

Adherence to Recommendations of Anticoagulation Management Guidelines in Endoscopy Procedures at Tallaght University Hospital (TUH)



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Background

- Anticoagulants agents are widely prescribed. These drugs confer an increased bleeding risk when undertaking therapeutic endoscopic procedures, and also risks of thromboembolic sequelae if discontinued^{1,2}
- European Society of Gastrointestinal Endoscopy (ESGE), along with other international societies of gastroenterology have published guidelines on anticoagulation management pre- endoscopic procedures^{3,4,5}

Objectives

- To assess the adherence of Warfarin (OAC) and Direct Oral Anticoagulants (DOAC) management to guidelines before endoscopy procedures at Tallaght University Hospital.

Methods

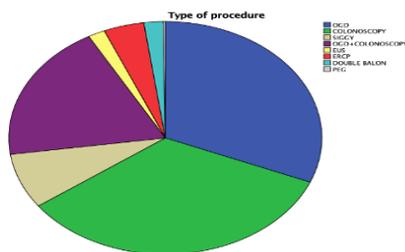
- Retrospective analysis of endoscopic procedures in patients on OAC and DOAC, which were pre-assessed in Endoscopy Department at Tallaght University Hospital, from January 2018 to December 2019.
- OAC/DOAC management were based on the underlying thrombotic risk condition and the initial endoscopy bleeding risk. The bleeding risk during endoscopy was assessed from the final report.

Results (1)

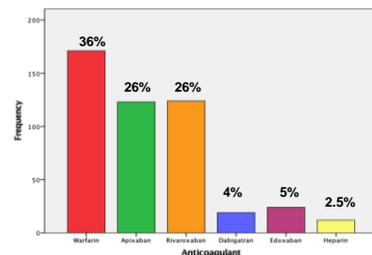
1A) 475 endoscopic procedures were performed in 169 (35.6%) Female and 306 (64.4%) Male on OAC/DOAC, aged 72 ± 9.6 (Mean \pm SD). 21/475 (4.4%) of patients did not attend for endoscopy procedure despite the pre-assessment.

1B) 39/454 (8.6%) of patients required repeating the procedure due to recent OAC/DOAC use, in which 32/39 (82%) had low thromboembolism risk but 28/39 (71.8%) had a low initial endoscopic bleeding risk.

1C) Colonoscopy was the most common endoscopic procedure.



1D) Rivaroxaban and Apixaban were commonly used DOAC.



References

- ¹ Flaker GC, et al. J Am Coll Cardiol. 2016;68:217-226.
- ² Slivnick JA et al. Am J Cardiol. 2018;121:1548-1551.
- ³ Chan FKL et al. Gut. BMJ Publishing Group; 2018;67(3):405-17.
- ⁴ Acosta RD et al. Gastrointest Endosc. Elsevier, Inc.; 2016;83(1):3-16.
- ⁵ Veitch AM et al. Gut. 2016;65(3):374-89.

Results (2)

2A) Thromboembolic risk was low in 86 % and high in 10 % of patients.

2B) Initial bleeding risk was low in 69.7% and high in 24.6% of patients.

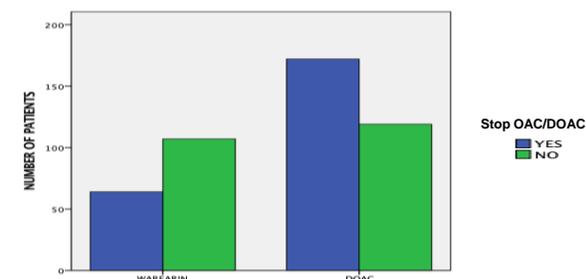
2C) Bleeding risk during procedure was low in 61.5% and high in 34.1% of patients.

Risk	Freq.	%
Low	409	86.1
High	48	10.1
Total	457	96.2
Not-reported	18	3.8
Total	475	100

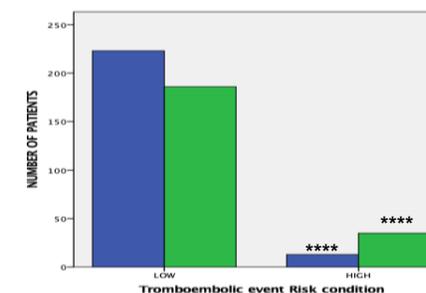
Risk	Freq.	%
Low	331	69.7
High	117	24.6
Total	448	94.3
Not-reported	27	5.7
Total	475	100

Risk	Freq.	%
Low	292	61.5
High	162	34.1
Total	454	95.6
Not-reported	21	4.4
Total	475	100

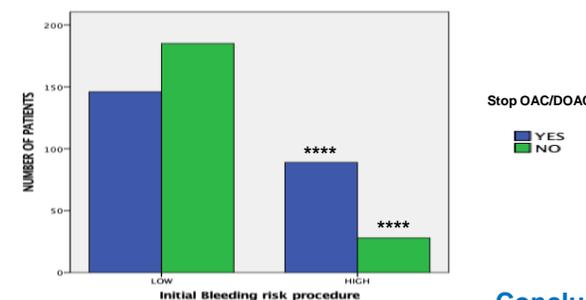
2D) Warfarin was stopped in 64/171 (37.4%) and continued in 107/171 (62.6%) of patients. DOAC was stopped in 172/290 (59.3%) and continued in 118/290 (40.7%) of patients.



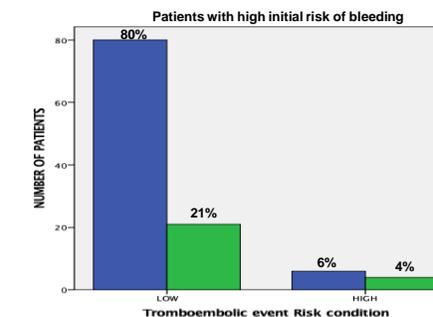
2E) OAC/DOAC was stopped in 223/409 (54.5%) of patients with low risk of TE and in 13/48 (27.1%) with high risk of TE; (****p \leq 0.0001, Chi-squared test).



2F) OAC/DOAC was stopped in 146/331 (44.1%) of patients with low initial risk of bleeding event and in 89/117 (76.11%) with high initial risk of bleeding; (****p \leq 0.0001, Chi-squared test).



2G) A correlation between stopping OAC/DOAC in patients with high initial bleeding risk and with high or low thrombotic risks.



Conclusions

- OAC/DOAC were held in the majority of patients with high initial endoscopy bleeding risk and continued in the majority of patients with high risk of thromboembolism.
- The pre-assessment at TUH in year 2018 and 2019 were beneficial and performed as per anticoagulation management pre-endoscopic procedures guidelines.