INTRAOPERATIVE CHOLANGIOSCOPY IN A PATIENT WITH RECURRENT BILIARY STENOSIS: A CASE REPORT

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AIM

The aim of this report is to present a clinical case of recurrent biliary stenosis and to describe the use of intraoperative cholangioscopy as part of the diagnostic work-up. The report further explores how the integration of cholangioscopy during surgery can facilitate the direct assessment of biliary strictures when conventional imaging and endoscopic methods are inconclusive.

Case Presentation

A 71-year-old female with a history of multiple episodes of cholangitis was admitted to the First Department of Surgery. Over the preceding years, she had undergone several ERCP procedures, including SpyGlass™ cholangioscopies, and repeated stent placements in both the right and left hepatic ducts. Despite these interventions, she continued to experience recurrent cholangitis. Magnetic resonance cholangiopancreatography revealed multifocal biliary strictures involving the left, right anterior, and right posterior segmental ducts. The patient underwent choledochotomy and exploration of the biliary tree, followed by manual dilation of the strictures. Due to the uncertain nature of the lesions, intraoperative cholangioscopy was performed using a Single-Use Choledochoscope (HUGEMED™) with targeted forceps biopsies. The cholangioscopic examination demonstrated no epithelial irregularities or mucosal defects, and biopsies were negative for malignancy, confirming an inflammatory etiology. The postoperative course was uneventful, and the patient was discharged on the 10th postoperative day. At 6-month follow-up, she remained asymptomatic, with no recurrence of cholangitis or evidence of biliary obstruction.

Conclusion

Intraoperative cholangioscopy is a valuable diagnostic tool in the management of complex or recurrent biliary strictures. By providing real-time endoluminal assessment and enabling targeted biopsy, it helps establish the underlying etiology and guide appropriate surgical management. In this case, intraoperative evaluation confirmed an inflammatory benign stricture, allowing safe management and an uneventful recovery with excellent short-term outcomes.