

# Management of acute diverticulitis

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## 1 Emergency department visits and hospital admissions for acute diverticulitis have increased

Emergency department visits for acute diverticulitis increased by 26.8% to 113.9 visits per 100 000 from 2006 to 2013 in the United States.<sup>1</sup> Hospital admissions for diverticulitis increased 7.5% annually from 190 per 100 000 in 2008 to 310 per 100 000 in 2015 in Europe; the increase occurred predominantly among patients aged younger than 60 years.<sup>2</sup> Insufficient consumption of dietary fibre is associated with this rise.

## 2 Symptoms of diverticulitis may be driven by inflammation rather than infection

Contemporary evidence shows that use of antibiotics in uncomplicated cases of diverticulitis neither accelerates recovery nor improves outcomes.<sup>2</sup> A recent study has suggested that chronic inflammation secondary to environmental risk factors and alterations of the gut microbiome are now favoured causes over microperforation or bacterial translocation.<sup>3</sup>

## 3 Most patients with uncomplicated diverticulitis can be treated as outpatients with nonopiate analgesia rather than antibiotics

Cross-sectional imaging that shows inflamed colonic diverticula without perforation or abscess defines uncomplicated diverticulitis. Two randomized controlled trials that compared antibiotic and nonantibiotic treatment reported no difference in recovery time, treatment duration or rate of recurrence.<sup>4,5</sup> Updated guidelines recommend reserving antibiotics for patients taking immunosuppressive medications and those with sepsis.<sup>1,2</sup> Treating symptoms with nonopiate analgesics avoids worsening bowel function and contributing to opiate dependence.

## 4 Evidence of complicated diverticulitis should prompt emergent surgical assessment and antibiotic treatment

Complicated diverticulitis, defined as radiologic evidence of perforation or intra-abdominal abscess, has a 30-day mortality rate of 8.7%.<sup>2</sup> Antibiotic therapy is indicated, and many patients require admission to hospital.<sup>1</sup> Percutaneous drainage of large abscesses (> 3 cm) or emergency surgery may be required.<sup>2</sup>

## 5 Colonoscopy and elective colon resection are not routinely required after resolution of uncomplicated diverticulitis

Only 8.7% of patients with uncomplicated diverticulitis will present to hospital with a second episode.<sup>1</sup> Elective surgery should be determined by frequency and severity of symptoms, rather than prevention of future complications.<sup>2</sup> Risk of malignant disease after uncomplicated left-sided diverticulitis is similar to that of the general population (1%), and standard colon cancer screening guidelines should be followed.<sup>1</sup> Complicated diverticulitis warrants an interval colonoscopy, typically 6 weeks after resolution.<sup>1</sup>

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