**Pediatric Appendicitis Pathway in the Emergency Department**

The following information is intended as a guideline for the acute management of children with suspected appendicitis. Management of your patient may require a more individualized approach.

Child >2 years old presenting with suspected appendicitis

**Pediatric Appendicitis Score**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>&lt;4</td>
<td>Dispo options: Discharge home with PCP flu Dispo options: Discharge home with PCP flu Admit to gen peds with alternative dx or for serial exams</td>
</tr>
<tr>
<td>≥4</td>
<td>Dispo options: Discharge home with PCP flu Dispo options: Discharge home with PCP flu Admit to gen peds with alternative dx or for serial exams US Abdomen Limited - Appendicitis + Pediatric Surgery Consult</td>
</tr>
</tbody>
</table>

**LOW RISK (NPV 95-100%)**

- WBC <9k + <65% neutrophils plus any of the following imaging outcomes:
  - Appendix not visualized
  - Appendix not visualized + fluid present in RLQ or pelvis
  - Normal appendix with no primary or secondary signs

**MODERATE RISK**

- Consider additional imaging (CT vs MRI) or Admit to surgical service for serial exams
  - NPO
  - Only TYLENOL for pain
  - NO ANTIBIOTICS

**HIGH RISK (PPV 91-97%)**

- WBC >9k + >65% neutrophils plus any of the following imaging outcomes:
  - Appendix visualized with primary signs of appendicitis
  - Secondary signs present +/− visualized appendix +/- primary signs of appendicitis

**Non-perforated Antibiotic Selection**

**Search in Epic Order Sets:** "Pediatric Appendicitis Antibiotic Panel"

**Standard Antibiotic Regimen**

- Ceftriaxone 50 mg/kg IV q24 hours (max 2000 mg) PLUS
- Metronidazole 30 mg/kg IV q24 hours (max 1500 mg)
- PERIOPI (single dose): Cefazolin 30 mg/kg, max 2000 mg

**If severe PEnicillin allergy (history of anaphylaxis or hives)**

- Ciprofloxacin 10 mg/kg IV q12 hours (max 400 mg) PLUS
- Metronidazole 30 mg/kg IV q24 hours (max 1500 mg)
- PERIOPI antibiotic if allergic to penicillin. None

**BOX 1**

**Discontinue ABX POST-OP**

**Perforated Antibiotic Selection--7 days total from source control**

**Standard Antibiotic Regimen**

- Ceftriaxone 50 mg/kg IV q24 hours (max 2000 mg) PLUS
- Metronidazole 30 mg/kg IV q24 hours (max 1500 mg)
- PERIOPI (single dose): Cefazolin 30 mg/kg, max 2000 mg

**If severe PEnicillin allergy (history of anaphylaxis or hives)**

- Ciprofloxacin 10 mg/kg IV q12 hours (max 400 mg) PLUS
- Metronidazole 30 mg/kg IV q24 hours (max 1500 mg)
- PERIOPI if allergic to penicillin. None

**Transition to oral abx at discharge for 7 days total:**

Augmentin 45 mg/kg PO BID (max 85 mg/dose)− dosed using amox component

**If severe PEnicillin allergy**

- Ciprofloxacin 15 mg/kg PO BID (max dose 500 mg/dose) PLUS
- Metronidazole 10 mg/kg PO TID (max 500 mg/dose)

**BOX 2**

**Surgical disposition for simple appendicitis**

1. Same day discharge− can leave from PACU (or in the AM if done at night)
2. No abx
3. Flu 2−3 weeks

**Surgical disposition for perforated appendicitis (hole in appendix, fecolith outside the lumen, diffuse fibrinous peritonitis)**

1. Clear post-op− avoid/remove early NGT, Foley, TPN, PICC
2. Continue abx post-op (7 days total combination of IV and PO)
3. Anticipate 3−7 day stay post-op (5−7 days if non-op management)
4. Early ambulation
5. If no improvement consider imaging on POD#7 (avoiding imaging early)
6. Home when tol reg diet, passing gas/bowel movement, ambulating, off IV pain meds, and afebrile x 24 hours

**References:**