PEDIATRIC SURGERY *Update* ©
Vol. 27 No. 05 NOVEMBER 2006

Bowel Angiodysplasia

Intestinal angiodysplasia represent a very rare cause of lower gastrointestinal bleeding in infants and children, more commonly seen in the elderly patient. Diagnosis is usually delayed. The angiodysplasia is a small, flat vascular malformation (vascular dysplasia) composed of congeries of dilated capillaries, arterioles, and postcapillary venules located most commonly in the left colon, followed in frequency by the distal ileum. The child presents with recurrent hematochezia (most commonly) and chronic blood loss. Mean age at the time of diagnosis is two years. Work-up in search of a diagnosis includes lower and upper endoscopy, Meckel (technetium) scintigraphic scan, packed red blood cells scan, magnetic resonance angiography, CT-scan (rapid venous enhancement during intravenous administration of contrast material), intraoperative enteroscopy and selective mesenteric arteriogram. Wireless capsule endoscopy is another tool that has been useful among children to diagnose intraluminal conditions of the small bowel, but this method lacks tissue sampling and therapeutic capabilities. Another rare cause of lower gastrointestinal bleeding is intestinal hemangiomatosis. Precise preoperative diagnosis and location are a priority before embarking in a negative exploratory laparoscopy or laparotomy. Surgical resection remains the definitive therapy for angiodysplasias and hemangiomas of the bowel since embolization and steroid therapy has produced conflicting results.

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Pyogenic Hepatic Abscess

Liver abscess in children can be of bacterial (pyogenic), fungal, parasitic or viral origin. Rare in frequency and lethal in occurrence, they are usually associated with immune compromised patients such as those harboring malignancy and chronic granulomatous

disease. Pyogenic abscess are by far the most common in parasitic non-endemic areas. Pyogenic hepatic abscess (PHA) establishes by several routes namely biliary, venous, arterial, direct spread or trauma. Some examples are appendicitis, cholecystitis, umbilical vein catheterization, bacteremia and hepatic trauma. Most PHA in infants and children occurs due to systemic bacteremia with staphylococcus aureus as primary infecting agent, while neonatal PHA occurs through the portal vein with gram negative organisms. Children with PLA shows nonspecific symptoms such as abdominal pain and tenderness, fever and hepatomegaly. Labs may show leukocytosis, elevated liver enzymes and erythrocyte sedimentation rate. Abdominal ultrasound and CT-Scan are the first line imaging in accurate diagnosis. Management consists of multiple systemic antibiotics with percutaneous drainage of macroscopic abscess collections. Multiple small collections will not be amenable top drainage. Resolution of the PHA can be followed with ultrasound. Prognosis has improved considerably with time.

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Gallbladder Hydrops

Acute distension of the gallbladder in the absence of stones, bacteria, or congenital malformations is known as gallbladder hydrops. This condition has a vascular origin such as transient arteritis or ischemia. In older children hydrops will present with fever, nausea, vomiting, right upper quadrant mass and abdominal tenderness, while neonates and infants might show only a palpable mass. Gallbladder hydrops in neonates or infants is caused by systemic sepsis, while Kawasaki disease (mucocutaneous lymph node syndrome), scarlet fever, leptospirosis and trauma are the most common cause of hydrops in older children. The diagnosis of hydrops is established using abdominal ultrasound demonstrating normal biliary ducts and a distended gallbladder without calculi or congenital malformation. The treatment of hydrops is conservative. Management consists of systemic antibiotics and early enteral feeding to stimulate gallbladder function and decompression. Should pain and distension persists, open or percutaneous cholecystostomy may be helpful depending on the medical condition of the child.

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ISSN 1089-7739