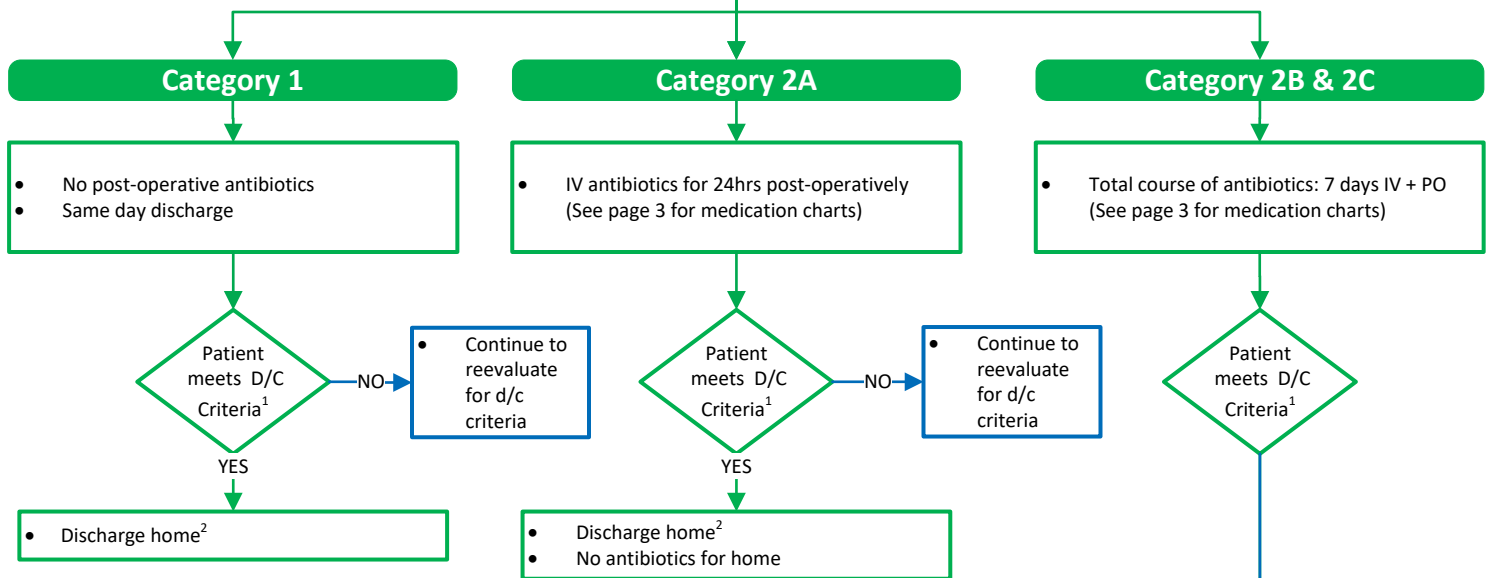


# Post Operative Appendicitis Algorithm For All Categories (1, 2A, 2B & 2C) Clinical Practice Guideline



## Immediate Post-Operative Care for All Appendicitis Categories

- Pain control – Acetaminophen, Ketorolac, Gabapentin, Morphine (for break through pain)  
- Transition to oral pain medications when tolerating regular diet  
(See page 2 for medications and dose recommendations)
- IVF
- Nausea management – Ondansetron
- Diet – Clear liquid diet and advance diet as tolerated
- OOB on day of surgery



### Categories

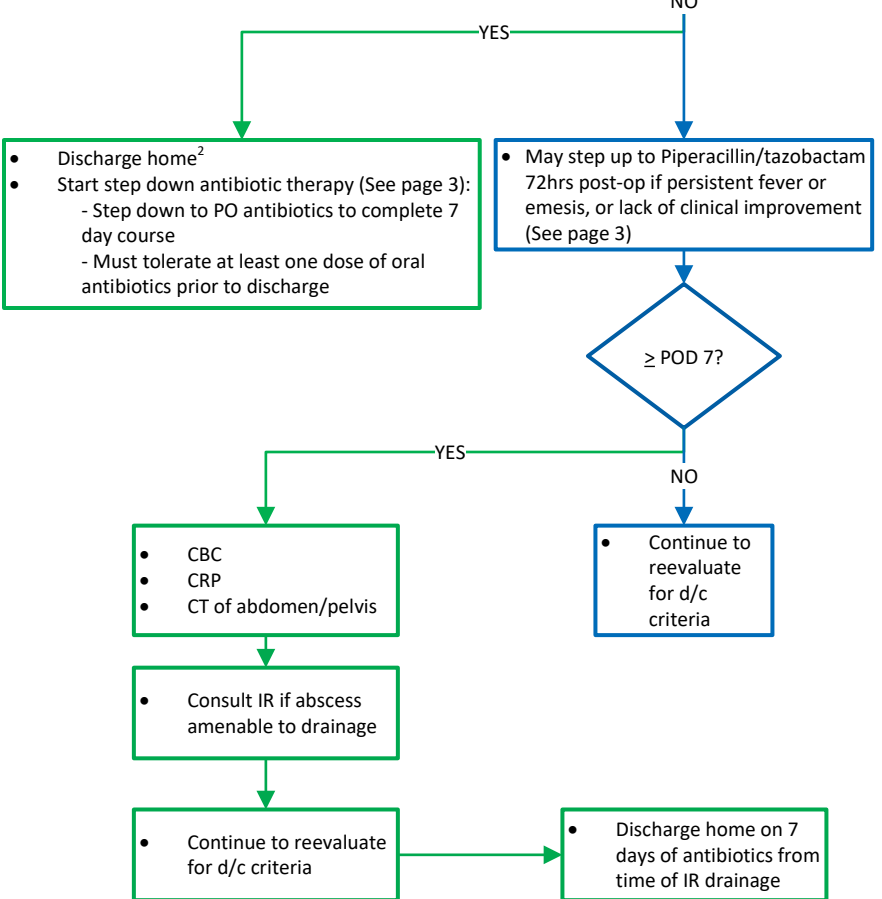
- **CATEGORY 1 (SIMPLE):** Acute appendicitis, localized peritonitis, w/o gangrene, w/o perforation, w/o abscess.
- **CATEGORY 2A: Gangrenous Appendix** – Acute appendicitis, localized peritonitis, **with gangrene**, w/ o perforation, w/o abscess.
- **CATEGORY 2B: Focal perforation** – Hole clearly in appendix, focal collection of pus in the right gutter or pelvis, small perf created during extraction, etc.
- **CATEGORY 2C: Gross contamination** – Purulence throughout abdomen/pelvis, fecal contamination, grossly perforated. Pus outside of RLQ, diffuse peritonitis, floating fecalith.

### <sup>1</sup>Discharge Criteria

- Afebrile
- Tolerating regular diet
- Adequate pain control with oral medications (See page 2 Medication charts)
- Benign abdominal exam by attending surgeon/designee
- Ambulation without assistance (250 feet)

### <sup>2</sup>Discharge Instructions

- Follow-up in 3-4 weeks via telephone, telemedicine, or clinic visit (including pathology review)
- Pain control: Acetaminophen, Ibuprofen, +/- Gabapentin (See page 2 Medication charts)



# Post Operative Appendicitis Algorithm

## For All Categories (1, 2A, 2B & 2C)

### Clinical Practice Guideline



## Post-operative Medications

Post-Operative Management		
Pain Control	Advancing Oral Pain Regimen	Polyethylene Glycol 3350 (Miralax) Dosing
<ul style="list-style-type: none"> <li>Acetaminophen: 10mg/kg/dose PO q4hr (max 500mg) or 15mg/kg/dose IV* (max 1000mg) q6hrs for pain</li> <li>Ketorolac: 0.5mg/kg/dose IV q6hrs (max 30 mg/dose) Max 20 doses</li> <li>Morphine: 0.1mg/kg/dose IV q3hr PRN pain if acetaminophen or toradol is not effective (max 5mg/dose)</li> <li>Gabapentin: 10mg/kg/dose PO TID (max 300mg)</li> </ul>	<p>Once pain controlled and tolerating PO, <i>change these medications from IV to PO</i>:</p> <ul style="list-style-type: none"> <li>Ketorolac to Ibuprofen 10mg/kg/dose PO q6hr PRN (max 400mg/dose)</li> <li>Morphine to: Hydrocodone with Acetaminophen</li> <li>Hydrocodone 0.2mg/kg/dose PO q6hr PRN pain (max 5mg Hydrocodone per dose)</li> <li>Consider Gabapentin as a discharge medication</li> </ul>	<p>When tolerating regular diet and if no stool for 24 hours, consider starting Miralax (max 17gm PO):</p> <ul style="list-style-type: none"> <li>Age 1-5 years: 4.25 grams (1/4 capful)</li> <li>Age 6-11 years: 8.5 grams (1/2 capful)</li> <li>Age 12 and up: 17 grams (1 whole capful)</li> </ul>

\* Criteria for IV Acetaminophen use:

- i. Complicated appendectomies who have been readmitted or perforated appendectomies that are high risk for ileus
- ii. Post-op ileus
- iii. Patient with history of multiple abdominal surgeries/multiple adhesions needing to be NPO >24 hours



## Post-operative Antibiotics

Empiric IV Treatment			
Indication	Antibiotics	Dose & Schedule	Max Single Dose
Complicated Appendicitis (2A, 2B & 2C)	Ceftriaxone And Metronidazole	75mg/kg q 24h IV	2000mg
		30 mg/kg q 24h IV	1500mg
Complicated Appendicitis (2A, 2B & 2C) with severe penicillin (PCN) allergy <sup>1</sup>	Ciprofloxacin And Metronidazole	15 mg/kg q 12hr IV	400mg
		30 mg/kg q 24h IV	1500mg
Complicated (2B & 2C) Appendicitis Step UP Therapy*			
Complicated (2B & 2C) Appendicitis	Piperacillin/tazobactam (Zosyn) <sup>2</sup>	100mg/kg q8h IV	4000mg

<sup>1</sup>Type 1 allergy defined by urticaria or anaphylaxis

<sup>2</sup>Metronidazole does not need to be added to a regimen with Piperacillin/tazobactam since anaerobic coverage is adequate with Piperacillin/tazobactam

**\*May step-up to Piperacillin/tazobactam 72 hours post-operatively for failure of Ceftriaxone/Metronidazole therapy or earlier for signs of sepsis**

Complicated (2B & 2C) PO Stepdown Therapy			
Indication	Antibiotic	Dose & Schedule	Max Single Dose
Complicated Appendicitis (2B & 2C)	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 (2B & 2C) with Severe PCN Allergy	Ciprofloxacin And Metronidazole	15mg/kg q 12h PO	500mg
		10mg/kg q 8h PO	500mg