UNIVERSITY of MARYLAND School of Medicine

Introduction

Following liver transplant (LT) with duct-to-duct anastomosis, biliary strictures and leaks are typically managed with ERCP and stenting. While multiple plastic stents are typically used for strictures, self-expandable metal stents (SEMS) can be used to decrease the number of ERCPS with longer periods of stent patency. However, their use is limited by stent migration. The use of fully covered SEMS (FCSEMS), with antimigration fins to manage benign biliary complications following LT may provide stricture resolution with limited adverse events.

AIM

To describe clinical outcomes of FCSEMS in LT recipients using one type of FCSEMS.

METHODS

Single center retrospective study of consecutive LT patients undergoing FCSEMS from 1/2014 to 4/2022.

1) Primary outcomes stricture resolution and recurrence.

2) Secondary outcomes: stent migration, stent occlusion, and number of ERCPs required.

Management of Biliary Complications in Liver Transplant Recipients Using a Fully **Covered Self-Expandable Metal Stent with Antimigration Features**

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Table 1: Procedure related details and stent outcomes 134.5 +/- 71.8 Stent Dwell Time (days) 36 (78.3%) vs 10 (21.7%) Stent Placement transpapillary vs intraductal, n (%) Prior Sphincterotomy, n (%) 17 (40%) Stricture Recurrence, n (%) 8 (17%) Average Number ERCPs, n 2.48 (1-5) (range) Stent Migration, n (%) 3 (6.5 %) Stent Occlusion, n (%) 8 (17%)

- (Viabil, W.L. Gore, Flagstaff, AZ).
- days.
- and 20 patients, respectively.
- Procedural details are listed in Table1

The use of a FCSEMS with antimigration features offers an opportunity to enhance stricture resolution with longer stent dwell times and fewer ERCPs. In our cohort there were no instances of clinically significant stent migration, dysfunction, or procedure related adverse events. Furthermore, these stents provide an opportunity reduce procedure related costs. Additional studies are needed to identify suitable patients for **FCSEMS** placement.



RESULTS

- 46 patients: anastomotic strictures (n=40), bile leaks (n=4) or both (n=2) treated with a FCSEMS with antimigration features

- The median time from LT to FCSEMS placement was 132.5

- Within one year of LT, 32 patients (69.5%) required intervention; early intervention at less than 30 and 90 days was needed in 7

- There were three instances of partial proximal stent migration that did not require reintervention or interfere with removability.

CONCLUSION