Irritable Bowel Syndrome (IBS)

Clinical editor's note

This pathway is being updated. For suspected bowel cancer symptoms, see the Faecal Immunochemical Test (FIT) page for up to date FIT criteria. For more information, see the FIT primary care briefing document.

Red flags

- Patient older than 50 years at first presentation
- Suspected cancer

Background

About irritable bowel syndrome (IBS)

About irritable bowel syndrome (IBS)

Irritable bowel syndrome is a relapsing functional bowel disorder that is characterised by abdominal pain, distension, and altered bowel habits.

- Prevalence is 10 to 15% of the population.
- The pathophysiology is poorly understood. Contributory factors include:
  - Environmental exposures and factors, including childhood stresses and learned illness behaviour
  - Post-infection, e.g. campylobacter
  - Visceral afferent hypersensitivity, i.e. for a given gastrointestinal stimulus, IBS patients experience more pain and related symptoms than people without IBS
  - Altered intestinal transit
  - Psychological distress and ongoing stress
- Definition (Rome IV criteria):
  - Recurrent abdominal pain or discomfort at least 1 day per month in the last 3 months, plus at least 2 of the following:
    - Relationship to defecation

    - Associated with change in frequency of stool
    - Associated with change in form (appearance) of stool
    - Symptom duration at least 6 months
- This definition is useful for younger patients, i.e. aged under 50 years, and those with long-standing symptoms and no red flags.

Assessment

A diagnosis of IBS is made on the presence of symptoms and exclusion of other diagnoses:

1. Take a history – ask about:
    -
      symptoms.

      Symptoms

      - Abdominal symptoms including pain, bloating, triggers, and pattern.
      - Bowel symptoms:
          - Abnormal stool form, i.e. hard or loose
          - Abnormal stool frequency
          - Incomplete evacuation
          - Faecal urgency
          - Faecal incontinence
          - Passing mucus per rectum
          - Anxiety and depression
          - Recent gastroenteritis (can be a precipitating factor)

      Check the patient's main concern about their symptoms – often people are worried they have cancer.
    - family history of colorectal cancer, coeliac disease, or inflammatory bowel disease.
    - previous cholecystectomy, or terminal ileal disease or resection – risk factors for bile salt malabsorption.
    - medications, e.g. Metformin, proton pump inhibitors, supplements.
    - lifestyle – diet, eating habits, alcohol, physical activity, travel.
2. Look for any concerning features:
    - Patient older than 50 years at first presentation

- Suspected cancer symptoms, e.g. weight loss, anaemia, rectal bleeding, or change in bowel habit.

3. Consider other possible diagnoses.

Other possible diagnoses

- Coeliac disease especially if positive family history
- Lactose intolerance
- Bile salt malabsorption – consider if previous cholecystectomy, or terminal ileal disease or resection
- Inflammatory bowel disease especially if positive family history
- Colorectal carcinoma
- Microscopic colitis
- Acute diarrhoea due to Giardia or bacteria
- Diverticulitis
- Endometriosis
- Pelvic inflammatory disease
- Pelvic radiation disease
- Ovarian cancer

4. Examine abdomen and rectum and, if appropriate, perform a gynaecological examination to rule out other conditions.

5. Arrange tests to exclude pathology:

   - FBC, ferritin, urea and electrolytes, TFT, anti-tissue transglutaminase (anti-tTG), and immunoglobulin A (IgA).
   - If constipation is a predominant symptom, add bone profile.
   - If diarrhoea or loose motions are predominant symptoms, arrange faecal microbial investigation (molecular enterics) and C. difficile PCR. If risk factors for C. difficile, check stool PCR, CRP, B12, folate.

     Risk factors for *Clostridium difficile*

     - Previous *C. difficile* infection
     - Antibiotic use
     - Proton-pump inhibitor use

   - Faecal calprotectin if:
     - family history of inflammatory bowel disease (IBD).

    - the patient is younger than 50 years with chronic diarrhoea and there is suspicion of possible inflammatory bowel disease (IBD).

- If iron deficiency anaemia, arrange tissue transglutaminase antibodies and IgA level. Check a urine dipstick to exclude microscopic haematuria – see the Haematuria pathway.
- Consider CA125 for female patients, particularly if aged 50 years or older. See NICE – Ovarian Cancer: Detection in Primary Care.
- If the patient meets the NICE criteria for colorectal cancer, arrange a faecal immunochemical test (FIT) – do not wait for test results if higher-risk.

  NICE criteria for colorectal cancer

  - Higher-risk symptoms (NICE NG12):
    - Aged 40 years or older and with unexplained weight loss and abdominal pain
    - Aged 50 years or older with unexplained rectal bleeding
    - Aged 60 years or older with iron deficiency anaemia (IDA) or change in bowel habit (CIBH)
    - Any adult with a rectal mass or abdominal mass
    - Younger than 50 years with rectal bleeding and abdominal pain, CIBH, weight loss, or IDA
  - Lower-risk symptoms (NICE DG30):
    - Aged 50 years or older with unexplained weight loss or abdominal pain
    - Younger than 60 years with CIBH or IDA
    - Aged 60 years or older and over with anaemia even in the absence IDA

Management

In the absence of any red flags and normal investigations, referral is rarely required.

1. If the patient meets the higher-risk (NG12) criteria for bowel cancer, request urgent suspected cancer colorectal surgery assessment. Do not wait for FIT test results.

   Higher-risk (NG12) criteria

   - Higher-risk symptoms (NICE NG12):
     - Aged 40 years or older and with unexplained weight loss and abdominal pain
     - Aged 50 years or older with unexplained rectal bleeding

- Aged 60 years or older with iron deficiency anaemia (IDA) or change in bowel habit (CIBH)
- Any adult with a rectal mass or abdominal mass
- Younger than 50 years with rectal bleeding and abdominal pain, CIBH, weight loss, or IDA

2. If the patient meets the lower-risk (DG30) criteria for bowel cancer, manage according to FIT results:

Lower-risk (DG30) criteria

- Aged 50 years or older with unexplained weight loss or abdominal pain
- Younger than 60 years with CIBH or IDA
- Aged 60 years or older and over with anaemia even in the absence IDA

  - Request urgent suspected cancer colorectal surgery assessment if:
    - a positive FIT result.
    - a negative FIT result but high suspicion of cancer.
  - If a negative result, review and safety net.

  Safety net

  - Discuss the reason for the test with the patient.
  - Reinforce to the patient that the test is not 100% accurate and that they should return if symptoms continue or worsen.

3. Request urgent gastroenterology assessment if:
   - positive anti-tissue transglutaminase antibodies for consideration of a gastroscopy and duodenal biopsies. Advise patient not to restrict gluten in their diet before endoscopy.
   - faecal calprotectin greater than 150 micrograms/g.

4. Provide education and reassurance, with information on lifestyle options:

Education and reassurance

- Stress the importance of learning to self-manage IBS.
- Reassure the patient but take care not to minimise the significance of the symptoms.
- Inform patients of the chronic relapsing-remitting of symptoms and benign nature of IBS.

  - Advise on diet

  Diet

  - First-line advice:
    - Advise patient to:

- practice good eating habits – regular meals, eating slowly, chewing food thoroughly, sitting down to eat, not eating late at night.
- eat a variety of foods.
- watch portion sizes.
- avoid or reduce fatty food, spicy food, caffeine, fizzy drinks, fruit juice, sorbitol (an artificial sweetener), and alcohol.
- increase or decrease fibre depending on current bowel habit.
- limit fresh fruit to 3 portions per day.
- consider eating more oats (e.g. porridge) to help with wind and bloating.
- have adequate fluid – at least 8 cups of water or other non-caffeinated drink per day.

- Consider asking patient to keep a food and symptom diary to identify trigger foods.

Food and symptom diary

Because IBS is unlikely to be IgE-mediated, there are no reliable tests to identify trigger foods. Therefore, accurate diary-keeping is an essential diagnostic tool.

- Second-line advice:
  - Consider food intolerance, e.g. FODMAPs, lactose intolerance, wheat intolerance.

Wheat intolerance

- Wheat intolerance differs from coeliac disease.
- Coeliac disease is a lifelong intolerance to gluten, whereas those with wheat intolerance still experience adverse symptoms from gluten-free products, due to the remaining part of the wheat affecting them.
- A food diary, with elimination and re-introduction of wheat into the diet can help establish a case for wheat intolerance.

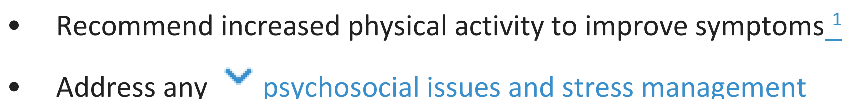
Lactose intolerance

- About 5% of people in the United Kingdom are lactose intolerant. The level of intolerance varies. Some patients are able to digest small amounts of lactose without symptoms.
- If lactose intolerance is suspected, try simple dietary exclusion for 4 weeks, then re-challenge with lactose.

        - Lactose intolerance can sometimes be overcome with slow incremental increases in dietary lactose intake.

        FODMAPs

        - FODMAP means:
            - Fermentable – rapidly broken down by bacteria in the gut
            - Oligosaccharides – fructans and galacto-oligosaccharides (GOS)
            - Disaccharides – lactose
            - Monosaccharides – fructose
            - And
            - Polyols – sorbitol, mannitol, maltitol, xylitol, and isomalt
        - Clinical studies have shown that a low FODMAP diet can lead to marked improvement in abdominal symptoms for up to 75% of people with IBS.
        - The low FODMAP diet is complex and can be confusing. Referral to a FODMAP-trained dietitian is recommended, although this is not currently provided by the Cardiff and Vale University Health Board.
        - The low FODMAP diet is not a life-long diet. It includes a 4 to 6 week exclusion phase followed by FODMAP reintroduction, using a systematic food challenge process to determine personal tolerance thresholds to individual foods, and enabling long-term self-management.
        - For more information about FODMAPs, see:
            - Information sheet by Australian dietitian Dr Sue Shepherd, author of the low FODMAP diet.
            - Food Intolerance Management Plan, a website to support the food intolerance management plan book written by Sue Shepherd. It is a good resource for patients who want to trial a low FODMAP diet.
            - Monash University Low FODMAP smartphone app (there is a cost) – provides accurate information about foods that trigger IBS reactions to help sufferers to manage their symptoms.
    - Consider requesting community dietitian assessment.
- Recommend increased physical activity to improve symptoms [1]
- Address any



psychosocial issues and stress management

Psychosocial issues and stress management

- Specific interventions may help some patients, e.g. relaxation techniques such as breathing techniques, meditation, or T'ai Chi.

- Gut-directed hypnotherapy has also been shown to be effective. [2]
- Consider requesting cognitive-behaviour therapy from the Primary Mental Health Support Service or in-house counsellor if stress and anxiety appear to be a major driver of symptoms. [2]

- Do not recommend probiotics

  Probiotics

  - They can be expensive and are not available under the NHS for treating IBS.
  - Some products contain ingredients, e.g. dietary fibre, FODMAPs, that may increase IBS symptoms.

5. Prescribe medications if needed. Most patients do not need medication, but some require symptom-targeted medication. Treat the most troublesome symptom:

- Diarrhoea

  Diarrhoea

  Loperamide is the first-choice anti-motility agent, and is preferred over codeine phosphate which has the significant issues of dependence, tolerance, and drug interactions.

  - Only use loperamide if an infective cause has been excluded and there is no clinical suspicion of IBD. Use 2 to 4 mg as required, and titrate to a maximum of 16 mg.
  - Encourage patients to learn how to adjust their doses of anti-diarrhoeal agent according to stool frequency and consistency.
  - Trial a stool bulking agent – 3.5 g ispaghula husk, e.g. Fybogel 1 sachet twice a day.
  - If previous cholecystectomy, trial 4 g colestyramine once or twice a day (unlicensed indication). Stop if no benefit after 2 weeks.
  - Consider Ondansetron (5-HT3 antagonist) – 4 to 8 mg 2 or 3 times a day for 2 weeks (unlicensed indication).

- Constipation

  Constipation

  - See Constipation in Adults pathway.
  - Encourage patients to learn how to adjust their doses of laxative according to stool frequency and consistency.
  - Lactulose may exacerbate symptoms of abdominal bloating and distension.

- Abdominal pain, bloating, and distension

  Abdominal pain, bloating, and distension

  Consider:

- first-line – antispasmodics, e.g. peppermint oil, mebeverine.

  Peppermint oil

  - There is some evidence this may be useful for bloating, wind, and bowel cramps.
  - Has antispasmodic and antiflatulent effects with mild analgesic effects.
  - May cause or worsen reflux.
  - Peppermint oil capsules, e.g. Colpermin or Mintec, are enteric coated so designed to be released in the colon.
  - Trial 1 to 2 capsules, 3 times a day until symptoms resolve. Can be continued up to 3 months. If helpful, continue but reduce to the lowest effective dose.

- second-line – antidepressants, hyoscine butylbromide.

  Antidepressants

  - Effective for the treatment of discomfort and pain in IBS.
  - Mechanism of action is likely to be through analgesic and motility effects rather than the treatment of psychological symptoms.
  - Tricyclic antidepressants:
    - Start with low dose, e.g. amitriptyline or nortriptyline (unlicensed indication – less sedating) 10 mg at night, increasing to a usual maximum dose of 30 mg.
    - Slowly increase if needed only after 3 to 4 weeks due to delayed onset of action.
    - Avoid with constipation.
    - Unlicensed indications. Patient must be fully informed and consent to unlicensed use.
    - Review after 4 weeks, then every 6 to 12 months.
  - SSRIs or SNRIs (unlicensed indications):
    - Consider if tricyclic antidepressants are ineffective.
    - Use where there is constipation or where psychological symptoms predominate.
    - Consider Citalopram or Fluoxetine 10 to 20 mg.
    - Review after 4 weeks, then every 6 to 12 months.

6. If the patient has difficulty managing persistent pain, despite maximal medical and gastrological interventions, consider:

- requesting chronic pain specialised assessment for the pain clinic, or directly to the chronic pain management programme if the patient is motivated and meets the criteria.

Criteria

Patients aged 18 years or older:

- with persistent pain present for more than 3 months.
- with all pain treatments completed and no plans for further investigations, surgical and/or medical interventions.
- with pain being the primary problem negatively impacting on physical functioning, mood and daily living.
- who are aware the pain needs to be managed rather than fixed, and are open to explore behavioural changes in a group environment with other people living with long-term pain.
- who are willing to explore living well with pain.
- with physical ability to participate in movement work.
- who understand they will receive biopsychosocial management information and not a medical assessment.

Exclusions

Patients:

- with on-going medical investigations, including plans for surgical or injectable pain therapies.
- who are actively pursuing medical or external treatments and is unwilling to contemplate adapting their lifestyle.
- with red flag symptoms.
- with multiple referrals to other services.
- with addiction or substance abuse impacting on functioning.
- with moderate to severe cognitive impairment.
- suffering from primary mental health problems which require intensive treatment, e.g. active psychosis, active suicidal ideation and self-harm behaviours.
- with overriding complexities that will make engagement on the programme difficult, e.g. unstable interpersonal difficulties and social circumstances.

See Velindre University NHS Trust – Cardiff Chronic Pain Management Services: Refferal Guidelines for the Chronic Pain Management Programme.

- seeking chronic pain advice.

7. Review intermittently to encourage self-management, look for red flags, and assess diet.

Red flags

- Aged over 50 years at first presentation
- Rectal bleeding
- Unexplained iron deficiency anaemia
- Unintentional weight loss

Request

- Request urgent suspected cancer colorectal surgery assessment if:
  - the patient meets the higher-risk (NG12) criteria for bowel cancer.
  - a positive FIT result.
  - a negative FIT result but high suspicion of cancer.
- Request urgent gastroenterology assessment if:
  - positive anti-tissue transglutaminase antibodies for consideration of a gastroscopy and duodenal biopsies.
  - faecal calprotectin greater than 150 micrograms/g.
- If the patient has difficulty managing persistent pain, despite maximal medical and gastrological interventions, consider:
  - requesting chronic pain specialised assessment for the pain clinic, or directly to the chronic pain management programme if the patient is motivated and meets the criteria.
  - seeking chronic pain advice.
- Consider requesting community dietitian assessment.
- Consider requesting cognitive-behavioural therapy from the Primary Mental Health Support Service or in-house counsellor if stress and anxiety appear to be a major driver of symptoms. [2]

Information

For health professionals

Education

BMJ Learning:

- Irritable Bowel Syndrome
- Irritable Bowel Syndrome: New and Emerging Treatments

Further information

- NICE Clinical Knowledge Summaries (CKS) – Irritable Bowel Syndrome
- World Gastroenterology Organisation – Irritable Bowel Syndrome: a Global Perspective

For patients

- Bupa – Irritable Bowel Syndrome Symptom Diary
- ibsnetwork – FODMAPS
- Patient:
  - IBS Diet Sheet
  - Irritable Bowel Syndrome

SEND FEEDBACK

SOURCES

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PAGE INFORMATION

Last Updated: 07 April 2023

Last Reviewed: 15 January 2019

Keywords: ——

Topic ID: 561195