Oral Antibiotics for Non-operative Treatment of Community-Acquired Appendicitis and Diverticulitis

These guidelines provide oral antibiotic recommendations for patients with minimal healthcare exposure experiencing acute uncomplicated appendicitis or diverticulitis for whom non-operative management has been selected by the clinician.

- Empiric antimicrobial therapy should cover the most likely organisms to cause intra-abdominal infections including Gram-negative Enterobacterales, aerobic streptococci, and obligate enteric anaerobes
- Resistance rates of *E. coli* and *Bacteroides* spp. to commonly used antibiotics have been globally increasing
- The typical antibiotic course is 5-7 days, either initiated with oral therapy or following a brief IV course
- Infectious Disease or ADSP consultation is recommended for immunocompromised hosts, patients with recent antibiotic use, or those with a history of infection or colonization with antibiotic resistant organisms such as *Pseudomonas aeruginosa*, ESBL-producing Enterobacterales, or *Enterococcus* spp.
- Due to the lack of data suggesting superiority of one oral antibiotic regimen over others, the following antibiotic recommendations are based on the Surgical Infection Society guidelines, literature review, and local susceptibility patterns

Antibiotic Recommendations	
First-line	Cephalexin 1000 mg PO q8h[1] + metronidazole 500 mg PO q12h
Alternative if contraindication or severe or life-threatening allergy[2] to above	(Ciprofloxacin 500 mg PO q12h[1] or levofloxacin 500 mg PO q24h[1]) + metronidazole 500 mg PO q12h
Alternative if unable to tolerate metronidazole	Moxifloxacin 400 mg PO q24h[3]

[1] Consult package insert or pharmacist for renal dose adjustment if patient has renal dysfunction: renal dose adjustments
[2] Refer to β-lactam cross-reactivity chart to assess if alternate β-lactam is safe to use: cross reactivity chart or contact ADSP pharmacist
[3] Alternative due to increasing rates of anaerobic resistance

Antibiotic	Inpatient *E. coli* Susceptibility[1]	ED *E. coli* Susceptibility[2]	Cost for 5d Course[3]
Amoxicillin-clavulanate	67%	60%	$4-$17
Cefpodoxime[4]	89%	85%	$15-$31
Cefuroxime[4]	84%	No local data	$4-$31
Cephalexin	78%	80%	$3-$15
Ciprofloxacin	69%	71%	$5-$15
Levofloxacin	64%	67%	$6-$28
Moxifloxacin (Non-formulary)	70%	64%	$7-$38
TMP-SMX	72%	73%	$3-$8

[1] Based on NMH Inpatient Antibiogram from 6/23/2021-6/24/2022
[2] Based on NMH ED Antibiogram from 6/23/2021-6/24/2022
[3] Cost data obtained from GoodRx (assuming patient has no insurance coverage or antibiotic is not covered by insurance)
[4] Less preferred due to limited accessibility in community pharmacies, increased costs, and potential drug interaction with acid suppressing medications