



Digestive Disease Week®

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EXHIBIT DATES: MAY 3-5, 2026

SPHINCTEROTOMY DURING ERCP IS ASSOCIATED WITH LOWER 90-DAY READMISSION FOR CHOLANGITIS: A MULTICENTER ANALYSIS FROM THE EPIC COSMOS NETWORK

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INTRODUCTION

- Readmission after ERCP is an important quality metric.
- Recurrent biliary obstruction and cholangitis are common drivers of post-ERCP hospitalization.
- Biliary sphincterotomy may improve drainage and reduce recurrent infection, but its effect on readmission at scale across diverse health systems remains uncertain.
- Large real-world data can help clarify whether sphincterotomy is associated with lower short-term readmission risk in benign biliary disease.

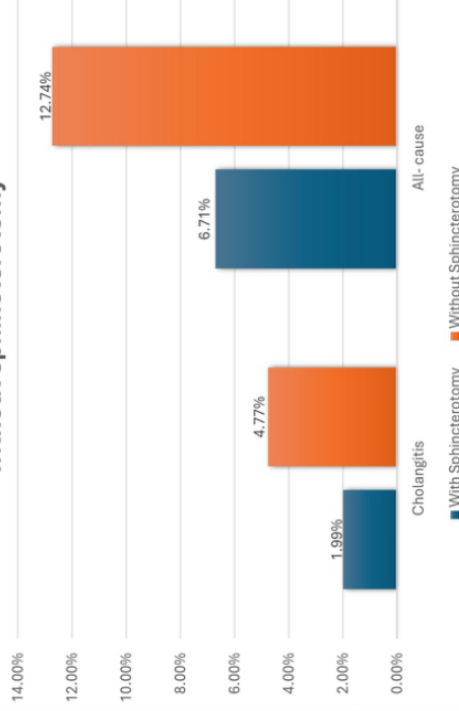
AIM

- To evaluate whether biliary sphincterotomy performed during index ERCP is associated with lower 90-day inpatient readmission for cholangitis.
- To compare all-cause 90-day readmission between patients with and without sphincterotomy.
- To assess whether this association is consistent across procedural and indication-based subgroups.

METHOD

- Retrospective multicenter cohort study using Epic Cosmos (2015–2025).
- Adults undergoing ERCP were identified by CPT codes and stratified by sphincterotomy status at index procedure.
- Patients with malignant biliary or pancreatic diagnoses were excluded to focus on benign disease.
- Primary outcome: 90-day inpatient readmission for cholangitis.
- Secondary outcome: 90-day all-cause readmission.
- Follow-up began 5 days after ERCP.
- Subgroup analyses were performed by procedural context and benign indication, including stones, biliary acute pancreatitis, benign strictures, and bile leaks.

90 day readmission rates after ERCP with vs without sphincterotomy



Indication based subgroups for cholangitis readmission after ERCP



RESULTS

- Among 358,506 patients, 187,051 underwent sphincterotomy and 171,455 did not.
- Cholangitis readmission was lower with sphincterotomy: 1.99% vs 4.77% (RR 0.42, 95% CI 0.40–0.44).
- All-cause readmission was also lower: 6.71% vs 12.74% (RR 0.53, 95% CI 0.52–0.55).
- Lower cholangitis readmission with sphincterotomy was seen across procedural subgroups:
 - Stone extraction: 2.04% vs 4.95%
 - Stent placement: 4.52% vs 5.44%
 - ERCP alone: 1.19% vs 3.68%
- Similar reductions were seen across indication-based subgroups, including stones, biliary acute pancreatitis, benign strictures, and bile leaks.

CONCLUSIONS

- In this large 10-year multicenter cohort, biliary sphincterotomy during ERCP was associated with substantially lower 90-day cholangitis-related readmission.
- Sphincterotomy was also associated with lower all-cause 90-day readmission.
- This benefit was consistent across multiple procedural contexts and benign biliary indications.
- These findings support a broad preventive role for sphincterotomy, likely through improved biliary drainage and reduced recurrent obstruction or infection.
- Sphincterotomy may represent a modifiable procedure-level quality marker that could help reduce preventable post-ERCP hospitalizations in benign biliary disease.

Take home points

- In more than 350,000 ERCPs for benign indications, biliary sphincterotomy was associated with markedly lower 90-day readmission for cholangitis and lower all-cause readmission.
- This association remained consistent across procedural and indication-based subgroups.
- Sphincterotomy may be an actionable quality-of-care target in benign biliary disease.