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 (HISTORY AND PHYSICAL EXAM) 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 (Functional)

If you have clinical questions about patients with acute abdominal pain, call Physician Priority Link® at 513-636-7997 or 1-888-987-7997.

If you would like additional copies of this tool, or would like more information, please contact the Physician Outreach and Engagement team at Cincinnati Children’s.

Tool developed by Cincinnati Children’s physician-hospital organization (known as Tri-State Child Health Services, Inc.) and staff in the James M. Anderson Center for Health Systems Excellence. Developed using expert consensus and informed by Best Evidence Statements, Care Practice Guidelines, and other evidence-based documents as available. For Evidence-Based Care Guidelines and references, see www.cincinnatichildrens.org/evidence.
# Abdominal Pain (Acute)

**Patient presents with acute onset abdominal pain**

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### Standard Workup

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

### HPE (History and Physical Exam) Red Flags

<table>
<thead>
<tr>
<th>Periumbilical/epigastric pain, progression to RLQ</th>
<th>Epigastric/RUQ pain, possible radiation to back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated nausea, vomiting, anorexia, fever</td>
<td>Post-prandial</td>
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<tr>
<td>Worse with movement, car ride</td>
<td>± Nausea, fever</td>
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</tbody>
</table>

- 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

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<table>
<thead>
<tr>
<th>±RUQ or epigastric tenderness to palpation</th>
<th>± Unilateral lower quadrant or suprapubic tenderness</th>
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<tbody>
<tr>
<td>± Murphy’s sign</td>
<td>± Pain with movement</td>
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<tr>
<td></td>
<td>± Tender pelvic mass on palpation</td>
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</tbody>
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**Likely diagnosis: Symptomatic cholelithiasis vs cholecystitis**

**Work-Up: CBC, LFTs, RUQ US**

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**Likely diagnosis: Ovarian torsion or ovarian hemorrhagic cyst rupture**

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

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### 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

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For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link® at 1-888-987-7997.