

# TIPSS Review: A retrospective study of TIPSS in Northern Ireland from 2006 to 2019

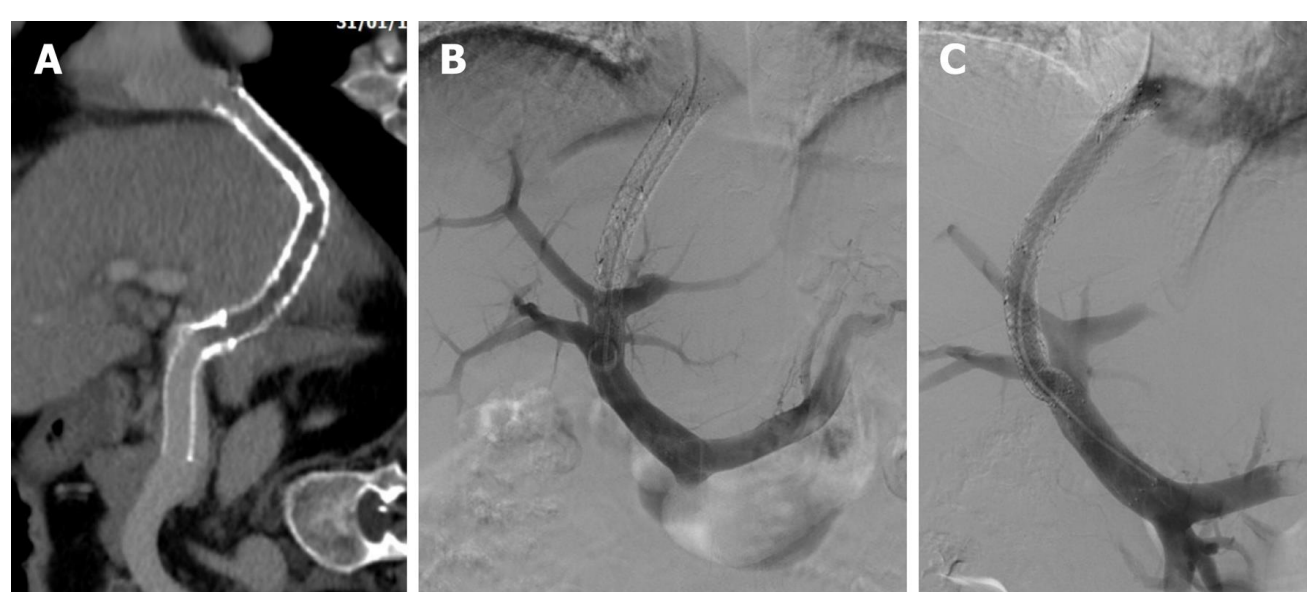


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## Introduction

- TIPSS (transjugular intrahepatic portosystemic shunt) is a non-surgical treatment used to decrease portal hypertension in patients with liver disease.<sup>1</sup>
- A stent is inserted by an interventional radiologist or hepatologist via the jugular vein to create a channel between the portal vein and hepatic vein.<sup>1,2</sup>



- Indications include variceal bleeds unresponsive to medical and endoscopic management, as well as intractable ascites and hepatic hydrothoraces.<sup>1,2</sup>

## Aims

- A review of all TIPSS procedures in Northern Ireland from October 2006 to July 2019 in the regional Hepatology centre (Royal Victoria Hospital Belfast).
- The review assessed patient demographics, liver disease aetiology, procedural indications, transplant rate and mortality.
- The primary goal was to assess mortality relative to MELD score.

## Method

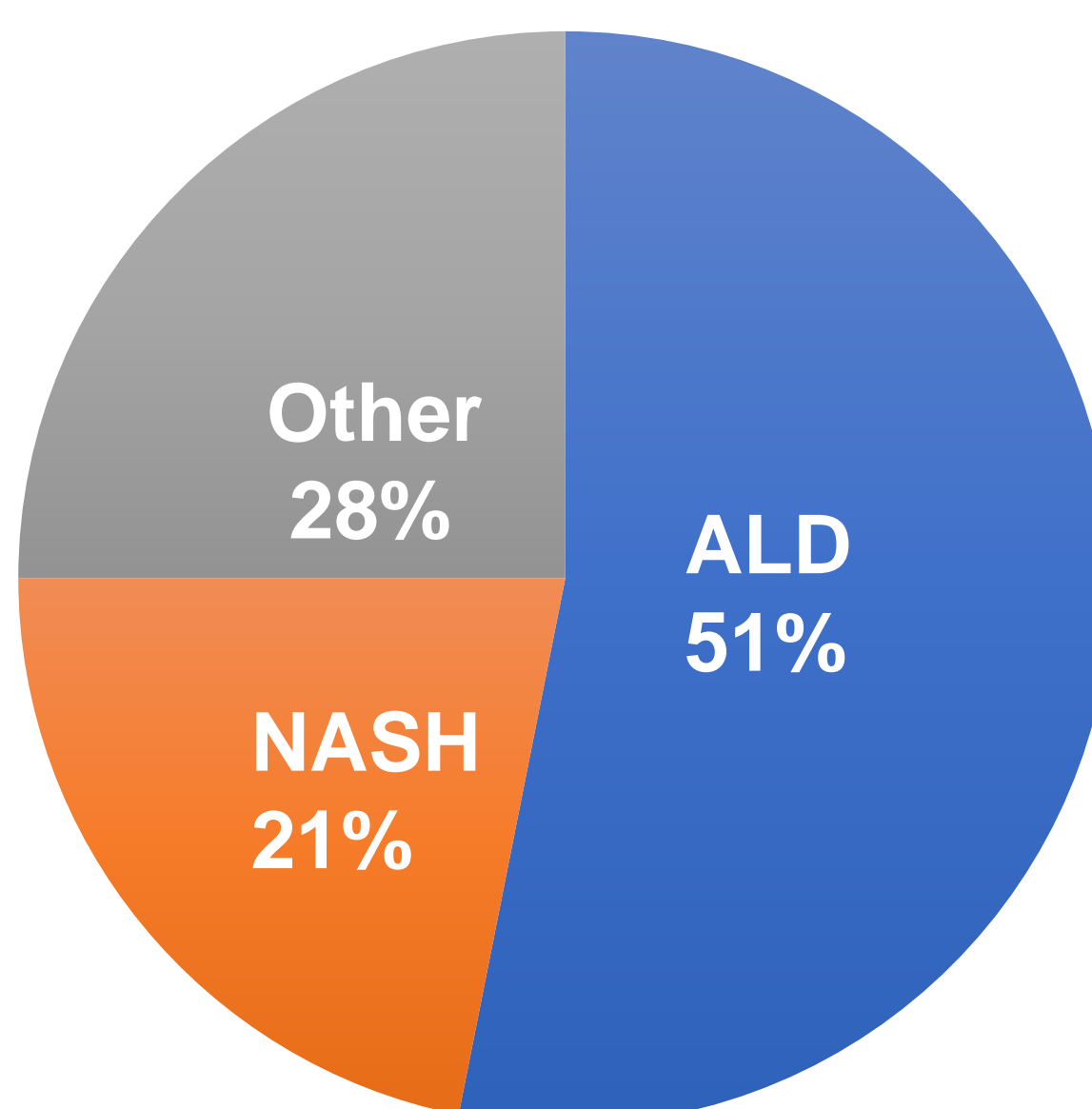
- TIPSS data from October 2006 to July 2019 was obtained from the Interventional Radiology team procedural database in the Royal Victoria Hospital Belfast.
- Additional data, such as MELD score, transplant rate and mortality rate, was collated via the Northern Ireland Electronic Care Record.

## Results

- During the specified timeframe 119 TIPSS procedures took place, for a total of 94 patients.
- Of the TIPSS procedures completed, 60% of patients were male, 40% were female.

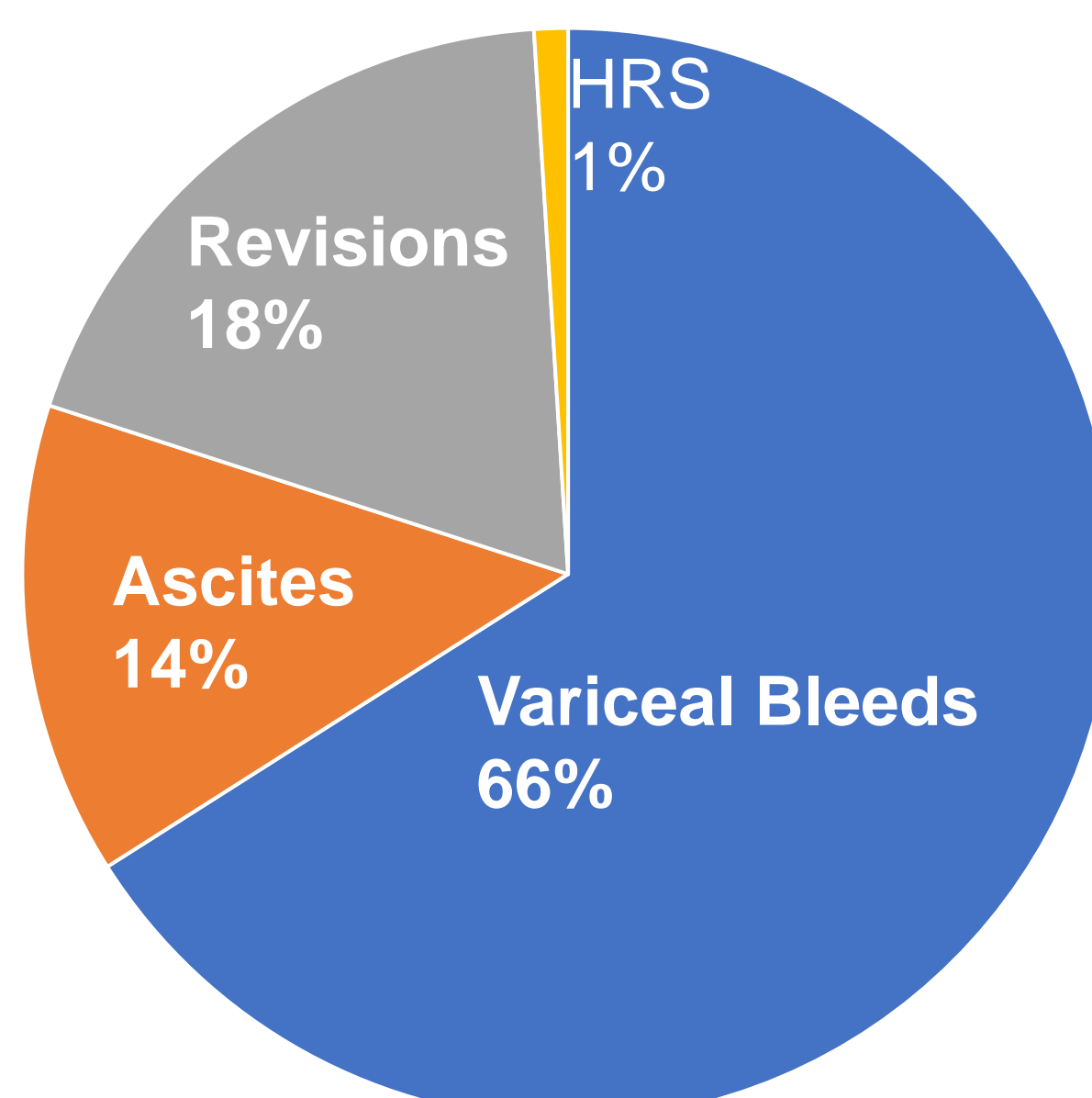
## Aetiology

- A wide-ranging aetiology of liver disease and portal hypertension was noted, with the most common being alcohol related liver disease (51%).



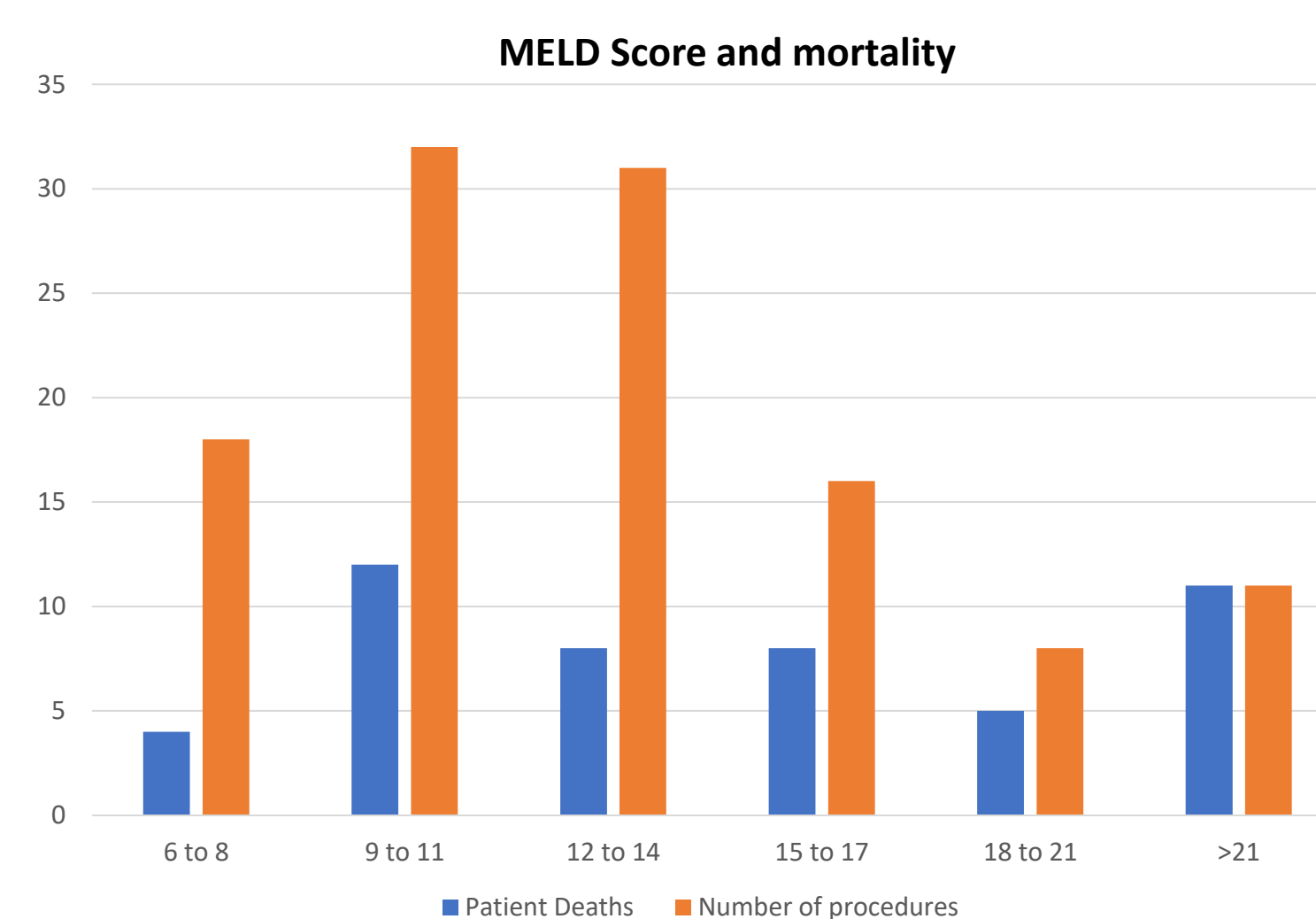
## Indication

- The most common indication cited for TIPSS was variceal bleeding (66%).
- Ten percent of patients proceeded to transplant post TIPSS.



## Mortality

- Mortality rate at one month and five years was lower in those with a MELD score of 14 or under, compared to a MELD score over 14 (6% and 38% versus 40% and 75% respectively).



## Conclusions

- The majority of TIPSS were performed in emergency circumstances for variceal bleeding, most often secondary to underlying alcohol related liver disease.
- Our results show that TIPSS was used as a successful bridge to liver transplant in 10% of the cohort of patients.
- Higher MELD scores (>14) correlate to higher mortality rates<sup>3</sup>, at 1 month and 5 years.
- All cause mortality post TIPSS at 5 years is 50%.
- Potential benefits of this study would be regarding appropriate patient selection for TIPSS, particularly including MELD score and associated mortality.

## References

1. EASL Clinical Practice Guidelines for the management of patients with decompensated cirrhosis (accessed 1/7/20)
2. BSG guidelines 2020: Transjugular intrahepatic portosystemic stent-shunt in the management of portal hypertension (accessed 1/7/20)
3. Reverter E, et al. A MELD-based model to determine risk of mortality among patients with acute variceal bleeding. *Gastroenterology* 2014; 146:412.

