

Complicated Appendicitis: Post Operative Management Clinical Practice Guideline

Update Draft
11.9.21



FINAL 12/15/16

Appendectomy with a Complicated Appendix (Category 2b & 2c) (PERFORATED)

Initial Post-operative Management

Antibiotic Therapy

See table on pg. 2 for dosing schedule

- Ceftriaxone
- Metronidazole

IF PCN ALLERGY USE

Ciprofloxacin & Metronidazole

Antibiotic Step up Therapy - 72hrs

post op if febrile, vomiting, poor po intake

D/C Ceftriaxone & Metronidazole

- Start Zosyn unless pt. has a PCN Allergy (See table on pg. 2 for dosing schedule)

Nutrition/GI

(NG not recommended)

- Clears and advance as tolerated
- When tolerating regular diet start **Miralax** PO (max 17 gm) prn no stool for 24 hours (see dosing pg.2)
- Advance to oral pain medications* once tolerating reg. diet

Pain Control*

- **Acetaminophen:** 10mg/kg/dose po q4hr (max 500mg) for pain
- **Toradol:** 0.5mg/kg/dose IV q 6hrs (max 30 mg/dose) Max 20 doses
- **Morphine:** 0.1mg/kg/dose IV q 3hr PRN pain if acetaminophen or toradol is not effective (max 5mg/dose)
- **Gabapentin** 10 mg/kg/dose po TID (max 300mg)

Activity/Consults

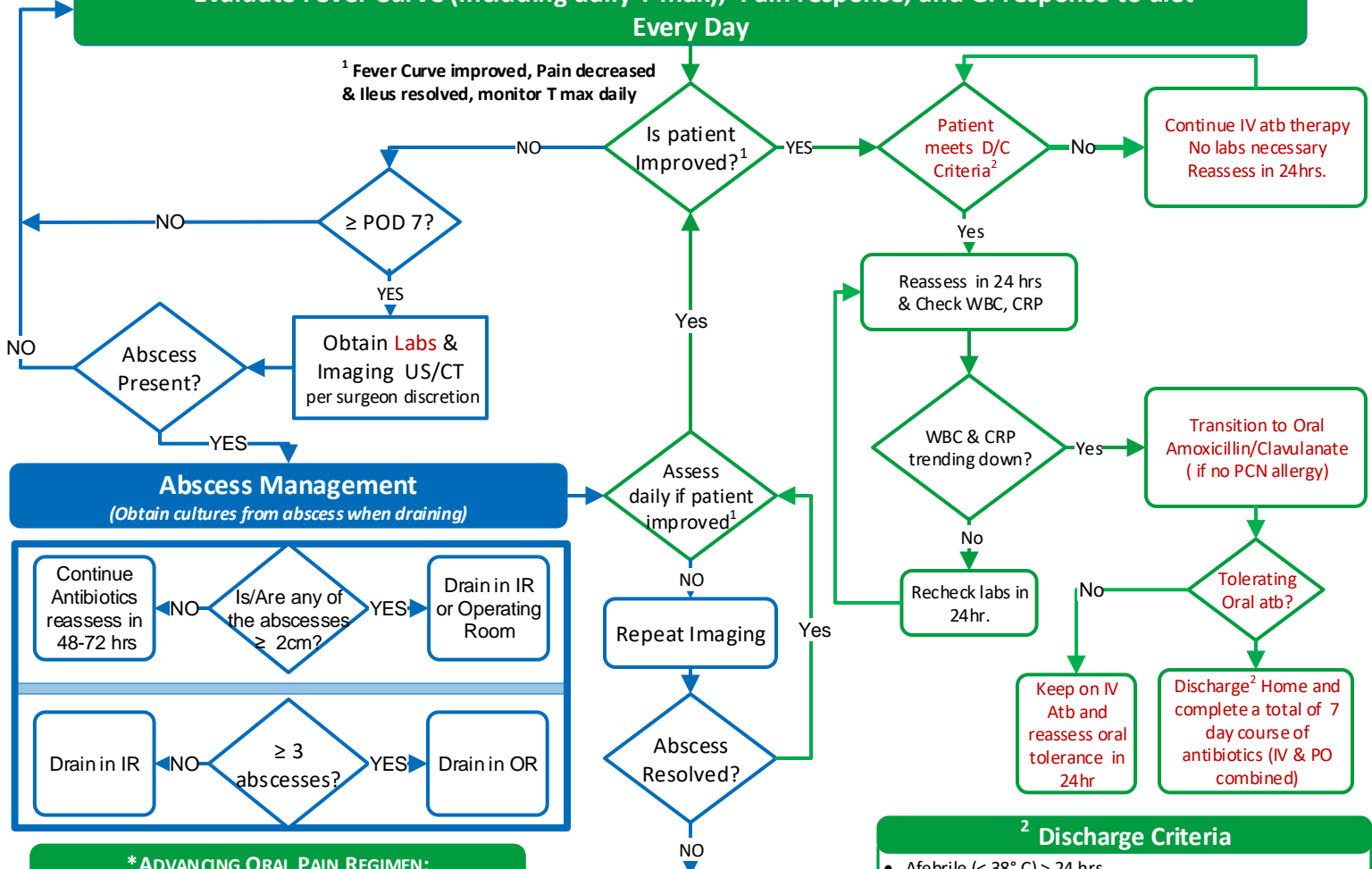
(Routine Labs not recommended)

- OOB on surgical day X1 minimally & ambulate 3x qd
- Consult Child Life
- Consult PT as needed
- Consult Nutrition as needed
- Avoid placing a foley; if used in surgery remove on POD 1

Evaluate Fever Curve (including daily T-max), Pain response, and GI response to diet

Every Day

¹ Fever Curve improved, Pain decreased & Ileus resolved, monitor T max daily



Abscess Management

(Obtain cultures from abscess when draining)

Continue Antibiotics reassess in 48-72 hrs

Is/Are any of the abscesses ≥ 2 cm?

Drain in IR or Operating Room

Drain in IR

≥ 3 abscesses?

Drain in OR

* ADVANCING ORAL PAIN REGIMEN:

Once pain controlled and tolerating po **change:**

- Toradol to **Ibuprofen** 10mg/kg/dose po q 6hr prn (max 400mg/dose)
- Morphine to : **Hydrocodone with Acetaminophen 325 mg** 0.2mg hydrocodone/kg/dose po q6hr PRN pain (max 5mg hydrocodone/dose);
- If discharged on narcotics also order Miralax qd X 5 days
- Consider Gabapentin as a discharge medication

- Return to OR/IR for drainage
- Consider ID Consult
- Assess susceptibility of organism to antibiotic
- Patient is off Guideline

² Discharge Criteria

- Afebrile ($< 38^{\circ} C$) > 24 hrs
- Tolerating regular diet
 - 50% of 3 consecutive meals
- Adequate pain control with oral medications
 - Pain score is 3 or less within 1 hr. after oral medication administered
- Benign Abdominal Exam by attending surgeon/designee
- Ambulation without assistance (250 feet)
- If discharging home with a drain, include drainage care instructions



Empiric IV Therapy for Appendicitis

Indication	Antibiotics	Dose & Schedule	Max Single Dose
Complicated Appendicitis (CA)	Ceftriaxone +	75mg/kg q 24h IV	2000mg
	Metronidazole	30 mg/kg q 24h IV	1500mg
Complicated Appendicitis with severe penicillin allergy ¹	Ciprofloxacin +	15 mg/kg q 12hr IV	400mg
	Metronidazole	30 mg/kg q 24h IV	1500mg
Complicated Appendicitis Step UP Therapy			
Complicated Appendicitis with sepsis	Piperacillin/tazobactam ²	100mg/kg q8h IV	4000mg

¹Type 1 allergy defined by urticaria or anaphylaxis

²Metronidazole does not need to be added to a regimen with piperacillin/tazobactam since anaerobic coverage is adequate with piperacillin/tazobactam

PO Stepdown Therapy

Indication	Antibiotic	Dose & Schedule	Max Single Dose
Complicated Appendicitis (CA)	Amoxicillin/Clavulanate Liquid 400mg/5mg for < 40kg	45/mg/kg/day divided BID	875 mg
	Amoxicillin/Clavulanate Tablet (875mg) for > 40kg	1 tablet BID	875mg
Complicated Appendicitis (CA) with Severe PCN Allergy	Ciprofloxacin +	15mg/kg q 12h po	500mg
	Metronidazole	10mg/kg q 8h po	500mg

MIRALAX DOSING

When tolerating regular diet start **Miralax** po (max 17 gm) prn no stool for 24 hours AND If discharged on narcotics also order Miralax qd X 5 days

- Age 1-5 years 4.25 grams (1/4 capful)
- Age 6-11 years 8.5 grams (1/2 capful)
- Age 12 and up 17 grams (1 whole capful)