

## GUIDELINES

# Diagnosis and management of irritable bowel syndrome in adults in primary care: summary of NICE guidance

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### Why read this summary?

Irritable bowel syndrome (IBS) is a chronic, relapsing, and often lifelong condition of unknown aetiology,<sup>1</sup> often associated with non-colonic symptoms. In clinical practice IBS is often diagnosed by the exclusion of more serious illnesses by unnecessary investigations and inappropriate referral. This article summarises the most recent guidance on IBS from the National Institute for Health and Clinical Excellence (NICE); the guidelines cover the diagnosis and management of the syndrome, reflecting the complete patient journey from presentation to positive diagnosis and management.<sup>2</sup>

### Recommendations

NICE recommendations are based on systematic reviews of best available evidence. When minimal evidence is available, recommendations are based on the guideline development group's opinion of what constitutes good practice. Evidence levels for the recommendations are given in *italic* in square brackets.

### Assessment

- Consider the diagnosis of IBS if abdominal pain or discomfort, bloating, or a change in bowel habit are reported by the patient for at least six months.
- All people presenting with possible IBS symptoms should be asked if they have any of the following "red flag" indicators; if they do, they should be referred to secondary care for further investigation (if cancer is suspected, see the NICE guideline 27<sup>3</sup>).
  - unintentional and unexplained weight loss
  - rectal bleeding
  - a recent change in bowel habit to looser and/or more frequent stools that has persisted for more than six weeks in a patient aged over 60 years
  - a family history of bowel or ovarian cancer.
- Patients should be assessed and clinically examined for the following red flag indicators and be referred to secondary care for further investigation if any of these are present (if cancer is suspected, see the NICE guideline 27<sup>3</sup>). If there is serious concern that the symptoms may suggest

ovarian cancer, a pelvic examination should also be considered.

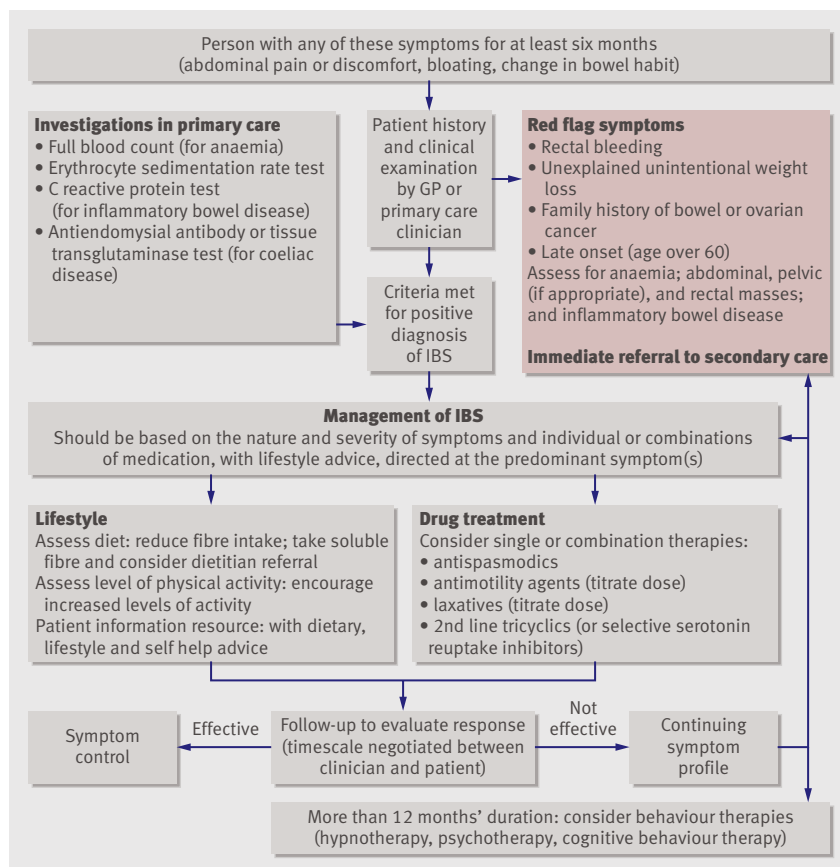
- anaemia
- abdominal masses
- rectal masses
- raised inflammatory markers.

The figure is an algorithm that incorporates red flag criteria for urgent referral to secondary care.<sup>3</sup>

### Use of diagnostic criteria

- Consider a positive diagnosis of IBS only if the person complains of abdominal pain or discomfort that is either relieved by defecation or associated with altered bowel frequency or altered stool form. This pain or discomfort must also be accompanied by at least two of the following four symptoms (other features such as lethargy, nausea, backache, and bladder symptoms are common in people with IBS, and may be used to support the diagnosis).
  - altered stool passage (straining, urgency, incomplete evacuation)
  - abdominal bloating (less common in men than women), distension, tension, or hardness
  - symptoms made worse by eating
  - passage of mucus.
- In people who meet the IBS diagnostic criteria, do the following tests to exclude other diagnoses.
  - full blood count
  - erythrocyte sedimentation rate or plasma viscosity
  - C reactive protein
  - antibody testing for coeliac disease (endomysial antibodies or tissue transglutaminase).
- The following tests are not necessary to confirm diagnosis in people who meet the IBS diagnostic criteria.
  - ultrasonography
  - rigid or flexible sigmoidoscopy
  - colonoscopy
  - barium enema
  - thyroid function test
  - microscopy and culture for faecal ova and parasite

This is one of a series of *BMJ* summaries of new guidelines, which are based on the best available evidence; they will highlight important recommendations for clinical practice, especially where uncertainty or controversy exists. The supporting evidence statements and further information about the guidance are in the version on [bmj.com](http://bmj.com).



Algorithm showing process for diagnosing and managing irritable bowel syndrome

- faecal occult blood test
- hydrogen breath test (for lactose intolerance and bacterial overgrowth).

#### Management

- As diet and lifestyle may trigger or exacerbate symptoms, explain the importance of self help in effectively managing IBS. This should include providing information on general lifestyle, physical activity, diet, and medication targeted at symptoms (such as laxatives for constipation or antimotility agents for diarrhoea).
- As many people with IBS have excess fibre in their diet, which may exacerbate symptoms, review fibre intake and adjust it according to symptoms. Usually patients should cease high fibre diets (18 g dietary fibre a day) and aim for a daily fibre intake of about 12 g a day.
- Discourage people with IBS from eating insoluble fibre (for example, bran). If advising an increase in dietary fibre, this should be soluble fibre, such as ispaghula powder, or foods high in soluble fibre, such as oats.
- In patients requiring a laxative or antimotility agent, advise dose titration according to stool consistency, with the aim of achieving a soft, well formed stool—corresponding to the Bristol stool form type 4 ([www.ibsgroup.org/main/bristol\\_stool.shtml](http://www.ibsgroup.org/main/bristol_stool.shtml)).<sup>4</sup>

#### FURTHER INFORMATION ON THE GUIDANCE

##### Background

Wide variations in diagnosis and management of IBS are reported in both the peer reviewed literature and patient interest websites. The guideline's key recommendations reflect the importance of:

- A positive diagnosis
- The judicious use of investigations to confirm the diagnosis and exclude coeliac disease
- Avoiding unnecessary investigations
- Different treatment modalities used in single or combinations to achieve symptom relief
- Dietary review, often resulting in the patient reducing the amount of fibre in their diet
- Information on self-help and self management as a key patient empowerment feature.

##### Diagnosing IBS

- The use of positive, pragmatic, diagnostic criteria for patients presenting with IBS increases patients' confidence through positive diagnosis; increases clinicians' confidence; and has potential for considerable NHS disinvestment in avoiding unnecessary investigations and referrals to multiple specialties.
- The pretest probability of organic disorders—including colon cancer, inflammatory bowel disease, thyroid disease, and lactose malabsorption—was no different in IBS populations compared with the general population. The exception was coeliac disease, which did have a higher incidence in the IBS population, leading to a recommendation that checking markers for coeliac disease was cost effective.
- What clearly emerges from the literature is that with careful history and physical examination, positive diagnosis of IBS is possible.<sup>5</sup> This, augmented by simple laboratory investigations to rule out more serious underlying disease in the absence of red flag symptoms (see figure), is a positive step forward for both clinicians in diagnostic practice and patients in receiving timely IBS interventions.

##### Methods

The Guideline Development Group followed standard NICE methodology in the development of this guideline ([www.nice.org.uk/page.aspx?o=114219](http://www.nice.org.uk/page.aspx?o=114219)).

##### Future research

Future research has been recommended in the following areas:

- Head to head trials comparing the effect of low dose antidepressant treatment on relieving abdominal pain or discomfort
- Head to head trials comparing psychological interventions to determine the most effective first and second line treatment for patients with refractory IBS
- Head to head trials comparing relaxation and biofeedback to determine the most effective behavioural treatments relating to improvement in overall symptoms
- Head to head trials comparing single and multiple herbal medicine compounds to determine the most effective combination for improving overall symptoms

- Consider tricyclic antidepressants as second line treatment for abdominal pain or discomfort if laxatives, loperamide, or antispasmodics have not helped. Start treatment at a low dose (5-10 mg equivalent of amitriptyline) taken once at night, and review regularly. The dose can be increased but does not usually need to exceed 30 mg. If this fails, consider treatment with a low dose selective serotonin reuptake inhibitor.
- Psychological interventions (such as cognitive behaviour therapy, hypnotherapy, and psychological therapy) may reduce pain and other symptoms and improve quality of life. Consider such treatments for those who have had symptoms for at least 12 months and have not responded to first line treatments.
- Advise patients that reflexology, acupuncture, and aloe vera have shown no benefit and are therefore not recommended.
- Do not discourage people from trying specific probiotic products for at least four weeks.
- Data from dietary elimination and food challenge studies are limited and sometimes contradictory; however, if diet is considered a major factor in a person's symptoms even after general lifestyle and dietary advice has been followed, consider referral to a dietitian for advice on avoidance of single foods and an exclusion diet.

#### Overcoming barriers

The emphasis on positive diagnosis, optimal clinical and cost effective management of IBS, and the

importance of patient empowerment relating to their condition and self management of their medication should benefit patients with IBS. Implementing these guidelines will require many medical professionals to view IBS in a new light. The principle of a positive diagnosis of IBS will be foreign to many: reducing the amount of fibre in the diet flies in the face of many health messages, and using psychotherapy will be a new concept. However, the guidelines provide clear advice on this condition. The guideline group expects that people with IBS will be treated more effectively without the need for unnecessary investigations and referral. When referral is required, the guidelines indicate the most appropriate interventions.

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## Commentary: Controversies in NICE guidance on irritable bowel syndrome

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The NICE guidelines summarise the diagnosis and treatment of irritable bowel syndrome (IBS), but several issues remain contentious.

#### Can a positive diagnosis of IBS be based on symptom patterns?

The NICE guidelines offer a pragmatic definition of IBS, similar to one published in 2002 by the American College of Gastroenterology Taskforce.<sup>1</sup> However, the utility of these pragmatic definitions is unknown. The Rome criteria for IBS were developed for research purposes and are specific, but there are no adequate validation data documenting their applicability in primary care.<sup>12</sup> The NICE guidelines suggest that symptoms that are made worse by eating support a diagnosis of IBS, but as acknowledged in the guidelines, this is based on expert consensus rather than research evidence. Clinicians need to be aware that this symptom may lead to confusion with functional dyspepsia and

peptic ulcer disease. Making a positive diagnosis of IBS seems reasonable, but the approach applied still is largely based on expert opinion, not high quality evidence.

#### Are "red flag" indicators truly useful for predicting organic disease?

Consensus has been reached that patients who present with symptoms of IBS and alarm features ("red flag" indicators) such as rapid weight loss deserve prompt referral for a structural evaluation. However, no consensus exists on exactly what features should constitute an alarm feature.<sup>1-3</sup> In a study of 1434 patients at a referral centre with a clinical diagnosis of IBS, alarm features were reported by 84% of the sample, but the positive predictive value of individual alarm features for identifying organic disease was at most 9%.<sup>3</sup> Age over 60 is considered an alarm feature in the NICE guideline. This differs from US guidelines, which suggested that all those 50 years and older,