ABSTRACT FORM

12th Annual Hospital Research Celebration

IS THERE A ROLE FOR ROUTINE, PREOPERATIVE ERCP FOR SUSPECTED CHOLEDOCHOLITHIASIS IN CHILDREN? 117

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Objectives: ERCP is frequently used preoperatively for suspected choledocholithiasis in adults. Cholelithiasis is uncommon in children, and the role of ERCP is unclear. We sought to elucidate the natural history of common bile duct (CBD) stones in children and its implications after cholecystectomy.

Design: Retrospective analysis of consecutive patients treated during a 10-year-period.

Setting: Tertiary care children's hospital.

Patients: All patients undergoing a cholecystectomy for biliary disease.

Interventions: Cholecystectomy; Intraoperative cholangiography (IOC) for suspected choledocholithiasis: hyperbilirubinemia, gallstone pancreatitis, ultrasonographic evidence of CBD dilation or CBD stones. ERCP postoperatively only for symptomatic choledocholithiasis (pain, jaundice).

Main Outcome Measures: Frequency of ERCP; complications of choledocholithiasis.

Results: 100 patients (63 females) were studied. Indications included acute cholecystitis (10%), chronic cholecystitis (42%) and gallstone pancreatitis (26%). IOC was performed in 45 patients. In 13, CBD stones were identified. Twelve were asymptomatic postoperatively and were treated expectantly (normal ultrasound at 1 week). The only symptomatic patient underwent ERCP 24 hours postoperatively. One additional patient, who did not undergo IOC, became symptomatic in the immediate postoperative period; imaging revealed a retained CBD stone, successfully extracted by ERCP. There were no choledocholithiasis-related complications.

Conclusions: This study suggests that, unlike in adults, the vast majority of CBD stones in children pass spontaneously, and that routine, preoperative ERCP for choledocholithiasis may not be indicated. Furthermore, preoperative indicators of CBD stones may not adequately predict postoperative symptoms. The high incidence of CBD stones in children may explain, in part, why more than a quarter present with gallstone pancreatitis.

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