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Gallstone Pancreatitis

Gallstone pancreatitis (GP) continue to be the most common complication of cholelithiasis in children. The most frequently encountered mechanisms of gallstone pancreatitis appear to be impacted stones, congenital pathology in the ampullary area, and passage of small stones through the common bile duct (CBD), with temporary obstruction and inflammation followed by disruption of pancreatic ductules and/or acinar cell membrane. Should the stone impact the ampulla jaundice could result. Management of the pancreatitis during the acute episode is supportive (bowel decompression, bowel rest and total parenteral nutrition), and the course of the disease for the most part is benign (low Ranson's criteria). When patients are discharged before cholecystectomy, the recurrence rate of acute biliary pancreatitis that requires emergency readmission is unacceptably high. Emergency endoscopic retrograde cholangiopancreaticogram (ERCP) with papillotomy has been found to reduce mortality and biliary sepsis in the early acute situation. Considering the relatively low incidence of CBD stones in GP routine preoperative ERCP is not indicated. Preop ERCP can be restricted to patients with cholangitis, persistent hyperbilirubinemia, CBD stones or persistent hyperamylasemia. Laparoscopic cholecystectomy should be done during the same admission after symptoms of pancreatitis and hyperamylasemia abates. Intraoperative cholangiography needs to be done to visualize the anatomy and address common bile duct stones.

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Mirizzi’sSyndrome

Mirizzi syndrome (MS) is an unusual finding of biliary tree diseases. Refers to partial mechanical obstruction of the common hepatic duct owing to compression by a stone impacted in the infundibulum, Hartmann's pouch or cystic duct, or due to the inflammatory reaction resulting from compression. The typical diagnostic signs of MS are dilatation of the common hepatic duct & radicals above the level of a gallstone impacted in the cystic duct, with normal duct width below the stone. Obstructive jaundice, pain and cholangitis are the common presentations of this condition. Diagnosis may require a combination of ultrasonography, computed tomography, and cholangiography (percutaneous or endoscopic retrograde). MS is classified as type I (stenosis of the common hepatic duct due to an impacted cystic duct stone), type II (fistula between cystic and common hepatic duct), type III (hepatic duct stenosis due to a stone), and type IV (hepatic duct stenosis due to cholecystitis). Management depends on the type identified and may consist of open partial cholecystectomy and choledochoplasty with a gallbladder flap, common bile duct exploration with t-tube placement or bilio-enteric anastomosis. Laparoscopic technique is fraught with bile duct injury increasing further the morbidity. The morbidity and mortality associated with this rare syndrome can be relatively high and a significant number of patients may develop late biliary strictures.

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Prenatal IH

The diagnosis of an inguinal hernia (IH) has been made prenatally with the help of sonography in a few cases. Moving, echo-free, cystlike structures representing peristalsis within trapped loops of bowel in an abnormally enlarged scrotum are the main ultrasonographic finding. There is no need to change the route of birth due to the presence of a prenatal IH. The differential diagnosis consists of other masses protruding from the abdominal wall such as omphalocele or from the perineal region (sacrococcygeal teratoma, undescended testis and communicating hydrocele). After delivery the diagnosis is confirmed during the initial physical exam of the baby by finding a reducible bulge in the inguinal area. Repair of the inguinal hernia should be done before discharge from the

hospital to avoid feeding difficulties, incarceration, strangulation or gonadal infarction. Prematures have a higher incidence of developing complications from the IH than term infants.

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* Edited by: **Humberto L. Lugo-Vicente, MD, FACS, FAAP**
Associate Professor of Pediatric Surgery, University of Puerto Rico School of Medicine and University Pediatric Hospital, Rio Piedras, Puerto Rico.
Address - P.O. Box 10426, Caparra Heights Station, San Juan, Puerto Rico 00922-0426.
Tel (787)-786-3495 Fax (787)-720-6103 E-mail: *titolugo@coqui.net*
Internet: http://home.coqui.net/titolugo