

Antibiotic Recommendations for Acute Appendicitis

► BACKGROUND

This guideline was developed in conjunction with the development of an Appendicitis Care Process Model (CPM) by the Surgical Services Clinical Program. The Corporate Antimicrobial Stewardship Sub-Committee (CASS) was consulted for recommendations.

► ASSESSMENT

According to guidelines by the Surgical Infection Society and the Infectious Diseases Society of America, "appropriate antimicrobial therapy includes agents effective against facultative and aerobic gram-negative organisms and anaerobic organisms." **Ceftriaxone plus metronidazole is a recommended regimen which covers the most common organisms in community-acquired intra-abdominal infections, without providing overly broad coverage and contributing to the spread of antimicrobial resistance.**

► RECOMMENDATIONS

- CASS recommends **cefTRIAXone 2,000 mg IV q24h PLUS metroNIDAZOLE 1,500 mg IV q24h** (with pharmacist managed IV-to-PO conversion to metroNIDAZOLE 500 mg PO q8h due to concerns regarding oral tolerability) as first line therapy for adult patients with acute appendicitis.
 - We are not concerned about excess neurotoxicity associated with the use of metronidazole in this order set. Based on a review of the literature, we feel metronidazole-induced acute neurotoxicity to be rare and reversible, and not more prevalent or toxic than alternative regimens.
 - We recommend avoiding long-term use of metronidazole (> 3 weeks) when possible given the risk of peripheral neuropathy, which has in some cases been very slow to resolve.
- In patients with cephalosporin allergies, we recommend **ertapenem 1 g IV q24h**
- CASS would be supportive of either **amoxicillin-clavulante 875 mg PO BID** or **levofloxacin 500 mg PO daily PLUS metroNIDAZOLE 500 mg PO q8h** (penicillin allergy) as oral step-down regimens.

REFERENCES

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These guidelines apply to common clinical circumstances, and may not be appropriate for certain patients and situations. The treating clinician must use judgment in applying guidelines to the care of individual patients.