TRANSDUODENAL SPHINCTEROPLASTY: LESSONS FROM A TERTIARY CARE CENTER'S EXPERIENCE

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Background: Transduodenal sphincteroplasty (TDS) was first introduced to manage peri-ampullary tumors. Currently, it is reserved when endoscopic sphincterotomy has failed or when the ampulla is inaccessible due to altered anatomy. Our group has utilized TDS for patients with choledocholithiasis with Roux-en-Y gastric bypass (RYGB), sphincter of Oddi dysfunction (SOD), and ampullary tumors that were refractory to endoscopic treatments.

Methods: This retrospective study included fifteen consecutive cases performed between 2017 and 2024. Patient demographics, clinical scenarios, and operative outcomes were examined. Differences between patient groups were analyzed using ANOVA

Results: The mean patient age for the group was 61.3 (33-83). Majority (80%) of the patients were female. All eight patients with stone diseases had previous bypass procedures (1 duodenal switch). Two patients underwent TDS for SOD and five for ampullary mass. A sixth patient with the ampullary mass required extensive sphincterotomy and was converted to the Whipple procedure and excluded from the study. Demographics were similar between these two groups. Statistical analyses were not significant among the three groups.

TDS was successful in 100% of stone cases, providing symptomatic resolution in 100 % of patients with SOD and 80% of peri-ampullary masses. No operative leaks or mortalities occurred. The overall 90-day readmission rate was 26%, where patients were treated for wound dehiscence, surgical site infection, c. diff infection, and dysphagia.

		PRIMARY DIAGNOSES		
		Choledocholithiasis (n=8)	SOD (n=2)	Ampullary mass (n= 5)
PREOP	Age (years)	62	45.5	66.6
	Female (%)	75	100	80
	BMI (kg/m2)	29.79	33.8	23.74
	ASA	3	2.5	2.8
	CBD Diameter (mm)	17.59	13	9
INTRAOP	Operative Time (Min)	112.5	80.5	99
	EBL (mL)	82.5	80	220
POSTOP	PO-LOS (days)	4.75	2.5	11
	Readmission (%)	25	50	20
	Complications (%)	12.5	0	40

Conclusion: TDS is a rarely performed operation that is useful in choledocholithiasis, SOD patients after failed ERCP, those with altered anatomy, such as RYGB, or those with ampullary masses requiring resection. It is safe and effective.