

When is a Belly Ache Not Just a Belly Ache?

Abdominal pain is a common problem in children. The child's medical history is important when determining the cause of the pain. The presence of alarm symptoms such as involuntary weight loss, growth retardation, delayed puberty, significant vomiting or diarrhea, gastrointestinal blood loss, unexplained fever, rash, arthritis, or a family history of inflammatory bowel disease suggests a higher prevalence of organic disease and indicates the performance of diagnostic tests. Red flags in the physical exam are localized tenderness, fullness or mass effect, hepatomegaly, splenomegaly, spine or costovertebral angle tenderness, oral ulcers, and perianal fissure or fistula.

Acute abdominal pain starts suddenly and quickly worsens. Some cases of acute pain are benign and some require rapid diagnosis and treatment. Life-threatening causes such as intestinal obstruction or perforation need to be ruled out. In the acute surgical abdomen, pain generally precedes vomiting, while the reverse is true in medical conditions. Diarrhea often is associated with gastroenteritis or food poisoning. Appendicitis is the most common surgically treated cause of abdominal pain in children and should be suspect with pain in the right lower quadrant.

Chronic abdominal pain is characterized by recurrent or continuous abdominal pain not well localized. Many pathologic conditions, such as infectious, inflammatory, metabolic, or anatomic disorders, can cause recurrent abdominal pain. The vast majority, however, are functional gastrointestinal disorders which are not explained by known biochemical or structural abnormalities. Recurrent abdominal pain, often vague and nonspecific, affects between 10%-20% of school-aged children. The pain is usually episodic, unrelated to meals, and periumbilical in location. Examples of more serious abdominal pain include pancreatitis, gastroesophageal reflux (GERD), inflammatory bowel disease (IBD), chronic constipation, food allergies, and biliary dyskinesia.

Acute pancreatitis usually begins with gradual or sudden pain in the upper abdomen, sometimes extending through the back. Other symptoms include swollen abdomen, nausea, vomiting, or fever. Pain may be mild at first and worsen after eating, or severe and constant, lasting several days. The incidence of acute pancreatitis has increased in the past decade due to increased awareness and diagnostic methods. In children, the majority of cases are idiopathic. Other etiologies include Hemolytic uremic syndrome, IBD, cystic fibrosis, cholelithiasis, trauma, or medications (valproic acid). Treatment is supportive. Most patients recover without complications. Chronic

pancreatitis is similar to acute pancreatitis with constant pain in the upper abdomen that radiates to the back. Other symptoms include weight loss due to poor absorption of food, or diabetes if the insulin-producing cells of the pancreas become damaged.

When signs and symptoms of heartburn occur at least twice a week, or interfere with daily life, it could be gastroesophageal reflux disorder or GERD. Symptoms include chronic coughing, frequent vomiting (in infants), heartburn, reflux, chest pain, dysphagia, or frequent ear and sinus infections.

Inflammatory Bowel Disease (IBD) includes Crohn's disease and ulcerative colitis. Crohn's disease causes transmural inflammation of the digestive or gastrointestinal (GI) tract affecting the mouth to anus. The most common area is in the terminal ileum. In ulcerative colitis, inflammation in the colonic mucosa causes diarrhea, sometimes bloody mucus in the stool, and abdominal pain.

Constipation is a common gastrointestinal problem in children accounting for 3% of general pediatrics and 25% of pediatric GI consults, and a result of poor diet and habits.

Chronic constipation may be a result of a more serious underlying disorder like IBD, celiac disease, metabolic disease, Hirschsprung Disease, and hypothyroidism.

Food allergies often start in childhood. About 5% of children actually have a clinically proven allergic reaction to foods. Many children who have a food allergy to milk, eggs, wheat, and soy outgrow the allergy by the age of 5. Allergies to peanuts, tree nuts, and shellfish take longer to recover.

Biliary dyskinesia (BD) is a functional disease described as abnormal motion of the bile ducts or the inability of the gallbladder to contract and release bile. The incidence of BD is increasing significantly due to poor diet and habits, overweight, and eating processed foods.

East Tennessee Children's Hospital has a team of subspecialists, including pediatric radiologists, where abdominal CT scans, ultrasound, MRI, and other diagnostic tests are used to evaluate and diagnose abdominal pain in children. Our state of the art endoscopic suite provides upper/lower endoscopy and other appropriate testing and therapy. If needed, a surgical referral, or referral to other top pediatric specialists, can be made through our clinic. For more information, please contact our clinic at (865) 546-3998 or www.giforkids.com.

