University of Nebraska Medical Center
Nebraska Medicine

Antibiotics for Complicated Diverticulitis

Introduction

Complicated diverticulitis is generally defined as diverticulitis which requires hospitalization and is often associated with abscess, perforation, obstruction, or fistula formation. Patients who are elderly (>70 yrs), significantly immunocompromised, or those with severe symptoms, signs of sepsis, or clinical instability would also be considered complicated. Uncomplicated diverticulitis can be managed as an outpatient and does not require antibiotics.

For complicated diverticulitis, when feasible and indicated, obtaining source control with appropriate cultures will provide optimal information for antibiotic management allowing targeting of organisms isolated from culture.

However, there are circumstances in which source control is not achievable (e.g., microperforation) and cultures are not obtained. In these circumstances, the following empiric regimens are reasonable. These regimens would also be appropriate for initial therapy pending culture data in those who have undergone drainage. Of note, in the setting of increasing antimicrobial resistance among Enterobacterales, rates of failure may be higher when culture data is not available.

Empiric INTRAVENOUS Antibiotics

Preferred: Ceftriaxone 2g IV daily PLUS Metronidazole 500mg IV/PO BID
- Alternative: Piperacillin-tazobactam 4.5g q8h IV over 4 hours

If septic shock: add amikacin 15mg/kg IV x 1 to one of the above regimens
If history of intra-abdominal *Pseudomonas*: Piperacillin-tazobactam 4.5g IV q8h over 4 hours
If history of ESBL colonization: Ertapenem 1g IV daily
If penicillin allergy: Ceftriaxone 2g IV PLUS metronidazole 500mg IV/PO BID
- If severe penicillin allergy (e.g., anaphylaxis): consider “graded challenge” order set for ceftriaxone.
  - For more details, see UNMC ASP penicillin allergy guidance document
- If cephalosporin allergy: use UNMC ASP non-penicillin beta-lactam allergy guidance document, in particular Figure 1, to choose a regimen that does not have structural similarity.
  - Options may still include IV piperacillin-tazobactam, IV ceftriaxone with metronidazole, IV cefepime with metronidazole, or IV ertapenem 1g daily administered as either full dose or graded challenge, depending on whether there is cross-reactivity risk. Consider ID consult.

Empiric ORAL Antibiotics

Preferred: Levofloxacin 750mg PO daily PLUS metronidazole 500mg PO BID
- Alternative: Amoxicillin-clavulanate 875-125mg PO BID

Penicillin allergy: Levofloxacin 750mg PO daily PLUS metronidazole 500mg PO BID

Duration of Therapy

- If source control achieved: 5 days
- If no source control achieved: 7-10 days pending clinical response

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