Acute Appendicitis Evaluation

Clinical Practice Guideline

Monroe Carell Jr. Children's Hospital at Vanderbilt

Child 4yo with suspected appendicitis

PEDIATRIC APPENDICITIS SCORE (PAS)*	
Anorexia	1
Nausea or Vomiting	1
Migration of pain	1
Temperature > 100.4 F	1
Cough/hopping/percussion tenderness	2
RLQ tenderness	2
Leukocytosis (WBC 10,000)	1
Neutrophilia (ANC > 7,500)	1

PAS is the cumulative point total (1-10) from all clinical findings*

*Use for Children ≥ 4 years old

ED Providers:
Use Order Set under Complaint-Based Panel

PAS ≤3

OFF algorithm reassess, consider alternate diagnosis
OR
DC home if criteria met

- For clinical signs of acute gastroenteritis refer to AGE CPG
- For clinical signs of urinary tract infection refer to UTI CPG

PAS 4-7

- NPO, IVF
- Order analgesia/ antiemetics
- Order US Abdomen exam (select **Appendix** button)

Pubescent females: Urine pregancy test, Pelvic US with doppler or Appendicitis MRI

Image positive for appendicitis?

No → OFF algorithm reassess, consider alternate diagnosis OR DC home if criteria met

Yes → Consult Surgery

US Equivocal
Non-visualized appendix

Negative secondary signs

Positive secondary signs

Consult Surgery

PAS ≥8

- NPO, IVF
- Order analgesia/ antiemetics

Consult Surgery

Diagnosis of appendicitis confirmed?

No → Consider US exam, alternate diagnosis

Yes → Begin antibiotic therapy

Preoperative Antibiotics indicated for **ALL** patients with appendicitis (uncomplicated, perforated, abscess) **Non-allergic patients:** Piperacillin/tazobactam 80-100 mg/kg Max:3.375 g **Penicillin Allergy:** Ciprofloxacin 10 mg/kg Max 400 mg PLUS Metronidazole 15 mg/kg Max:500 mg

Admit to surgery

COMMUNICATION
Surgery team to discuss with attending surgeon **prior to** ordering additional imaging
-Communicate with ED staff

Surgical Evaluation

Appendicitis MRI (without IV contrast)

Consider alternate modality (Abd/pelvis CT scan w/ contrast) if:
- MRI unavailable
- Age < 6 yo
- Likely perforation or abscess
- US findings better evaluated by CT

MRI availability:
Weekdays
5 am - 1:30 am
Weekends
7 am - 8 pm

Diagnosis of appendicitis confirmed?

Yes → Begin antibiotic therapy

Equivocal → Consider admit to Surgery for observation and serial abdominal exams
No antibiotics

No → DC home if criteria met with strict return precautions

This guideline does not take into account individual patient situations, and does not substitute for clinical judgment

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