NICE National Institute for Health and Care Excellence

NICE Pathways

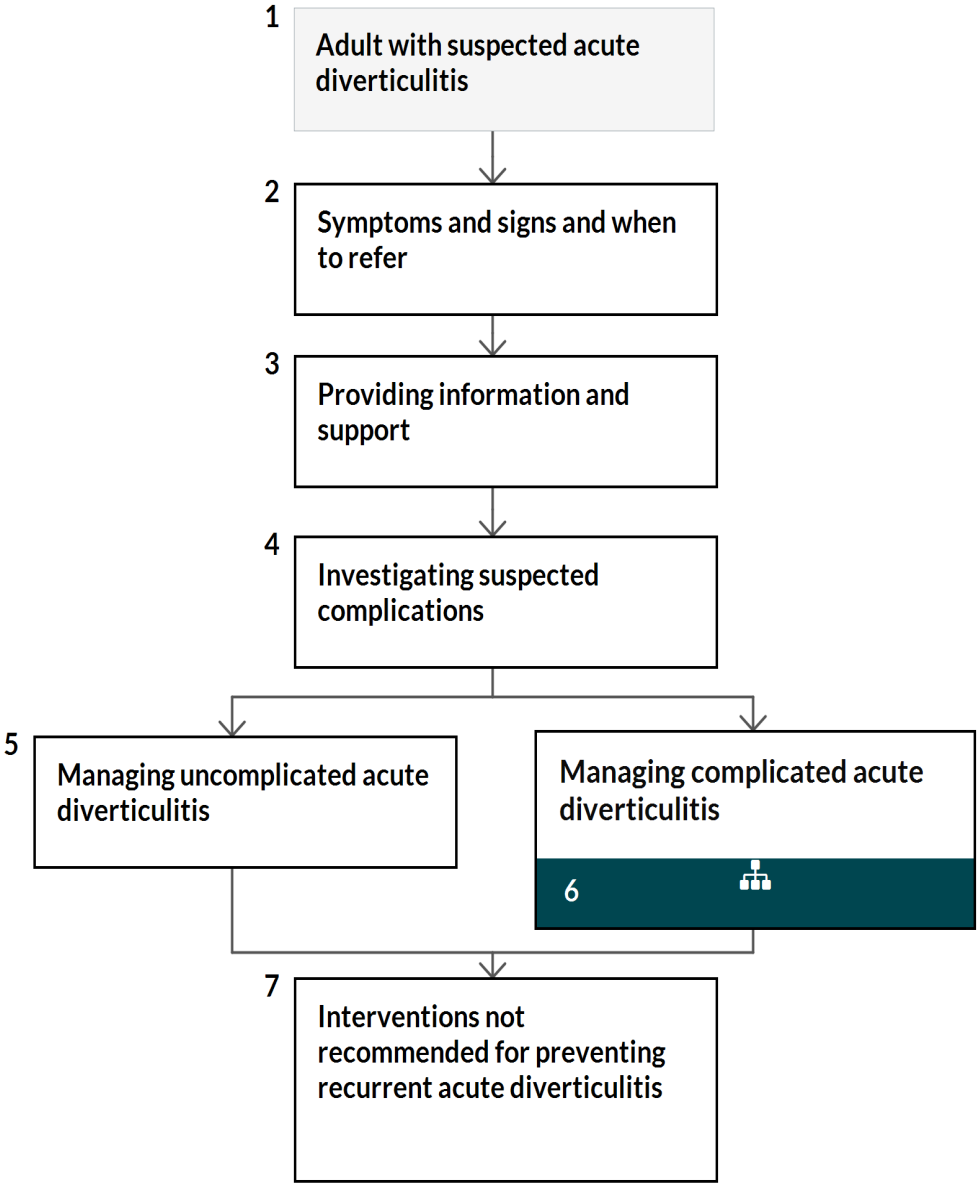
Acute diverticulitis

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

http://pathways.nice.org.uk/pathways/diverticular-disease
NICE Pathway last updated: 02 November 2020

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



1 Adult with suspected acute diverticulitis

No additional information

2 Symptoms and signs and when to refer

Symptoms and signs

Suspect acute diverticulitis if a person presents with constant abdominal pain, usually severe and localising in the left lower quadrant, with any of the following:

- fever **or**
- sudden change in bowel habit and significant rectal bleeding or passage of mucous from the rectum **or**
- tenderness in the left lower quadrant, a palpable abdominal mass or distention on abdominal examination, with a previous history of diverticulosis or diverticulitis.

Be aware that in a minority of people and in people of Asian origin, pain and tenderness may be localised in the right lower quadrant.

See the NICE guideline to find out why we made this recommendation and how it might affect practice.

Complications and when to refer

Suspect complicated acute diverticulitis and refer for same-day hospital assessment if the person has uncontrolled abdominal pain and any of the features in the table on symptoms and signs that suggest complicated acute diverticulitis [See page 7].

See the NICE guideline to find out why we made this recommendation and how it might affect practice.

For people with suspected uncomplicated acute diverticulitis who are not referred for same-day hospital assessment:

- reassess in primary care if their symptoms persist or worsen **and**
- consider referral to secondary care for further assessment.

See the NICE guideline to find out why we made this recommendation and how it might affect

practice.

3 Providing information and support

Give people with acute diverticulitis, and their families and carers where appropriate, verbal and written information on:

- diet and lifestyle
- the course of acute diverticulitis and likelihood of complicated disease or recurrent episodes
- symptoms
- when and how to seek further medical advice
- possible investigations and treatments
- risks of interventions and treatments, including antibiotic resistance, and how invasive these are
- role of surgery and outcomes (postoperative bowel function and symptoms).

See the NICE guideline to find out why we made this recommendation and how it might affect practice.

NICE has written information for the public on diverticular disease.

4 Investigating suspected complications

For people with suspected complicated acute diverticulitis who have been referred for same-day hospital assessment, offer a full blood count, urea and electrolytes test and C-reactive protein test.

If the person with suspected complicated acute diverticulitis has raised inflammatory markers, offer a contrast CT scan within 24 hours of hospital admission to confirm diagnosis and help plan management. If contrast CT is contraindicated, perform one of the following:

- a non-contrast CT **or**
- an MRI **or**
- an ultrasound scan, depending on local expertise.

If inflammatory markers are not raised think about the possibility of alternative diagnoses.

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

5 Managing uncomplicated acute diverticulitis

For people with acute diverticulitis who are systemically well:

- consider a no antibiotic prescribing strategy
- offer simple analgesia, for example paracetamol
- advise the person to re-present if symptoms persist or worsen.

Offer an antibiotic prescribing strategy if the person with acute diverticulitis is systemically unwell, is immunosuppressed or has significant comorbidity.

Offer oral antibiotics if the person with acute diverticulitis is systemically unwell but does not meet the criteria for referral for suspected complicated acute diverticulitis.

If the person has CT-confirmed uncomplicated acute diverticulitis, review the need for antibiotics and discharge them depending on any co-existing medical conditions.

When prescribing an antibiotic for suspected or confirmed acute diverticulitis, follow the advice in the table on antibiotics for adults aged 18 years and over with suspected or confirmed acute diverticulitis [See page 7].

NICE has produced a visual summary on antimicrobial prescribing for diverticular disease.

For guidance on medicines optimisation and effective antimicrobial use, see the NICE Pathways on medicines optimisation and antimicrobial stewardship.

Rationale and impact

See the NICE guideline to find out why we made these recommendations and how they might affect practice.

6 Managing complicated acute diverticulitis

See Diverticular disease / Managing complicated acute diverticulitis

7 Interventions not recommended for preventing recurrent acute diverticulitis

Do not offer aminosalicylate or antibiotics to prevent recurrent acute diverticulitis.

See the NICE guideline to find out why we made this recommendation and how it might affect practice.

Symptoms and signs that suggest complicated acute diverticulitis

Symptom or sign	Possible complication
Abdominal mass on examination or peri-rectal fullness on digital rectal examination	Intra-abdominal abscess
Abdominal rigidity and guarding on examination	Bowel perforation and peritonitis
Altered mental state, raised respiratory rate, low systolic blood pressure, raised heart rate, low tympanic temperature, no urine output or skin discolouration	Sepsis (see the NICE Pathway on sepsis)
Faecaluria, pneumaturia, pyuria or the passage of faeces through the vagina	Fistula into the bladder or vagina
Colicky abdominal pain, absolute constipation (passage of no flatus or stool), vomiting or abdominal distention	Intestinal obstruction

Antibiotics for adults aged 18 years and over with suspected or confirmed acute diverticulitis

Antibiotic[1]	Dosage and course length[2]
First-choice oral antibiotic for suspected or confirmed uncomplicated acute diverticulitis	
Co-amoxiclav	500/125 mg three times a day for 5 days

[1] See BNF for appropriate use and dosing in specific populations, for example, hepatic impairment, renal

impairment, pregnancy and breastfeeding, and administering intravenous (or, where appropriate, intramuscular) antibiotics.

[2] A longer course may be needed based on clinical assessment. Continue antibiotics for up to 14 days in people with CT-confirmed diverticular abscess.

Alternative first-choice oral antibiotics if penicillin allergy or co-amoxiclav unsuitable	
Cefalexin (caution in penicillin allergy) **with** metronidazole	**Cefalexin:** 500 mg twice or three times a day (up to 1 to 1.5 g three or four times a day for severe infection) for 5 days **Metronidazole:** 400 mg three times a day for 5 days
Trimethoprim **with** metronidazole	**Trimethoprim:** 200 mg twice a day for 5 days **Metronidazole:** 400 mg three times a day for 5 days
Ciprofloxacin (only if switching from IV ciprofloxacin with specialist advice; consider safety issues[1]) **with** metronidazole	**Ciprofloxacin:** 500 mg twice a day for 5 days **Metronidazole:** 400 mg three times a day for 5 days
First-choice intravenous antibiotics[2] for suspected or confirmed complicated acute diverticulitis	
Co-amoxiclav	1.2 g three times a day
Cefuroxime **with** metronidazole	**Cefuroxime:** 750 mg three or four times a day (increased to 1.5 g three or four times a day if severe infection) **Metronidazole:** 500 mg three times a day
Amoxicillin **with** gentamicin **and** metronidazole	**Amoxicillin:** 500 mg three times a day (increased to 1 g four times a day if severe infection)

[1] See MHRA advice for restrictions and precautions for using fluoroquinolones due to very rare reports of disabling and potentially long-lasting or irreversible side effects affecting musculoskeletal and nervous systems. Warnings include: stopping treatment at first signs of a serious adverse reaction (such as tendonitis), prescribing with special caution for people over 60 years and avoiding coadministration with a corticosteroid (March 2019).

[2] Review intravenous antibiotics within 48 hours or after scanning if sooner and consider stepping down to oral antibiotics where possible.

	Gentamicin: Initially 5 to 7 mg/kg once a day, subsequent doses adjusted according to serum gentamicin concentration[1] **Metronidazole:** 500 mg three times a day
Ciprofloxacin[2] (consider safety issues) **with** metronidazole	**Ciprofloxacin:** 400 mg twice or three times a day **Metronidazole:** 500 mg three times a day
Alternative intravenous antibiotics	
Consult local microbiologist	

Glossary

Acute diverticulitis

(sudden inflammation or infection associated with diverticula; symptoms include constant abdominal pain, usually severe and localising in the left lower quadrant; other features, including fever, may also be present)

Complicated acute diverticulitis

(the presence of complications associated with inflamed or infected diverticula; these complications may include abscess, fistula, stricture perforation and sepsis)

Sources

Diverticular disease: diagnosis and management (2019) NICE guideline NG147

[1] Therapeutic drug monitoring and assessment of renal function is required (BNF, August 2019).

[2] Only in people with allergy to penicillins and cephalosporins.

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to

have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.