

## **Acute Abdomen in Children**

Acute abdomen can be defined as a surgical emergency in which there is sudden and severe pain in abdomen with accompanying signs and symptoms that focus on an abdominal involvement.

It accounts for about 8- 10% of all children attending the emergency department and almost 20% of the consultations in a GP practice. The goal of emergency management is to identify and treat any life-threatening medical or surgical condition and provide relief from pain.

In mild cases often the cause is gastritis or gastroenteritis, colic, constipation, Mesenteric Adenitis.

The common surgical causes are Malrotation and Volvulus, Intussusception in early infancy, Acute Appendicitis, and Typhoid and Ischemic enteritis with perforation in the older children.

Lower lobe Pneumonia, Diabetic Ketoacidosis and acute Porphyria should be considered in patients with moderate-severe pain with little localizing findings in abdomen.

The approach to management should include, in order of priority, a rapid cardiopulmonary assessment to ensure hemodynamic stability, focused history and examination, surgical consult and radiologic examination to exclude life threatening surgical conditions, pain relief and specific diagnosis.

In a sick patient the initial steps include rapid IV access and normal saline 20 ml/kg (in the presence of shock/hypovolemia), adequate analgesia, nothing per oral/IV fluids, Ryle's tube aspiration and surgical consultation.

An Abdominal Radiograph, and an ultrasound of the Abdomen and Pelvis are the basic primary modalities of investigation that serve as adjuncts to the well trained examining hand of the experienced Paediatric Surgeon.

In patients with significant abdominal trauma or features of pancreatitis, a Contrast enhanced computerized tomography (CECT) abdomen will be a better initial modality.

Continuous monitoring and repeated physical examinations should be done in all cases.

Specific management varies according to the specific etiology.

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