Abdominal Pain (Acute)

Acute abdominal pain is a common complaint in children. It varies with age, symptoms and location of pain. Causes vary significantly and may require non-surgical or surgical methods to resolve. Most episodes of abdominal pain are brief and benign, but some situations may require urgent intervention.

ASSESSMENT
Perform assessment focused on symptom onset, location and character of pain, exacerbating factors (e.g. movement, car ride, eating), and associated symptoms (e.g. nausea, vomiting, anorexia, fever).

HPE RED FLAGS
- Significant abdominal pain and/or tenderness
- Persistent or progressively worsening pain
- Peritoneal signs (pain with movement/jumping jacks/car ride, + Rovsing/obturator/psoas signs, +Murphy’s sign)
- Persistent or worsening associated symptoms including nausea/vomiting, fever

WHEN TO REFER
In the presence of any of the red flags listed above, refer to Cincinnati Children’s Pediatric Surgery for management/treatment as soon as possible.

SEE ALSO: Community Practice Support Tool — Abdominal Pain (Chronic)
Abdominal Pain (Acute)

Patient presents with acute onset abdominal pain

Standard Workup

- Situational History
- Past Medical/Surgical History
- Physical Exam

HPE RED FLAGS

- Periumbilical/epigastric pain, progression to RLQ
- Associated nausea, vomiting, anorexia, fever
- Worse with movement, car ride

- RLQ tenderness to palpation
- + Rovsing sign (pain in RLQ with LLQ palpation)
- Pain with movement of bed, jumping jacks
- May also have + obturator or psoas signs

Likely diagnosis: Appendicitis

Work-Up: CBC, U/A, RLQ US (± pelvic US for females)

- Epigastric/RUQ pain, possible radiation to back
- Post-prandial
- ± Nausea, fever

- ±RUQ or epigastric tenderness to palpation
- ± Murphy’s sign

Likely diagnosis: Symptomatic cholelithiasis vs cholecystitis

Work-Up: CBC, LFTs, RUQ US

- Female patient
- Periumbilical pain, may progress to lower abdominal pain
- ± nausea, vomiting, dysuria
- May present with sudden onset of pain

- ± Unilateral lower quadrant or suprapubic tenderness
- ± Pain with movement
- ± Tender pelvic mass on palpation

Likely diagnosis: Ovarian torsion or ovarian hemorrhagic cyst rupture

Work-Up: CBC, U/A, pelvic US, Serum HCG (pregnancy) test

Other potential medical/surgical causes of abdominal pain

- Inflammatory bowel disease
- Omental infarct
- Meckel’s diverticulitis/obstruction from omphalomesenteric duct remnant
- Gastroenteritis
- Mesenteric adenitis
- Pyelonephritis/cystitis
- Endometriosis
- Intussusception
- Epiploic appendagitis
- Urolithiasis
- Gastric/duodenal ulcer
- Pelvic inflammatory disease
- Ectopic pregnancy

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link at 1-888-636-7997.