

ANMC Antibiotic Guidelines for Gastrointestinal Surgical Prophylaxis

Suspected Pathogens

Polymicrobial process:

- Staph. aureus
- Enterobacteriaceae
- *Anaerobes (including Bacteroides)
- Enterococcus sp.
- Strep. sp.

*Anaerobes less significant unless bile duct to bowel anastomosis or fistula present for cholecystectomy patients

Intraoperative Re-dosing Frequency

- Cefazolin: 4 hours
- Clindamycin: 6 hours
- Gentamicin: N/A
- Levofloxacin: N/A
- Metronidazole: N/A

Antibiotic Selection

Procedure	Adult Treatment Options	Pediatric Treatment Options
<p>Lower GI Tract</p> <ul style="list-style-type: none"> • Colectomy • Uncomplicated appendectomy • Small bowel obstruction 	<p><u>Preferred Therapy:</u></p> <ul style="list-style-type: none"> • Cefazolin IV PLUS <ul style="list-style-type: none"> ○ Weight < 120 kg: 2g ○ Weight ≥ 120 kg: 3g • Metronidazole 500mg IV <p><u>Anaphylactic Beta-Lactam Allergy:</u></p> <ul style="list-style-type: none"> • Levofloxacin 500mg IV PLUS • Clindamycin 900mg IV 	<p><u>Preferred Therapy:</u></p> <ul style="list-style-type: none"> • Cefazolin 30 mg/kg IV (max dose 2g) PLUS • Metronidazole 10 mg/kg IV (max dose 500mg) <p><u>Anaphylactic Beta-Lactam Allergy:</u></p> <ul style="list-style-type: none"> • Gentamicin 2.5 mg/kg IV PLUS • Clindamycin 10 mg/kg IV (max dose 900mg)
<p>Gastroduodenal</p> <ul style="list-style-type: none"> • Cholecystectomy • Whipple • Bypass surgery 	<p><u>Preferred Therapy:</u></p> <ul style="list-style-type: none"> • Cefazolin IV <ul style="list-style-type: none"> ○ Weight < 120 kg: 2g ○ Weight ≥ 120 kg: 3g <p><u>Anaphylactic Beta-Lactam Allergy:</u></p> <ul style="list-style-type: none"> • Clindamycin 900mg IV 	<p><u>Preferred Therapy:</u></p> <ul style="list-style-type: none"> • Cefazolin 30 mg/kg IV (max dose 2g) <p><u>Anaphylactic Beta-Lactam Allergy:</u></p> <ul style="list-style-type: none"> • Clindamycin 10 mg/kg IV (max dose 900mg)

CONSIDERATIONS

- Post-operative antibiotic dosing is optional, but if given should be discontinued within 24 hours of surgery
- Bowel preparation with oral antimicrobial decontamination(neomycin) prior to colectomy remains controversial, however, Nichols bowel prep has been revitalized at ANMC and may be considered for elective colorectal resection
- Due to *E.coli* resistance >10%, empiric quinolone use alone is cautioned in high-risk/severe cases

Antimicrobial Stewardship Program Approved May 2017; Updated June 19, 2019

Joint Surgical Infection Society and Infectious Diseases Society of America Guidelines (CID 2010:50); Clinical Practice Guidelines for Antimicrobial Prophylaxis in Surgery (ASHP 2013;70(3))