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Ventriculo-Peritoneal Shunts Cysts

Ventriculo-peritoneal shunts (VP shunts) placement is standard form of therapy for children with communicating hydrocephalus and infants with non-communicating hydrocephalus. The proximal end of the system is inserted into a CSF reservoir, most commonly the lateral ventricle. The proximal catheter is connected to a valve that serves to regulate flow through the system. The valve is connected to the distal catheter which is inserted into a cavity which will serve as receptacle for the CSF such as the peritoneum, pleural cavity, central venous system or gallbladder. Complications of VP shunts needing revision consist of shunt malfunction (occlusion of the proximal catheter by debris of choroid plexus, glial or ependymal tissue), shunt infection, and intraabdominal pseudocysts formation. Abdominal pseudocysts are loculated pockets filled with unabsorbed CSF fluid. Chronic inflammation, low grade subclinical infection, multiple surgical procedures and elevated CSF protein causes the peritoneal mesothelial serous membrane to thickened reducing the absorbing power. Though most cases are asymptomatic showing no shunt malfunction, children with abdominal pseudocysts may present with raised intracranial pressure or symptoms such as abdominal pain, distension, vomiting, fever or anorexia. One-third are associated with an incipient infection. Diagnosis is established with Ultrasound or CT Scan. Treatment of the pseudocyst involves removing the peritoneal catheter with relocation to an absorbing peritoneal surface or atrium.

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Choledochocele

Choledochocele is an extremely rare variant of choledochal cysts classified as type III by Alonso-Lej. The cystic dilatation occurs in the distal portion of the common bile duct most commonly in an intrapancreatic fashion protruding toward the duodenum. Patients with choledochocele can develop intermittent colic abdominal pain, obstructive jaundice and

recurrent bouts of pancreatitis. Nearly half of the patients have previously undergone cholecystectomy. Diagnosis is suggested by ultrasonography and confirmed with HIDA scan, MRCP or ERCP. In the most common variety the ampulla opens into the choledochocele which in turns communicates with the duodenum via another small opening. Cyst distension explains the episodes of colicky pain. Adenocarcinoma has been reported arising from choledochocele, though some researchers believe choledochocele does not share the strong premalignant potential of the more common types of choledochal cysts. The mucosa lining of choledochocele is usually duodenal, arguing that the cyst is a duodenal duplication. Successful endoscopic management (papillotomy) of choledochocele has been reported when the lesion is small. Surgical management entails excision of the duodenal luminal portion of the cyst leaving the medial portion containing the ampulla intact. Prognosis after surgery is good.

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Perianal Abscess

Perianal abscess is a not so rare condition seen almost exclusively in infants less than two years of age. Most cases are seen in males infants. The infant presents with a history of increasing irritability, fever, erythema and induration of the perianal skin. In a period of 48 to 72 hours the area becomes fluctuant. Oral antibiotics are ineffective in controlling the infectious process. It is theorized that a perianal abscess arises from a developmental anomaly in the deep crypts of Morgagni which trap bacterias initiating a cryptitis that proceed to a perianal abscess. This abscess may open or not to become later a fistula in ano. Gut derived organisms are isolated from most cases of perianal abscess. Most abscess are located laterally equally divided between right and left. Perianal abscesses in children are best treated by incision, drainage and systemic antibiotics. A proportion of patients with perianal abscess later develop a fistula in ano. This fact has led some researchers to propose that primary treatment of perianal abscess in childhood involve a careful search for a coexisting fistula and treatment of this by fistulotomy. Long term recurrence is very rare. Recurrence should prompt a search for associated disorders such as Crohn’s, immunodeficiency and autoimmune neutropenia.

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

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