



## **Abdominal Pain**

There are many different causes of abdominal pain in children, sometimes the child's other symptoms - fever, nausea, vomiting or diarrhoea are a bigger clue to the problem than just the pain in the abdomen.

Some common causes of abdominal pain in children include:-

**Gastroenteritis** is an inflammation of the stomach and intestines caused by intestinal infection that causes cramps and diarrhoea. The diarrhoea may be very watery, and may contain blood or mucus. Viruses cause up to 40% of the infectious diarrhoea cases in the UK. It is the second most common illness following upper respiratory infections. Treatment is directed at replacing fluids, salts and minerals (electrolytes) loss as a result of diarrhoea - the objective is to prevent dehydration. Viral gastroenteritis does not respond to antibiotic therapy. Prevention is directed at hand washing and proper food handling.

There are 20 to 35 million cases of gastroenteritis each year. This can be caused by viruses, bacteria or parasites. Many types of virus are responsible for gastroenteritis. The most common are Rotavirus and Norwalk virus. Rotavirus is often responsible for severe gastroenteritis in infants and young children. Norwalk virus is more often associated with institutional group related viral outbreaks - most common in Winter in school aged children through contaminated food or water. Gastroenteritis can also spread from person-to-person contact, if it is caused by Shigella bacteria or by one of the intestinal viruses.

**Appendicitis** is an infection of the appendix, a tube like glandular structure attached to the beginning of the large intestine (colon). Appendicitis can cause pain in the lower right portion of the abdomen along with nausea, vomiting and fever. It is uncommon below one year of age and most common in the late teens and early twenties. It is commoner in males than in females. Appendicitis usually begins with crampy, colicky-like mid abdominal pain and loss of appetite then progresses rapidly to the "classic" signs of appendicitis.

**Irritable Bowel Syndrome** is a condition characterised by increased motility of the small and large intestine. It is a mysterious illness which causes occasional attacks of abdominal pain, cramps and diarrhoea, with or without episodes of constipation. There is no fever. The disease may be blamed on many different factors, including diet and a stressful lifestyle. Increasing dietary fibre and eliminating stimulants to the gastrointestinal tract such as caffeine may be beneficial. Anxiety reduction measures may also be helpful.

**Urinary Tract Infections** can affect the bladder, kidneys or both and are usually caused by one of the species of intestinal bacteria, especially E. coli. Urinary tract infections can cause pain in the lower abdomen, in the flank or in the middle of the back. They can also cause discomfort during urination, frequent urination, bedwetting, fever and other symptoms. Antibiotics are used to control bacterial infections. Recurrent urinary tract infection requires careful evaluation to see if a urinary tract abnormality is present, especially in children under 3 when vesico-ureteric reflux can cause permanent kidney damage (see urinary tract infection). Prevention of acute urinary infections centres around careful hygiene, liberal fluid intake, elimination of bubble baths and prophylactic antibiotics



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**Lactose Intolerance** is marked by a difficulty digesting lactose (contained in milk and dairy products). Lactose intolerant people have indigestion, bloating, and diarrhoea after eating or drinking anything that contains lactose. Primary lactose intolerance is genetically determined and increases with age. Approximately two thirds of the world population have lactose intolerance. It is common in Asians, Africa Europeans, Native Americans and South American Indians. Severe lactose malabsorption may follow gastroenteritis or other intestinal inflammation and can occur in anyone. It is transient and treated by elimination of lactose containing products.

**Peptic Ulcers** are an erosion in the lining of the beginning part small intestine. While previously thought to be due to diet and stress, current research indicates most peptic ulcers are caused by a bacterial infection due to *Helicobacter Pylori*. They cause a burning pain under the ribs and this pain is often relieved by eating and by taking antacids. A gastric ulcer is a result of an imbalance between acid and pepsin secretions, leading to inflammation of the stomach. Antacids and ulcer healing medications are usually an effective treatment, combined with antibiotics to eradicate the *H.Pylori* if this is present (confirmed with blood test for anti-bodies)

Abdominal pain can be a symptom of many different kinds of illness in children, including illnesses that seem to have no relation to abdominal organs.

### **What to look for**

Whenever your child has abdominal pain, it is important to find out as much as possible about the location of the pain, the type of pain (burning, crampy, dull), and the time that the pain started (after/before eating). For example, pain in the lower right side of the abdomen may be a sign of appendicitis; crampy pain around the navel is intestinal pain; and crampy pain that begins after a child drinks milk or eats ice cream may mean lactose intolerance.

Look for other symptoms like nausea and vomiting or diarrhoea and cramps could be a sign of gastroenteritis. Fever and a burning feeling when a child urinates can be signs of a urinary tract infection. Fever with occasional bouts of diarrhoea and/or constipation, can be irritable bowel syndrome.

Other signs to look for : a distended abdomen; a painful and rigid abdomen; bleeding in any form - bruises (bleeding under the skin) on the surface of the abdomen); vomiting blood or bloody bowel movements. These signs require immediate attention.

### **What to do**

We may have a good idea of what is happening to your child after hearing the symptoms and performing a physical examination. Because the symptom of abdominal pain is a part of many illnesses, the next step can be anything from reassurance that the problem is minor to an emergency hospital admission. Lactose intolerance can be treated by a simple switch to non-lactose products but appendicitis needs immediate surgery to remove the infected appendix.