# NICE on the management of diverticular disease

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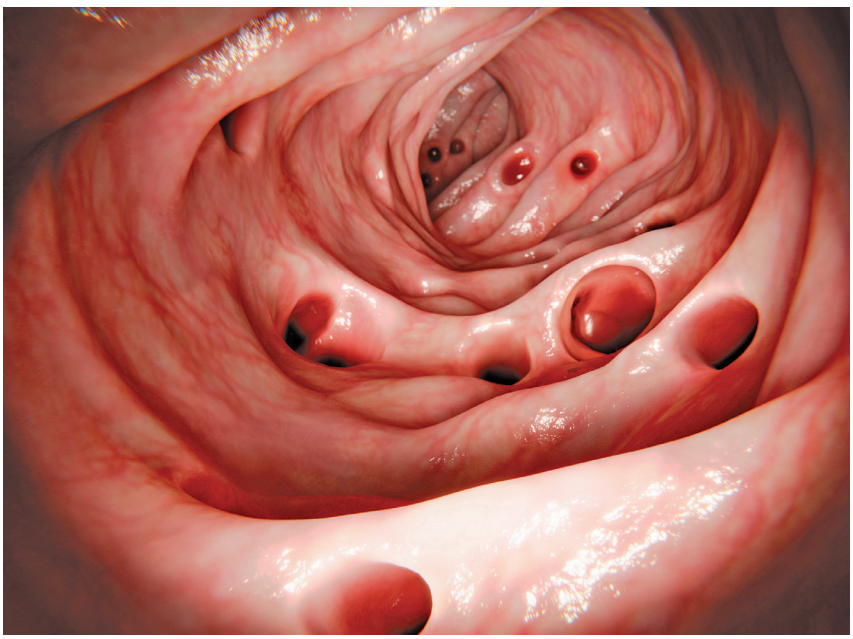
**NICE's guideline on the management of diverticular disease in adults (NG147) aims to improve diagnosis and care, and to help patients get timely advice about symptoms and when to seek help. This article provides an overview of the guidance.**



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This relatively short guideline on the diagnosis and management of diverticular disease in adults (NG147)[1] includes recommendations covering the full range of presentations, from asymptomatic diverticulosis to emergency surgery for complicated acute diverticulitis. It is divided into four sections: diverticulosis, diverticular disease, acute diverticulitis, and providing information to patients and their families.

## Diverticulosis

The management of diverticulosis primarily involves lifestyle change – a healthy balanced diet with sufficient fibre (whole grains, fruit and vegetables), exercise, weight loss for the overweight, adequate fluid intake and smoking cessation. There is no need to avoid seeds, nuts, popcorn or fruit skins, and if an increase in dietary fibre is necessary, this should be gradual to minimise flatulence and bloating. A bulk-forming laxative may be indicated for constipation.

## Diverticular disease

Diverticular disease should be suspected if typical symptoms are present (intermittent abdominal pain with constipation, diarrhoea or occasional large rectal bleeding). Pain and tenderness are often localised to left lower quadrant of the abdomen but in some, notably people of Asian origin, the right lower quadrant may be affected instead.

Unfortunately, these symptoms are not specific and may also suggest irritable bowel syndrome, colitis and malignancy. Routine referral is unnecessary if endoscopy and other investigations can be organised from primary care, but if cancer is suspected, the recommendations of the NICE 2015 guideline *Suspected Cancer: Recognition and Referral* (NG12)[2] should be followed. Suspected colitis is also an indication for referral.

Uncomplicated diverticular disease can often be managed by lifestyle changes (adequate fluid, stopping smoking, weight loss, increasing fibre intake and exercise),

plus a bulk-forming laxative if necessary for persistent constipation or diarrhoea, and paracetamol or antispasmodics for abdominal pain or cramping. Antibiotics should not be prescribed, and NSAIDs and opioids should be avoided if possible as they may increase the risk of perforation. Persistent unresponsive symptoms y suggest an alternative diagnosis.

## Acute diverticulitis

Constant, usually severe, abdominal pain localised to in the left lower quadrant (or right in a minority of people), associated with fever, sudden change in bowel habit, significant rectal bleeding or passage of mucus from the rectum, or a palpable abdominal mass or distention in someone with a history of diverticulosis or diverticulitis, suggest acute diverticulitis. If this initially seems like uncomplicated disease, the patient should be reassessed if symptoms worsen, with referral in mind.

Suspected complicated acute diverticulitis is an indication for same-day hospital assessment, if someone has uncontrolled pain plus signs and symptoms that indicate bowel perforation, peritonitis, abscess, sepsis, fistula into the bladder or vagina, or intestinal obstruction. NICE provides a table of red-flag signs and symptoms to look for. Initial investigations should include a full blood count, and measurement of urea and electrolytes and C-reactive protein. Imaging (preferably using contrast CT) should be carried out within 24 hours of hospital admission if inflammatory markers are raised; if they are not, alternative diagnoses should be considered.

Someone with acute diverticulitis who is systemically well should not be offered antibiotics but simple analgesia (*eg* paracetamol) and asked to come back if their symptoms get worse or do not go away. Patients who are systemically unwell, immunosuppressed or have significant co-morbidity should be offered an antibiotic – orally for uncomplicated disease or intravenously if admitted for complicated acute diverticulitis. NICE lists the antibiotics indicated for each indication; co-amoxiclav is the drug of first choice for both oral and intravenous administration.

If sepsis or an abscess is suspected, management should follow the NICE guidance on sepsis (NG51, 2016),[3] and antibiotics should be prescribed in line with the recommendations provided. Imaging to demonstrate the size and location of the abscess should guide subsequent treatment. If the abscess can be drained, pus samples should be sent for microbiological assessment. If there is no improvement in someone with a CT-confirmed abscess, there may be a need for further imaging. Abscesses more than 3cm in diameter should be managed by percutaneous drainage or surgery; patients with abscesses less than 3cm should be switched to oral antibiotics if possible.

Diverticular perforation with generalised peritonitis should be managed by laparoscopic lavage or (and definitely for faecal peritonitis) resectional surgery. NICE provides a table detailing the risks and benefits of laparoscopic lavage *vs* resectional surgery. There was no significant difference between them in quality of life scores, though a stoma may be needed after resectional surgery. There was some benefit in mortality for lavage, although the evidence was very uncertain.

Similarly, guidance on the choice of surgical procedure (primary anastomosis or Hartmann's procedure) is limited by uncertainty about the evidence, and NICE recommends either of these as options for complicated acute diverticulitis, taking into account the patient's age and co-morbidities. Elective surgery using open or laparoscopic resection should be considered in patients who have recovered from complicated acute diverticulitis but have continuing symptoms, *eg* stricture or fistula. An aminosalicylate or antibiotic should not be offered to prevent recurrent acute diverticulitis.

## Patient information

Patients and their families should have information about diet and lifestyle, how their disorder may progress, and recognising and managing symptoms. They should be aware of when to seek medical advice, and should also understand their management choices and the likely outcomes for each.

## Summary

NICE has packed a lot of recommendations into a small guideline on diverticular disease. It makes specific recommendations about many aspects of management but acknowledges that some interventions have little evidence to guide decision-making. Patients and their families play a central role in optimising outcomes by adopting a healthy diet and lifestyle, and being fully aware of the treatment choices.

## References

1. National Institute for Health and Care Excellence. *Diverticular disease: diagnosis and management*. NG147. November 2019. Available from: https://www.nice.org.uk/guidance/ng147
2. National Institute for Health and Care Excellence. *Suspected cancer: recognition and referral.* NG12. June 2015. Available from: https://www.nice.org.uk/guidance/ng12
3, National Institute for Health and Care Excellence. Sepsis: recognition, diagnosis and early management. NG51. July 2016 (updated September 2017). Available from: https://www.nice.org.uk/guidance/ng51

## Declaration of interests

None to declare.

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