

POSTER SESSION I (CONT.)

P11

PROCEDURAL MANAGEMENT OF CHOLELITHIASIS IN INFANTS UNDER ONE YEAR OF AGE

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Purpose:

Gallstones in infants under one year of age are rare and management is poorly defined. We examined risk factors, complications, and outcomes at our institution.

Methods:

We retrospectively reviewed infants with cholelithiasis diagnosed on ultrasound between 1997 and 2013. Patients were divided into conservatively and procedurally-managed groups. Symptoms, risk factors, imaging, and laboratory values were compared between groups using student's T-test and Chi-square analysis, with $p < 0.05$ considered statistically significant.

Results:

Fifty patients were evaluated for cholelithiasis. Risk factors for development of gallstones included sepsis or antibiotics (72%), blood products (50%), parenteral nutrition (46%), diuretics (42%), cardiac surgery (30%), and phototherapy (16%). Ten (20%) patients had no risk factors, while 52% had 3 or more. Twelve (24%) patients underwent procedures at an average age of 4.6 months (range 0.2-8.3), including open (4) or laparoscopic (6) cholecystectomy, intraoperative cholangiogram (5), and ERCP alone (2) or in combination with cholecystectomy (2). Compared to conservative management, procedurally-managed patients more commonly had symptoms (11 vs 92%, $p < 0.005$) including jaundice (9), emesis (5), acholic stools (3), and a right upper quadrant mass (1) as well as complications of cholelithiasis, including choledocholithiasis (6), cholecystitis (3), pancreatitis (1), cholangitis (1), and common bile duct perforation (1). Procedurally -managed patients more frequently had choledocholithiasis and biliary ductal dilation on imaging, though there were no differences in WBC count or total bilirubin. Of the 38 patients managed conservatively, 19 had follow-up ultrasounds with gallstone resolution in 21%. Patients with persistent cholelithiasis more commonly had risk factors for gallstone formation (93 vs 50%, $p = 0.04$). One patient required cholecystectomy for postprandial abdominal pain which subsequently resolved, while the remainder of conservatively -managed patients remained asymptomatic.