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GB Disorders

Gallbladder (GB) disorders in children are increasing and laparoscopic cholecystectomy (LC) is rapidly becoming the procedure of choice. From 1990 through 1995 eighty-three children between 21 mo. and 18 yrs. of age underwent cholecystectomy at San Pablo Medical Center. Mean age was 14.8 years and females with classic biliary symptoms predominated (RUQ pain and fatty food intolerance). 12% developed gallstone pancreatitis, and 7% jaundice. Indications for surgery were cholelithiasis in 71 (86%) children, GB dyskinesia in ten (12%), and sludge/polyp in 2. Fifty-nine cholecystectomies (71%) were done laparoscopically and 24 (29%) open. Choledocholithiasis (CBD stones) in six children (7%) was managed by open extraction with t-tube placement or endoscopic papillotomy followed by LC. No major ductal complication occurred. Predominant pathologic findings were chronic cholecystitis. LC is superior in post-surgical stay, length of stay, diet resumption, use of pain medication, operating time, and cosmesis to the open procedure. Modern diet, overweight and abnormal liver function chemistry are the main predisposing conditions of GB disorders in children during this decade. Females in their teenage years with typical symptoms continue to be the most commonly affected groups. Persistent biliary symptoms associated to low GB ejection fraction during hepatobiliary CCK stimulated scan may be cause by dyskinesia. The method of choice to remove the disease GB in children is LC: is safe, efficient, and superior to the conventional method. CBD stones can be managed with simultaneous endoscopic papillotomy. Costs of LC are reduced using reusable equipment and selective cholangiographic indications.

SBS

The small bowel syndrome (SBS) is a permanent malabsorption caused by loss of small bowel, leaving a residual jejunum-ileal length of less than 75 cm. During the pediatric age it most commonly results from neonatal necrotizing enterocolitis, intestinal atresia or midgut volvulus. Survival depends on remnant length and presence of ileo-cecal valve. Initial medical management consists of parenteral nutrition, elemental diet and predigested formulas.

Management should focus on the rapid intestinal transit time, decreased mucosal surface area, ineffective peristalsis, and short bowel length of these patients. Despite significant morbidity, the general outcome is favorable and warrants aggressive nutritional support, medical treatment, and surgical intervention in selected patients. Patients with symptomatic dilated intestinal segments and stasis hooked on TPN may benefit from intestinal tapering or isoperistaltic lengthening (Bianchi) procedures. Other alternatives are home parenteral nutrition or bowel transplantation.

Umbilicus

Few conditions plague the umbilicus of the young infant. These are: hernias, umbilical granulomas, infectious process (omphalitis), patent urachus or omphalo-mesenteric (O-P) remnants. They can manifest as either purulent, urinary or intestinal discharge. Hernias can wait until the child is older (5 y/o), since most will disappear with time. Granulomas are generally well taken care with silver nitrate applications. Omphalitis during the neonatal period are caused by staph. or strep. organisms invading underneath the granulation tissue of the cord stump, should never be taken lightly, and spreading infection may involve the superficial lymphatic or lower abdomen. Treatment consists of local or systemic antibiotics. Urachal remnants have associated urinary tract abnormalities (distal lower obstruction) and are managed with excision after urinary investigation. O-P remnants clearly describe a communication between the bowel and umbilicus, manifesting as ducts, sinus, cysts or bands. Surgical excision and thorough search for discontinuous segments of the track are necessary. This may include a laparotomy.

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