



Monitoring Off Antibiotics: Acute Uncomplicated Diverticulitis

Traditionally, diverticulitis has been regarded as an infection in the large intestine that is treated with antibiotics. However, antibiotic use is not benign and some patients can resolve diverticulitis without antibiotics. Which patients with diverticulitis can be monitored off antibiotics?

When is diverticulitis considered uncomplicated?

Uncomplicated diverticulitis is inflammation of colonic diverticula in the **absence** of peritonitis, abscess, obstruction, stricture and/or fistula.¹

What do guidelines recommend?

The American Gastroenterological Association (AGA) and the American Society of Colon and Rectal Surgeons recommend **selective**, as opposed to routine, antibiotic use in the treatment of acute uncomplicated diverticulitis.^{1,2} The AGA advises using antibiotics in acute uncomplicated diverticulitis when factors are present including: immunocompromise, frailty, comorbidities, refractory symptoms or vomiting, CRP >140 mg/L, or WBC >15,000 cells/mL.¹

What's the evidence?

Several randomized controlled trials have assessed the need for antibiotics in uncomplicated diverticulitis.³⁻⁷ Most of these studies included hospitalized patients, but one study included outpatients that were discharged from the emergency room.⁶ **No difference in time to recovery or complications** (e.g. abscess, perforation) has been seen between antibiotics and no-antibiotics over a 6-12 month follow-up period.^{3,4} One study found **decreased length of hospital stay** with observation without antibiotics.⁴ Furthermore, **no difference in readmission within 1 week, readmission within 30 days, or adverse effects** has been demonstrated with and without the use of antibiotics.⁵ In patients discharged from the ED, there was **no difference in subsequent hospitalization rate** between those treated with and without antibiotics.⁶ In long term follow up of patients included in one randomized controlled trial with a median follow up of 11 years, **no differences in recurrences, complications, surgery for diverticulitis, or colorectal cancers** was detected between patients who were treated and not treated with antibiotics.⁸

Key Takeaway: Antibiotics have demonstrated no clinical benefit in patients with uncomplicated diverticulitis. The benefits do not outweigh the risks of antibiotics in immunocompetent patients with mild, acute uncomplicated diverticulitis.

References:

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