amongst IBD patients: a case control study

**Author(s):** Mohman Khan, Padraic Calpin, Orlaith Kelly, Jenny Moloney, Edel McDermott, Hugh Mulcahy, Abdur aftab, Garry Courtney

**Department(s)/Institution(s):** (1) Gastroenterology, St Luke's Hospital Kilkenny (2) Gastroenterology, St Vincent's University Hospital, Dublin 4

**Introduction:** As with other chronic diseases, patients with IBD are also at risk for depression, anxiety, low self-esteem and social isolation. The physical symptoms in gastrointestinal disease,

including diarrhoea, bleeding per rectum and faecal incontinence are much less socially acceptable than other chronic diseases. Together with the potential for surgery, including stoma formation, this results in a high risk for altered body image and psychosocial distress unique to IBD.

**Aims/Background:** In this study we aimed to compare the effects of disease activity on body image and quality of life in these patients and also to assess whether biological treatment offers superior clinical and psychological outcomes or reduction in disability

**Method:** Patients taking biologics attending St. Luke's IBD service were asked to complete a questionnaire including the Body Image States Scale (BISS), the Stunkard Figure Rating Scales (FRS), the Hospital Anxiety and Depression scale (HADS), the Beck Depression Inventory (BDI), the SF 36 Health Survey, the IBDQ and the sexual satisfaction survey. Clinical markers of disease severity were also examined including recent endoscopic findings, Mayo score and CRP. These were then age and sex matched with IBD patients not taking biologics. Results were statistically analysed  $p$  values  $< 0.05$  were deemed significant

**Results:** 64 IBD patients were included in this study. 32 patients were taking biologics at time of study (60% M) Median age was 41; IQR (31-54). 55% had UC, 33% had Crohn's, 13% had indeterminate colitis. These were age, sex and disease matched with 32 respondents not taking biologics. Mayo scores, Hb and CRP were not significantly different between groups. Endoscopic severity was increased in the biologic group though not significantly. There was no significant difference in Beck Depression Inventory scores between treatment groups, however those on biologic treatment who were in remission reported significantly lower disability using the Disability Index (Peyronie et al, 2012) compared to their peers in remission not on biologics ( $p < 0.05$ ). Endoscopic severity was found to be independently associated with higher Beck depression Inventory scores ( $p < 0.01$ )

**Conclusion:** Depression is common in IBD. Clinical and mucosal remission may not only lead to reduced inflammation but also to reduced levels of depression. Treatment with biologics appears to be associated with lower levels of disability in patients with similar pre-treatment clinical severity scores.

## ABSTRACT 123 (13B233) POSTER PRESENTATION

**Title of Paper:** A Perioperative and Pathological Comparison of the Impact of Interval to Surgery Following Chemoradiation for Rectal Cancer

**Author(s):** K McElvanna, AJ Cole\*, R Spence, RJ Moorehead, R Gilliland, K McCallion, I McAllister, WJ Campbell

**Department(s)/Institution(s):** Department of Colorectal Surgery, Ulster Hospital Dundonald, Belfast, \*Department of Clinical Oncology, Northern Ireland Cancer Centre, Belfast

**Introduction:** The optimal interval between completion of neoadjuvant chemoradiation (NCRT) and resection for rectal carcinoma is unknown.

**Aims/Background:** This retrospective study investigated the impact of interval to surgery on perioperative and pathological outcomes following NCRT for rectal cancer.

**Method:** Patients with rectal carcinoma who underwent NCRT followed by rectal resection (September 2008 – January 2013) were identified and divided into 2 groups according to their NCRT-surgery



interval: Group A < 9 weeks (n=36), Group B > 9 weeks (n=44). Twelve complete clinical responders who were managed non-operatively were excluded. Demographic, perioperative morbidity, mortality, pathological and survival data were reviewed.

**Results:** Eighty patients (42 male, median age 64.5 years) were included. Overall median interval to surgery was 9.4 weeks (range 5.3 -23.6 weeks). Group A median interval was 7.1 weeks, Group B 12.6 weeks. Length of surgery, perioperative complication and mortality rates were not influenced by interval length. Median length of stay was increased with longer interval (A: 8 days v B: 10 days, p= 0.039). The overall complete pathological response rate was 18.8% (A: 27.8% v B: 11.4%). 2-year survival rates were similar (A: 83.3% v B: 89.9%) after a median overall follow-up of 35 months.

**Conclusion:** A longer interval to surgery may be associated with an increased length of stay and in this cohort did not appear to confer a surgical or pathological benefit. A lower complete pathological response rate after a longer interval may be influenced by the selective non-operative management of complete clinical responders to NCRT.

#### **ABSTRACT 125 (13B234) POSTER PRESENTATION**

**Title of Paper:** Endoscopic Transanal Vacuum-assisted Closure of Low Pelvic Cavities Following Anastomotic and Stump Leakage

**Author(s):** G Martel, K McElvanna, K McCallion, I McAllister

**Department(s)/Institution(s):** Department of Colorectal Surgery, Ulster Hospital Dundonald, Belfast

**Introduction:** Endoscopic transanal vacuum-assisted closure is a minimally invasive method used in the treatment of low pelvic anastomotic leaks and symptomatic cavities.

**Aims/Background:** We report our experience with this technique using Endo-Sponge therapy in a series of 10 patients.

**Method:** All patients treated with Endo-Sponge therapy between November 2008 and January 2013 in our hospital were identified. Data collected retrospectively from clinical and endoscopic notes included indication, duration of therapy, number of sponge changes, complications and outcome.

**Results:** Ten patients (8 male, median age 59 years) underwent Endo-Sponge therapy. Seven were treated for anastomotic leaks following low anterior resection. Two patients had symptomatic low pelvic cavities following ileal pouch excision and 1 was treated for a pelvic cavity following a perforated low Hartmann's stump. Seven patients were treated within 17 days (0-17 days) of diagnosis of pelvic sepsis. The remaining 3 patients were treated for chronic low pelvic cavities at intervals ranging from 5 months following index surgery. Median duration of treatment was 28.5 days (8-40 days) with a median number of sponge changes of 7 (2-11 changes). One patient developed a transient inflammatory response and pneumoperitoneum which settled with antibiotic therapy but there were no other complications. All patients had clinical resolution of pelvic sepsis and four patients had definitive cavity closure.

**Conclusion:** Endoscopic transanal vacuum-assisted closure is an effective low-risk method of controlling pelvic sepsis following anastomotic leak and can be used in the management of symptomatic cavities following pouch excision and low rectal stump leakage.

#### **ABSTRACT 125 (13B235) POSTER PRESENTATION**

**Title of Paper:** Infrastructure for the medical care of patients with IBD in the Republic of Ireland; preliminary results of a national electronic survey

**Author(s):** Anthony O'Connor, Barry Egan, Mary Forry, John Keohane, Lucina Jackson, Larry Egan, Glen Doherty

**Department(s)/Institution(s):** Steering Group, Irish Society of Gastroenterology IBD Quality Initiative

**Introduction:** The UK National IBD Audit (now in its fourth cycle) has focused attention on quality of care for IBD patients and has lead to the generation of agreed national standards of care in the UK.

**Aims/Background:** This project was performed to gather baseline information on the infrastructure for care of patients with IBD in Ireland using elements adapted from the UK National IBD Audit.

**Method:** An invitation to participate in an electronic survey was distributed by post and e-mail to Consultant Gastroenterologists and ISG members in the Republic of Ireland. The survey was conducted by an independent market research organization.

**Results:** n=13 responses were received; 4 responses from HSE hospitals, 4 responses from public voluntary hospitals, 5 responses from private centres. Only 4/13 (31%) of centres have an identified ward for the care of hospitalised patients with IBD. In 7/13 cases, the ratio of beds to lavatories for in-patients exceeds 3 (maximum 7 beds). All respondents rated the role of the IBD nurse as important or very important in the care of IBD patients. 11/13 reported somewhat or very limited access to magnetic resonance enterography (MRE) for small bowel imaging; 5/13 respondents reported out-patient waiting times exceeding 12 weeks for MRE. Most centres highlighted a lack of IBD nurses, IBD specialists and waiting times for diagnostic tests as important current barriers to optimal care for IBD patients.

**Conclusion:** Preliminary results of the first national survey of the infrastructure for care of IBD patients have highlighted important areas for improvement. The ratio of beds to lavatories on in-patient wards recommended by the UK National IBD standards is exceeded in most centres. There is poor access to MRE in many sites, leading to avoidable exposure to ionising radiation. The survey emphasises the importance of the IBD nurse specialist in patient care. The findings identify priority areas for improving the quality of care for IBD patients in the Republic of Ireland

#### **ABSTRACT 126 (13B236) POSTER PRESENTATION**

**Title of Paper:** Audit on factors that predict bone disease in patients with chronic liver disease

**Author(s):** Arjun Sugumaran, Mohamed Eisa, Sandra Walsh, Thiriloganathan Mathialahan

**Department(s)/Institution(s):** Wrexham Maelor hospital

**Introduction:** Osteodystrophy is a recognized complication with



cirrhosis. Female sex, cholestasis, low BMI are proven to increase risk of bone disease in cirrhotics. British Society of Gastroenterology (BSG) released guidelines on management of osteoporosis in cirrhotics in 2002.

**Aims/Background:** Our aim is to audit our current practice of diagnosis and management of osteoporosis in liver patients and to identify other associated risk factors.

**Method:** Retrospective audit was done on 73 cirrhotic patients enrolled in the Hepatocellular Carcinoma (HCC) surveillance programme in our hospital. Our practice was compared with British Society of Gastroenterology (BSG) recommendations<sup>2</sup>. Data on demographics, etiology of cirrhosis, alcohol or steroid intake, post menopausal state, presence of varices, investigations for osteoporosis done and treatment given were collected and analyzed.

**Results:** Only 34 patients had DEXA scan performed at any point, with average duration between cirrhosis diagnosis and first scan being 2.41 years. 14 had osteoporosis (T score < -2.5) at hip or lumbar spine and 11 were osteopenic (T of -1.5 to -2.5), showing a prevalence of bone disease at 73.5%. On analysis, except for female sex, no other variable increased risk of bone disease. Few patients were tested for Vitamin D (6.8%) or hormonal studies (8.1%) but 78% had thyroid tests and 100% had bone profile. Treatment for osteoporosis was given, as recommended in all subjects; however 2-yearly follow up scans happened only in 19.2%. Though 6/11 patients had varices, association was not statistically significant by Pearson chi-square test (p value of 0.058). Similarly, longer duration of cirrhosis did not increase risk as analyzed by t-test.

**Conclusion:** Our audit showed high prevalence of bone disease (osteoporosis and osteopenia) in chronic liver disease patients, however there is bias as DEXA scans were requested only in symptomatic patients. There was poor compliance with BSG guideline especially with surveillance intervals. Female sex increases risk but the association of bone disease with duration of cirrhosis and presence of varices are not statistically significant.

**ABSTRACT 127 (13B237) POSTER PRESENTATION**

**Title of Paper:** Musculoskeletal symptoms amongst endoscopists

**Author(s):** Stella Burska, Barbara Ryan

**Department(s)/Institution(s):** Department of Gastroenterology, Adelaide and Meath Hospital incorporating The National Children's Hospital, Tallaght

**Introduction:** Gastroenterologists may be at risk of overuse / repetitive strain type injuries. The number, complexity and duration of endoscopic procedures, in addition to the career duration are possible contributing factors. Anecdotally and in limited literature, endoscopists report a variety of musculoskeletal problems. Much attention has been paid to the safety of patients during endoscopic procedures, but the safety of the physician is often forgotten.

**Aims/Background:** Firstly to establish the frequency and character of musculoskeletal symptoms in endoscopists and to compare to those in physicians in non-interventional specialties. Secondly to investigate possible contributing factors to these symptoms in endoscopists.

**Method:** Online questionnaires were created which contained 13 simple questions about speciality, age, number, duration and

complexity of procedures performed, handedness and other physical activities. Questionnaires were distributed and collected on ISGE meeting and also accessible via the BSG website.

**Results:** 86 responses have been collected to date. Most of them experienced back (43%), neck (36%) or shoulder pain (35%). Physicians perceived that table height and monitor positions were contributors. Musculoskeletal problems were surprisingly not more common in older doctors, who have been scoping for longer. The results from non-interventional specialties are currently awaited and will be available for comparison in the coming weeks.

**Conclusion:** Musculoskeletal symptoms are relatively common amongst endoscopists, and surprisingly were not more common in older, longer practising endoscopists. Our results will be compared to age matched groups of doctors involved in non-interventional specialties to try to assess the impact of endoscopy on health. Further exploration of endoscopy workstation and tool design changes may be of benefit to the longterm health of endoscopists.

**ABSTRACT 128 (13B239) POSTER PRESENTATION**

**Title of Paper:** How Gender And Age Affect Tolerance Of Colonoscopy

**Author(s):** W. Lai, M. Fung, J. Vatish, R. Pullan, M. Feeney

**Department(s)/Institution(s):** Torbay Endoscopy Unit, Torbay Hospital, Torquay, UK

**Introduction:** The aim of a colonoscopist is to perform the procedure safely within a reasonable time limit, and minimise any discomfort/pain caused to their patients. It is therefore useful to recognise factors that can influence patients' tolerance of colonoscopy as part of pre-procedure planning.

**Aims/Background:** We collected data from a local endoscopy unit to evaluate the effect of gender and age on patients' experience of the procedure.

**Method:** 354 patients who had bowel cancer screening colonoscopy (and found to have polyps) between January 2010 and December 2011 were identified from the BCSP database (Oracle BI Interactive Dashboards). Endoscopy reports were drawn from Scorpio@ reporting system, with the patients' comfort level recorded using the Modified Gloucester Discomfort Score (Fig.1).

**Results:** Male patients had a lower mean comfort score (i.e. better tolerated) than female patients (-0.5, 95% CI -0.47, -0.53) (Fig.2). This is consistent with the lower mean fentanyl requirement in men compare to women (-6mcg+/-0.1072). The comfort score also showed a positive correlation when plotted against age, length of procedure and fentanyl requirement (Fig 3&4)

Fig 1

**Comfort Level (Modified Gloucester Discomfort Score)**

- 0 Not specified/entered (legacy record)
- 1 None - resting comfortable throughout
- 2 One or two episodes of mild discomfort, well tolerated
- 3 More than two episodes of discomfort, adequately tolerated
- 4 Significant discomfort, experienced several times during procedure
- 5 Exterme discomfort frequently during procedure

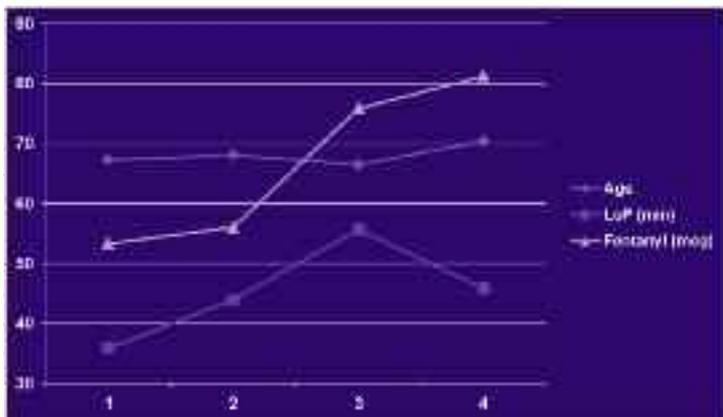


**Results:** 887 procedures were performed in the 2 year period. 794 polyps were found in 354 procedures, giving a polyp detection rate of 39.9% in this series. Of which 6% contained focus/were of high grade dysplasia. Majority of polyps was found in the sigmoid colon (40.8%) and rectum (13.5%).

669 polyps had histology results, of which 51.8% were Tubular adenomas, 34.7% Tubulovillous adenomas and 7.6% Hyperplastic polyps. There was a 9.6% increase (95% CI 18.5% – 0.7%) in the proportion of Tubular adenomas in the over 70s compare with the 60-65 age group (57% vs. 47.4%) (Fig.1). There was also an apparent shift from Hyperplastic polyps and Tubulovillous adenoma to Tubular adenoma with increasing age (Fig.2).

Gender	Number	Mean Comfort Score	Mean Fentanyl Requirement (mcg)	Mean Midazolam Requirement (mg)
Male	247	1.40	53.4	1.82
Female	107	1.80	59.4	1.86

Comfort Score	Mean Age	Mean LoP (min)	Mean Fentanyl Requirement (mcg)
1	67.3	35.9	53.4
2	68.1	44.0	56.0
3	66.5	55.7	75.9
4	70.4	45.9	81.3



Age Group	Tubular Adenoma	Tubulovillous Adenoma	Hyperplastic Polyp
Overall (n=699)	362 (51.8%)	243 (34.7%)	53 (7.6%)
60-65 (n=276)	131 (47.4%)	99 (35.9%)	28 (10.1%)
66-70 (n=213)	111 (52.1%)	75 (35.2%)	15 (7%)
>70 (n=210)	120 (57%)	69 (32.9%)	10 (4.8%)

n = the no. of polyps found in each age group

**ABSTRACT 129 (13B241) POSTER PRESENTATION**

**Title of Paper:** Characteristics And Distribution Of Polyps Found In Bowel Cancer Screening Colonoscopy

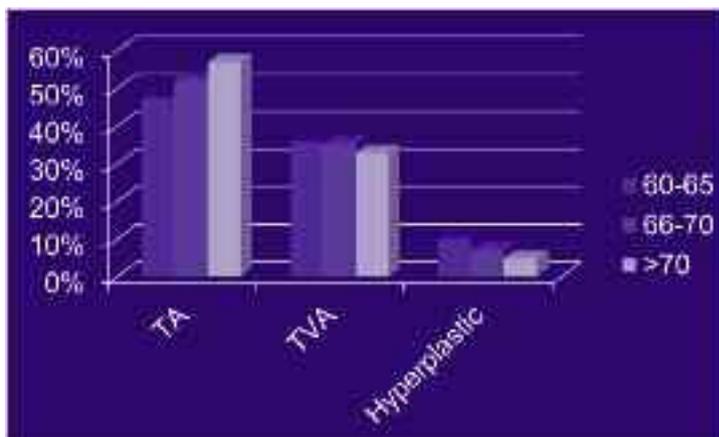
**Author(s):** W. Lai, M. Fung, J. Vatish, R. Pullan, M. Feeney

**Department(s)/Institution(s):** Torbay Endoscopy Unit, Torbay Hospital, Torquay, UK

**Introduction:** Bowel Cancer Screening Programme (BCSP) in the UK achieved nationwide coverage in 2010/11. We collected data from a local endoscopy unit that performs bowel cancer screening colonoscopy between 2010 and 2011.

**Aims/Background:** This audit aims to look at the characteristics and distribution of polyps found in screening as well as surveillance colonoscopies performed under the BCSP.

**Method:** Patients aged between 60 and 75 who underwent bowel cancer screening colonoscopy (first and surveillance) in Torbay endoscopy unit from January 2010 to December 2011 were identified from the BCSP database (Oracle BI Interactive Dashboards). Endoscopy reports were drawn from Scorpio© reporting system and corresponding histology results using Cyberlab© integrated pathology system.



**ABSTRACT 130 (13B242) POSTER PRESENTATION**

**Title of Paper:** Gastric antral vascular ectasia: clinical features, associations and prognosis

**Author(s):** A. Jalil, J. Ponichtera, H. Hameed, C. Purcell, M. Eatock

**Department(s)/Institution(s):** Milton Keynes NHS Foundation Trust, Milton Keynes, United Kingdom

**Introduction:** Gastric antral vascular ectasia (GAVE) is a rare



disorder characterised by upper GI bleeding, chronic iron- deficiency anaemia and endoscopic findings of columns of red tortuous vessels along the longitudinal folds of the antrum of the stomach. Although the pathogenesis of this condition is largely unknown, it is associated with a number of medical conditions including portal hypertension and scleroderma. There have been few studies analysing the prevalence of the associated conditions in a cohort of GAVE cases, and none in a sample size of greater than 15.

**Method:** This is a retrospective cohort study of all patients diagnosed with GAVE an Milton Keynes district general hospital between November 2007 and November 2012. Information was gathered from electronically stored patient records.

**Results:** 20 patients were identified, 50% of cases were male. Average age at diagnosis overall was 65 years. The most common symptom that lead to a diagnosis of GAVE was of iron deficiency anaemia. 45% of cases had a co-existing diagnosis of liver cirrhosis (n=9), 35% chronic renal failure, 25% (n=7) had diabetes (n=5), 20% had rheumatologic disease (n=4) and in half of these the condition was scleroderma, 11% of the cohort had thyroid function abnormalities (n=2). Patients were followed up for a mean period of 1.9 years and in this period one patient had an acute GI bleed. Argon Plasma Coagulation was performed in 5 cases and the remaining cases were treated medically. Following APC the

haemoglobin increased by an average of 3.75g/dL.

**Conclusion:** GAVE is an important differential diagnosis in the setting of iron deficiency anaemia on a background of cirrhotic liver disease or portal hypertension, especially in patients in their sixties or older. This cohort confirms the associations in previous studies but also notes that acute bleed risk is low and that APC appears an effective treatment modality

## British & Irish Gastroenterology BIG Meeting, 2013 List of Sponsors

**Abbvie Ltd**

**Merck Sharp & Dohme**

**Abbott Laboratories**

**Boston Scientific Ltd**

**Cook Medical**

**Dr. Falk Pharma UK Ltd**

**Endosurgical Limited**

**Ethicon**

**Ferring UK Ltd**

**Fleetwood Healthcare Ltd**

**Gilead Sciences UK & Ireland Ltd**

**Hospira Ireland Sales Ltd**

**Hospital Services Ltd**

**Intraveno**

**Johnson & Johnson Medical**

**LanganBach Services Ltd**

**Manepa Limited**

**Medserv**

**MSD Hepatology**

**Norgine Limited**

**Olympus Ireland**

**Pharmacosmos UK Ltd**

**Reckitt Benckiser Ireland**

**Roche Products (Ireland) Ltd**

**Shire Pharmaceuticals Ireland Ltd**

**Sword Medical**

**Tillotts Ltd**

**Vifor Pharma UK Ltd**

**Warner Chilcott UK Ltd**

**Wassenburg Ireland Ltd**

# ISG Winter Meeting 2012



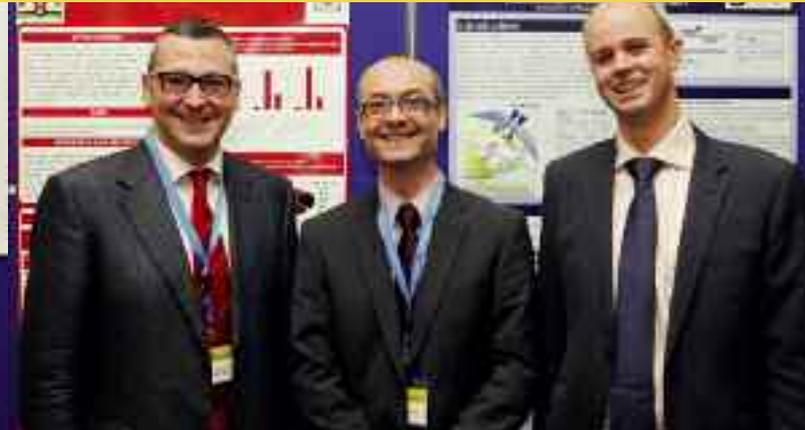
L R Philip Cullinan Garreth Halligan Fergal Kearns  
David O'Brien of Olympus



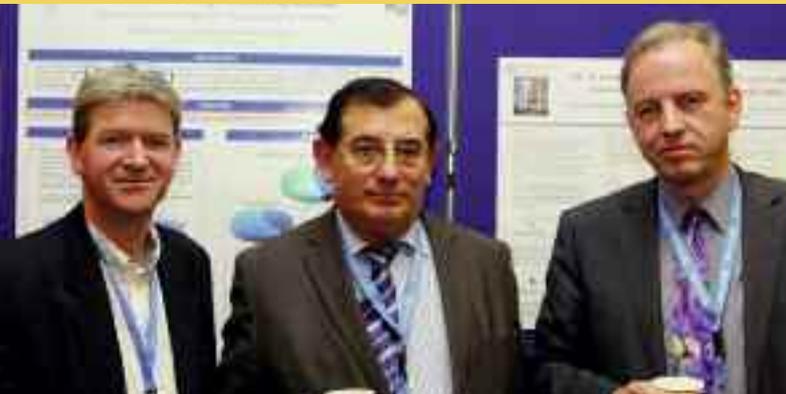
L R Prof Kieran Shanahan Prof J Conor O'Keane  
Prof Michael J O'Brien Dr Niall Swan



LR Dr Eileen Clarke and Dr Subhasish Sengupta



LR Dr Glen Doherty, Dr Seamus Murphy and Dr Johnny Cash



LR Dr Paul Clott, Dr Lqdan Tobbin and Dr David Gibbons



Mahrukh Azhar and Matthew Smyth of NUI Galway



Paul Morrison Ronan Wright and Rob Vavasour of Wassenburg



Prof Aiden McCormick President of ISG

# ISG Winter Meeting 2012



Ann Liddell Caroline Hall and Elaine Millington of Cook Medical



Annette O'Sullivan and Georgina Cunningham of Reckitts Benckiser Ltd.



Brian Farrell of ASP and Ann Marie Darcy of Hermitage Clinic



Geraldine Bennett and Joy Keane of Boston Scientific



Gerldine Murphy and Collette Cotter of ISCC



L R Dr Gerard Clarke, Sarah Cahill, Ruth Boylan, Dr Niall Breslin and Prof Aidan McCormick President of ISG



Heli Conlon and Caitriona Moylan of Intraveno



John Stewart and Steve Gillman of Manitex



Nicola Mellott and Steve Betts of Abbott Established Pharmaceuticals

Graham Cooke MD of Irish Medical Independent

# ISG Winter Meeting 2012



L R Deirdre Mazzone, Caroline Walsh of Mater Private Hospital



L R Dr Murat Kica, John Halpin of Ferring Pharma and Dr Subhasish Sengupta



L R Dr Afdhal and Dr Ahmed Abu Shanab



L R Melissa Brown, Dr Louise Fitzgerald, Rebecca Finnegan and Dr Gaurav Manikpure



Prof Jean Frederic Colombel University of Lille France



Prof Michael J O'Brien Boston University Medical Centre USA



Prof Nezam H Afdhal of Havard Medical School USA



Simon Travis President ECCO John Radcliff Hospital Oxford UK

# ISG Winter Meeting 2012



Dr Dermot Kelleher Principal of Faculty of Medicine Imperial College London



Dr Anna Smyth



Dr Karl Clancy



Dr Linda Sharp



Dr Shane Duggan



Dr Linda Sharp



Dr Shivaram Bhat



Hijalmar C. Santvoort University Medical Centre Utrecht Netherlands

# ISG Winter Meeting 2012



Mr Ronan Cahill



Prof Brendan Drumm Former CEO HSE Ireland



Prof Dermot O'Toole



Prof Ciaran Boyle RCSI



Prof Fergus Shanahan of CUH Ireland



Dr Paud O'Reegan



Dr Grant Caddy, Dr Neill McDoughal and Dr Ian Carl



LR Emer Bolger, Mary Forry, Aoibhlinn O'Toole and Nuala Goodwin



LR Dr Sengupta Prof Eileen Clarke and Dr Dermot Long

# ISG Winter Meeting 2012



Prof Colm O'Morain and Prof John Crow



Prof Alan and Gayle Baird, Claire McCormick and Prof Aiden McCormick President of ISG



Dr Fiona Beehan, Dr Shane Duggan, Dr Catherine Gary and Dr Sinead Phipps



Dr Grace Cheny and Dr Omar Sherif



Dr Kevin Ward, Natille Phillips, Maureen Ward, Dr Michael and Dr Hilda O'Shea



Roisin Keeling and Prof and Mrs Donal Weir



Dr Leanne Stratton, Dr Jill Summerville, Dr Jenny Addley, Dr Emma Clarke



Mr John Moorehead, Patrica Robinson, Florence Collins, Eileen O'Connor, Prof Humphrey O'Connor



Shauna Davitt, Edel Dolan, Roberta Murphy and Dr Mary Cannon

# ISG Winter Meeting 2012



Prof Steve Patchett, Dr Maeve Skelly, Dr Orla Crosbie and Dr Billy Stack



Claire McCormick and Prof Aiden McCormick President of ISG



abbvie

OUR NAME HAS  
CHANGED.  
OUR COMMITMENT TO  
GASTROENTEROLOGY  
ENSURES.

**The partner you once called Abbott is now AbbVie.** Our name has changed but our commitment to join you in improving patient care does not. We stand by our promise to develop and deliver innovative medicines and work with you to elevate the standard of care in the treatment of inflammatory bowel diseases.

[abbvie.com](http://abbvie.com)