RATES OF RETAINED BILIARY STENTS COULD BE AFFECTED BY SOCIOECONOMIC STATUS AND LANGUAGE BARRIER

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ABSTRACT

INTRODUCTION

- Endoscopically placed common bile duct stents are used for biliary decompression. Studies have reported median patency of plastic stents between 77 to 126 days.
- It is advisable to remove or exchange these stents within three months of the index procedure to prevent complications such as stent occlusion, dysfunction, migration, and cholangitis.
- We hypothesized that the risk of retained biliary stents might be high in the underserved population owing to low socio-economic status, language and intellectual barriers, and demographical distribution.

METHODS AND MATERIALS

- A retrospective study was conducted amongst all patients who underwent ERCP-guided plastic biliary stent placement between January 2016 and December 2021 at our community-based institution.
- Charts were reviewed to collect demographics, index ERCP, removal/exchange procedure, complications, and follow-up office visits.
- Retained biliary stents were defined as patients who did not show up for their follow-up ERCP for stent removal (missed stent group) or those who presented for stent removal later than the recommended time frame of 3 months (Delayed stent removal group).
- Descriptive analysis was performed. Chi-square and Fisher exact tests were used to compare categorical variables and t-tests for continuous variables.

RESULTS

- A total of 431 ERCPs were performed, out of which 46 (10.7%) patients had retained stents. Fifty percent of the cohort (n=23) were white and 63% (n=29) were females. 10 patients (21.8%) were non-English speakers, and 10 patients (21.8%) were non-insured.
- 32 (69.6%) of the index ERCPs performed were done in the outpatient setting. Our ERCP reports stated the recommended follow-up time for stent removal for all patients whether performed in the inpatient or outpatient setting.
- However, 8/14 (57%) of the inpatients did not have these instructions included in their discharge summaries.
- No statistical significance was seen when comparing missed versus delayed stent removal groups, except for the ERCP location. (Table 1).

CONCLUSIONS

- Socio-economic and demographic factors, including language barrier and lack of insurance as well absence of specific and clear follow-up dates on the discharge instructions from the hospital could be associated with retained biliary stents.

		Missed n=17	*Delayed n=29*	*P value*	*Total n=46*
Race	**Non- White**	11 (64.7%)	12 (41.4%)	0.127	23 (50%)
Sex	**Female**	12 (70.6%)	17 (58.6%)	0.416	29 (63%)
Language	**Non-English**	4 (23.5%)	6 (20.7%)	0.821	10 (21.8%)
Insurance	**Non-insured**	3 (17.6%)	7 (24.1%)	0.606	10 (21.8%)
ERCP location	**Inpatient**	10 (58.8%)	4 (13.8%)	0.001	14 (30.4%)
	Outpatient	3 (17.6%)	29 (100%)	<0.0001	32 (69.6%)

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