Irritable bowel syndrome in adults: symptoms, treatment and management

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Abstract
Irritable bowel syndrome (IBS) is a complex functional bowel disorder. It can be difficult to treat because of its presentation with multiple symptoms and aggravating factors. GPs and gastroenterologists regularly see patients return for advice on symptom management. IBS is often misdiagnosed, and is not always managed effectively, despite the guidance available to clinicians. This article aims to inform readers about the symptoms and sub-classifications of IBS and the range of pharmacological and non-pharmacological treatments available, to enable nurses to understand and manage symptoms of the condition in this group of patients.

Keywords abdominal pain, biofeedback, bowel disorders, constipation, diarrhoea, gastrointestinal system and disorders, irritable bowel syndrome, IBS

Aims and intended learning outcomes
The aim of this article is to ensure healthcare professionals understand the symptoms and risk factors associated with irritable bowel syndrome (IBS) in adults, and to inform them about the treatment and management options available. After reading this article and completing the time out activities you should be able to:

» Describe the different sub-classifications of IBS.
» List the signs and symptoms of IBS in adults.
» Outline the risk factors that contribute to the development of IBS.
» Explain your role in the treatment and management of IBS in adults.
» Assess and treat patients who present with IBS in your practice setting.
» Discuss pharmacological and non-pharmacological treatment interventions for adults with IBS.
» Describe the use of biofeedback therapy in the treatment of IBS.

Relevance to The Code
Nurses are encouraged to apply the four themes of The Code: Professional Standards of Practice and Behaviour for Nurses and Midwives to their professional practice (Nursing and Midwifery Council (NMC) 2015). The themes are: Prioritise people, Practise effectively, Preserve safety, and Promote professionalism and trust. This article relates to The Code in the following ways:

» It informs nurses about pharmacological and non-pharmacological treatments for patients with IBS. The Code states that nurses must practise effectively by ensuring that any information or advice given is evidence based.
» Nurses must prioritise people by encouraging and empowering patients with IBS to take an active role in making decisions about their treatment and care. The Code states that nurses must act in partnership with those receiving care, assisting them to access relevant health and social care, information and support when they need it.
Nurses must recognise and respect the contribution people can make to their own health and wellbeing. This article indicates how nurses can enable patients to manage diet, lifestyle, stress and anxiety, which are common aggravating factors in IBS.

Nurses must work within their competence when assessing and treating patients with IBS, requesting support to carry out any action or procedure beyond the limits of their competence, for example a digital rectal examination.

Introduction

IBS is a chronic, relapsing functional bowel disorder. Most adults with the condition experience episodes of symptom exacerbation, followed by periods when symptoms remain dormant (Emmanuel and Quigley 2013). The term IBS is used to define the presence of various abdominal symptoms with no organic cause (Travis et al 2005). IBS is characterised by the presence of abdominal pain and discomfort, and is associated with disordered defaecation or a change in bowel habit (National Institute for Health and Care Excellence (NICE) 2015).

Symptoms and their effect vary between individuals. Women are two to four times more likely to have IBS symptoms than men (Travis et al 2005). Prevalence studies in 2015, indicated that 10-15% of people in the UK had IBS and that the condition accounted for 2% of GP appointments (Quigley et al 2015). IBS accounted for 40-60% of referrals made to gastroenterologists in 2014 (Jones et al 2000). In 2012/13 in the UK, the cost to the NHS for laxatives was £44,977,959 and £25,582,752 for antispasmodic medications (Soubieres et al 2015). These medications are commonly used to treat patients with IBS.

IBS is a significant health issue that affects many individuals. It is most prevalent in people aged 15-65 years. Many cases develop in early childhood, yet often individuals do not present with the problem until they are in their late 20s to 40s (NICE 2015).

Patients commonly present with symptoms that may include (NICE 2015):
» Constipation, diarrhoea or both (mixed).
» Abdominal distension and/or bloating.
» Abdominal pain.

Diagnosing IBS

Diagnosis of IBS can be challenging and the condition is not always formally diagnosed by healthcare professionals. Research indicates that many primary care providers are unaware of the diagnostic criteria for IBS (Hungin et al 2014). Suboptimal diagnosis is likely, because of the multiple and variable presentation of symptoms and the lack of biological disease markers for the condition (Soubieres et al 2015). Many primary care physicians have shown a preference for referring patients to specialist gastroenterologists for further diagnostic testing (Hungin et al 2014), although NICE (2015) guidelines and the British Society of Gastroenterology (BSG) (2014) state that diagnosis and management can be carried out effectively in the primary care setting, at a lower cost (Soubieres et al 2015). Uncertainty in diagnosis and persistent symptoms are responsible for many of the referrals to secondary care (Soubieres et al 2015). Around half of the patients diagnosed with IBS in primary care are referred to secondary care for endoscopic testing (BSG 2014).

Classification systems, including the Manning criteria and the Rome criteria, have been developed to assist in standardising the diagnosis of IBS. The Manning criteria, developed in 1978, were the first diagnostic criteria established to define IBS (Manning et al 1978, Spiller et al 2007). They compare the symptoms of patients with abdominal pain against six criteria, to determine who should be diagnosed with organic disease, rather than IBS (Table 1). The Rome I criteria were published in 1990 (Drossman 2007). The Rome criteria have evolved over the past 20 years, to provide a detailed, accurate and useful definition of IBS. The most recent are the Rome IV criteria (Table 1), released for use in June 2016 (Drossman 2016).

Research to validate the Manning criteria and the Rome IV criteria has indicated there is little difference in accuracy between the two systems; both have been criticised for their lack of accuracy and specificity.
Further work is required to develop a more explicit method of diagnosis (Ford et al. 2013). The Rome IV criteria are the most widely used criteria for diagnosing IBS; they provide a standard definition and diagnosis of IBS as a functional gastrointestinal disorder of brain-gut interaction, and are easier to apply than the Manning criteria (BSG 2014). The development of the Rome IV criteria took place over a six-year period involving input from 117 experts worldwide (Lacy et al 2016). The Rome IV criteria form a comprehensive tool, which clarifies that functional bowel disorders comprise a spectrum of symptoms, requiring a biopsychosocial approach (Drossman 2016).

One priority in diagnosing patients with IBS is to establish their symptom profile, and whether abdominal pain or discomfort is among their main symptoms. It is important to ask the patient to clarify the severity, timing and location of their pain or discomfort, and whether this is localised to a specific site or is generalised abdominal pain (NICE 2015). This helps to distinguish IBS-related pain from cancer-related pain, which typically has a specific, fixed position (NICE 2015).

‘Red flag’ symptoms (Box 1) should be identified in primary care, ideally at the initial assessment, and patients should be referred to secondary care for further investigative studies (BSG 2014, NICE 2015, Quigley et al 2015). Establishing the patient’s bowel habits helps to determine the sub-classification of IBS, which will be discussed in detail in the next section.

The Rome Stool Form Scale (Lewis and Heaton 1997) is a valuable visual tool (Figure 1), to enable patients to objectively describe the quality and frequency of stool. The NICE (2015) guidelines recommend diagnostic testing for IBS in adults who meet the IBS diagnostic criteria. The following clinical investigations help to exclude other diagnoses:

- Full blood count.
- Erythrocyte sedimentation rate or plasma viscosity.
- C-reactive protein test.
- Antibody testing for coeliac disease (endomysial antibodies or tissue transglutaminase antibodies).

### Sub-classifications of IBS

IBS may be classified as pain-predominant IBS, IBS-diarrhoea (IBS-D), IBS-constipation (IBS-C) or, IBS-mixed (IBS-M), or IBS-unclassified (IBS-U). Criteria for diagnosing these sub-classifications are listed in Table 2. An individual is defined as IBS-M, if they report greater than 25% of their stools being loose or watery and 25% of their stools being hard or lumpy, when not using a laxative or antidiarrhoeal medication. Patients with IBS-M are often misclassified because of variations attributable to the medications they use to treat their symptoms (Su et al 2014). Symptoms of IBS-M resemble more closely the symptoms of IBS-C than those of IBS-D (Table 2). Although some estimates

### TABLE 1. Criteria for diagnosing irritable bowel syndrome

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<tr>
<th>Manning criteria</th>
<th>Rome IV criteria</th>
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<tr>
<td>Diagnose irritable bowel syndrome if three or more of the following are present:</td>
<td>Recurrent abdominal pain, on average for at least one day per week in the last three months, associated with two or more of the following:</td>
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<tr>
<td>» Abdominal pain</td>
<td>» Related to defaecation</td>
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<td>» Relief of pain on defaecation</td>
<td>» Onset associated with a change in frequency of stool</td>
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<td>» Increased stool frequency with pain</td>
<td>» Onset associated with a change in form (appearance) of stool</td>
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<td>» Looser stools with pain</td>
<td>Diagnostic criteria fulfilled for the last three months, with symptom onset at least six months before diagnosis</td>
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<td>» Mucus in stools</td>
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<td>» Feeling of incomplete evacuation</td>
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### BOX 1. Red flags symptoms suggesting organic disease is more likely than irritable bowel syndrome

» A change in bowel habit to looser and/or more frequent stools persisting for more than six weeks in an individual aged <60 years
» Rectal bleeding
» Unintentional and unexplained weight loss
» Family history of bowel or ovarian cancer
» Rectal masses
» Abdominal masses
» Anaemia
» Raised inflammatory markers

(National Institute for Health and Care Excellence 2015)
suggest the prevalence of IBS-C, IBS-D and IBS-M are approximately equal, Su et al (2014) estimated that 44% of patients with IBS have IBS-M, suggesting that many patients are misclassified. This group of patients was relatively unrecognised until the Rome III criteria were established (Travis et al 2005). Patients with IBS-U present with a variety of symptoms which do not fit into either of the more predominant sub-classifications of IBS.

It is important to note that daily pain for six months rarely results from organic causes, and is indicative of IBS alongside other symptoms, in the absence of red flags (Box 1).

TIME OUT 1
Research and collate a list of possible differential diagnoses for IBS-C, IBS-D and IBS-M. Write short notes on how could you use this information to ensure that patients receive an accurate diagnosis, as well as tailored treatment and management plans.

Patient assessment
Informed consent should be obtained before undertaking an assessment of the patient (NICE 2007, Ness 2009). Patients with bowel dysfunction may feel anxious before being assessed, because of the sensitivity of the topic. Patients may benefit from having a friend or relative present during the assessment, to support them and reduce anxiety (Ness 2009).

It is important for healthcare professionals to have knowledge of female and male anatomy and physiology in relation to the lower gastrointestinal system (Skills for Health 2010) to ensure a thorough examination of the patient’s presenting symptoms. The healthcare professional should also be familiar with local and national protocols that affect their practice in relation to bowel dysfunction (Skills for Health 2010). Inadequate knowledge limits assessment of the patient’s condition. This can result in management that might impede the patient’s progress, resulting in unsatisfactory health outcomes and poor patient satisfaction.

TIME OUT 2
Identify and familiarise yourself with the most recent guidelines available for the management of IBS in adults. Are you implementing this guidance in your practice? List four improvements that could be made to your practice as a result of reading the guidance and share this information with your colleagues.

Obtaining a thorough history of the patient’s symptoms and performing a physical examination, in conjunction with any relevant clinical investigations, enables the healthcare professional to form a definitive diagnosis. An accurate assessment of the patient is important for diagnosis, and for developing an effective, patient-centred and individualised treatment programme. The healthcare professional should conduct

Figure 1. Bristol Stool Form Scale

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assessments of patients with IBS or bowel dysfunction in a clean, well-equipped and confidential environment that enables patients to share their experience openly (Skills for Health 2010, Royal College of Nursing (RCN) 2012). To obtain a patient history for IBS, the healthcare professional should ask questions, such as those listed in Box 2, and adapt these according to the sub-classification of IBS associated with the patient’s presenting symptoms.

Pre-assessment questionnaires are useful to support overall patient assessment. They can be used to prepare patients for the type of language and questions that they will be asked during the assessment. Frequently used questionnaires include:

» Patient Assessment of Constipation Quality of Life (PAC-QOL) (Marquis et al 2005).

» International Consultation on Incontinence Questionnaire-Bowels (ICIQ-B) (Cotteril et al 2011).

» Hospital Anxiety and Depression Scale (HADS) (Zigmond and Snaith 1983). An objective physical assessment enables healthcare professionals to develop a complete overview of the patient’s presenting symptoms. This should include palpating the abdomen, and a digital rectal examination that should only be undertaken by a trained clinician (RCN 2012). Digital examination enables the healthcare professional to (RCN 2012, Collins and O’Brien 2015):

» Establish if faecal matter is present in the rectum, and its consistency and volume.

» Assess the condition of the rectum, before offering any rectal medication or interventions, such as an enema, suppositories or rectal irrigation.

» Ascertain if faecal matter requires digital removal from the anus.

» Assess the function of the sphincter complex.

TIME OUT 3

You should have a good understanding of the anatomy and physiology of the lower gastrointestinal tract to assess and manage patients with bowel dysfunction, including IBS. Familiarise yourself with, and make brief notes on, the following topics and processes and their association with bowel function:

» Reflexes.

» The nervous system.

» The pelvic floor and sphincter complex.

» The usual process of stool production and factors that influence this.

» The usual process of defaecation.

Management

The symptoms of IBS are diverse. Management of the condition varies depending on the patient’s predominant symptoms and bowel pattern (Anastasi et al 2013). Not all patients require the same support. Some patients respond well to non-

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<th>TABLE 2. Irritable bowel syndrome (IBS) sub-classifications</th>
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<td>IBS sub-classification</td>
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<td>IBS-diarrhoea (IBS-D)</td>
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<td>IBS-constipation (IBS-C)</td>
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<td>IBS-mixed (IBS-M)</td>
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<td>IBS-unclassified (IBS-U)</td>
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(National Institute for Health and Care Excellence 2015, Quigley et al 2015)

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<th>BOX 2. Example questions for obtaining a patient history of irritable bowel syndrome</th>
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<td>» What is your main bowel problem and when did it start? Is there anything that might have initiated your bowel problem?</td>
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<td>» How frequently do your bowels open?</td>
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<td>» What is the consistency of your stool? Use of the Bristol Stool Form Scale (Lewis and Heaton 1997) is helpful to assess this.</td>
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<td>» Have you ever noticed any blood or mucus in your stool?</td>
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<td>» Do you strain to open your bowels? How often do you spend each day on the toilet trying to open your bowels?</td>
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<td>» Do you feel your empty your bowels fully each time? Do you ever feel evacuation is incomplete?</td>
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<td>» Do you take any medications to help regulate your bowels, such as laxatives, enemas, suppositories or antidiarrhoeal medications?</td>
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<td>» How many meals do you eat each day? Are there any particular foods that you avoid eating? What do you tend to eat on a regular basis for breakfast, lunch and dinner?</td>
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<tr>
<td>» How does your bowel problem affect your daily life, relationships and emotions?</td>
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pharmacological treatment, while others also require pharmacological treatment. Response to treatment interventions can depend on various physiological and psychological factors. Treatment should be individualised. Special consideration should be given to diet, stress and psychological factors, because these are the most common aggravating factors in IBS (Quigley et al 2015).

**Diet, physical activity and psychological factors**

Healthcare professionals should establish an effective therapeutic relationship with the patient. They should dedicate time to explain to the patient the nature of IBS, treatment options, and the effects of diet, lifestyle, stress and anxiety on the condition. This can improve the patient's symptoms and reduce the number of times they return for advice and support. Patients do not all present with the same exacerbating factors. Therefore, it is important that the healthcare professional obtains a thorough patient history to ensure a relevant and effective management plan is implemented.

Treatment of IBS should focus on symptom management using lifestyle and dietary modifications, because there is no known cure for the condition. Regular exercise and stress or anxiety management can be useful in reducing symptoms of IBS. A study of 666 patients with IBS demonstrated that dietary modifications, exercise and patient education were the most frequently used interventions, with satisfactory relief achieved in 57% of patients (Whitehead et al 2004).

**TIME OUT 4**

Speak to a dietitian in your team or practice area, or contact your local community dietitian to discuss dietary modifications for the various sub-classifications of IBS. List the most important or significant dietary modifications for each sub-classification of IBS; you may wish to capture this information in a table to enable ease of reference during patient consultations. How might you support patients to make changes to, or modify their, diet?

**TIME OUT 5**

Research the difference between soluble and insoluble fibres found in food and the effect each may have on the symptoms of IBS. Discuss with a dietician any dietary modifications that may improve the symptoms of IBS and how you could incorporate this information into patient education.

**Diet**

Individuals with IBS are often advised to increase their intake of dietary fibre, for example wholegrain cereals, fruit and vegetables that are high in insoluble fibre (Spiller et al 2007). However, the healthcare professional should consider the patient’s dietary intake and base their advice on the information gained during the assessment. For example, a patient who has a high intake of insoluble fibre, might be advised to try a low fibre diet. The BSG (2014) and NICE (2015) recommended a trial period excluding insoluble fibre, while monitoring the patient’s response. Food diaries can enable the patient and healthcare professional to record and monitor any response to diet modification.

Patients with IBS-C, IBS-D and IBS-M often state that certain food types aggravate their symptoms, for example caffeine, dairy products and cereals, and artificial sweeteners, such as sorbitol and xylitol (Spiller et al 2007). It is common for symptoms to become worse when the patient consumes gluten, even when coeliac disease has been excluded (Biesiekierski et al 2011); bloating, lethargy, abdominal pains, diarrhoea, constipation, joint pains and headaches may be reported by patients. This is known as gluten sensitivity (Catassi et al 2013, Czaja-Bulsa 2015). Some patients find that removing gluten from their diet can eliminate many of the symptoms associated with this food type. Patients can also be sensitive or intolerant to fat or lactose, presenting with similar symptoms to those of gluten sensitivity (Spiller et al 2007). Excluding these food types one at a time, and systematically reintroducing them one at a time, can help to identify whether an intolerance or sensitivity is a probable aggravating factor for IBS in individual patients (Catassi et al 2013).

NICE (2015) provides recommendations on dietary modifications for patients with IBS as follows:

» Have regular meals and take your time when eating.

» Avoid long intervals between eating and avoid skipping meals.

» Drink at least eight glasses of fluid per
Many patients identify a link between stress or anxiety and their gut symptoms. The healthcare professional should establish if the patient is experiencing any psychological co-morbidities in the initial assessment to determine if referral to a psychological therapist is required. Research has shown that there are several types of psychotherapy that have proved beneficial to individuals with IBS, with short and long-term effects, including cognitive behavioural therapy, mindfulness-based stress reduction, gut-directed hypnotherapy and relaxation (Kennedy et al 2005, Mykletun et al 2010, Zernicke et al 2013, Laird et al 2016). All psychotherapy treatments should be provided by trained and experienced therapists.

**Physical activity**
Sport and exercise can help to improve bowel function, especially for patients with IBS-C. A sedentary lifestyle can result in reduced colonic stimulation and worsening constipation. Song et al (2012) demonstrated that moderate-to-high levels of physical activity in females resulted in an improvement in colonic transit time. Physical activity has also been shown to reduce abdominal bloating and clear flatus; reduce levels of stress, anxiety and depression; and improve sleep, energy levels, physical functioning and quality of life (El-Salhy et al 2010, Johannesson et al 2011). However, caution is necessary when making recommendations regarding exercise to patients with co-morbidities; a doctor should be consulted and referral to a physiotherapist should be made, if necessary.

**Psychological factors**
Psychological symptoms are common in patients with IBS; approximately half of patients with IBS (46/91) present with anxiety, depression and paranoia (Mykletun et al 2010). The ‘brain-gut axis’ theory explains the link between the gut and psychological health (Burnett and Drossman 2004). It suggests that cognitive information and external factors can affect gastrointestinal function, and that stress and emotions may trigger neuroimmune or neuroendocrine reactions affecting the gut, via the brain-gut axis (Mayer et al 2001, Mulak and Bonaz 2004). Koloski et al (2012) conducted a 12-year longitudinal, prospective, population-based study on the brain-gut axis and concluded that the central nervous system and gut interact bidirectionally in functional gastrointestinal disorders.

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Laxative use, with negative consequences. Inappropriate laxative use, including use of ‘natural’ products such as senna, may lead to hypokalaemia (Gennari and Weise 2008). In the author’s practice, ‘normal’ bowel frequency is considered to range from three times per day to three times per week. The Bristol Stool Form Scale (Lewis and Heaton 1997) can be used to enable the patient and healthcare professional to determine whether the use of laxatives is required.

**TIME OUT 6**

Explain the differences between stimulant, bulk-forming and osmotic laxatives. Discuss with a colleague and provide the rationale for the type of laxative you would consider to manage the following:

- A patient presenting with hard stools.
- A patient presenting soft stools that are difficult to pass.

**Laxatives**

Laxatives have been shown to relieve symptoms of constipation but have not been shown to relieve abdominal pain (Bijkerk et al 2004); side effects of laxatives include abdominal bloating and an increase in flatulence (British National Formulary (BNF) 2016). Healthcare professionals should advise the patient to drink plenty of water after taking laxatives. Laxatives include bulk-forming, osmotic and stimulant laxatives. A bulk-forming laxative, such as ispaghula husk, adds bulk to the stool (NICE 2015) and works in a similar way to psyllium husk, the dietary supplement. If stools remain hard, osmotic laxatives, such as macrogols, should be introduced. Healthcare professionals should be aware that the use of lactulose is not recommended in treating patients diagnosed with IBS, because it is likely to precipitate or worsen bloating (NICE 2015).

When stools are softer, but are incomplete or remain difficult to pass, healthcare professionals are advised to prescribe a stimulant laxative, such as bisacodyl or senna to improve peristalsis (NICE 2015). Stimulant laxatives are generally recommended for occasional use only, because they are associated with tachyphylaxis and dependency (Spiller et al 2007). An accurate assessment of the patient enables the healthcare professional to identify whether the incomplete evacuation of stools is caused by the stool type or a functional problem, such as pelvic floor dysfunction or anismus, which should be treated with pelvic floor training, rather than laxatives.

Linaclotide is indicated for use in moderate to severe IBS-C (NICE 2015). It is a minimally absorbed guanylate cyclase-C receptor agonist (Chey et al 2012) that decreases visceral pain, increases intestinal fluid secretion and improves intestinal transit (NICE 2013).

**Antispasmodics**

Antispasmodic or anticholinergic medications, such as mebeverine hydrochloride, hyoscine butylbromide and peppermint oil can be beneficial to the patient, because they alleviate symptoms of abdominal pain and discomfort by relaxing the smooth muscle in the stomach and intestine (Anastasi et al 2013). These medications are best taken 20-30 minutes before meals, three times per day (BNF 2016).

**Antidiarrhoeals**

Individuals with IBS-D have an increased colonic transit time compared to healthy individuals and benefit from medication to delay transit time. Antidiarrhoeal medications, such as loperamide hydrochloride, slow intestinal transit time by inhibiting peristalsis (Anastasi et al 2013). This reduces stool frequency and urgency (Gunn et al 2003) and improves stool consistency. NICE (2015) guidelines recommend these medications for use in patients with IBS-D. As with antispasmodic medications, the BNF (2016) recommends that they are taken 20-30 minutes before meals. The optimal dosage depends on the patient’s response and the change in stool consistency. Loperamide hydrochloride is available in capsule or liquid form. The use of liquid loperamide can help to titrate the dosage up or down by small increments, reducing the risk of patients becoming constipated.

A few patients with IBS-D may have bile salt malabsorption. This can be diagnosed...
There is limited evidence in relation to adults using rectal irrigation to treat constipation and faecal incontinence or increased bowel frequency. Most of the evidence available relates to neurogenic bowel conditions, but there are robust reviews to support its use (Christensen and Krogh 2010, Emmanuel et al 2013, Emmett et al 2015). There are several types of irrigation systems available and patients should be assessed on an individual basis for the most appropriate system according to their symptoms.

Probiotics
Probiotics are dietary supplements that contain live bacteria. They can be beneficial to patients with IBS when taken on a regular basis, because they alter the gastrointestinal flora (Ford and Tally 2012). Probiotics can improve symptoms such as bloating, pain and flatus, and improve bowel frequency (Wall et al 2014). Lactobacilli and bifidobacteria are the most commonly used strains of bacteria in the treatment of IBS (Wall et al 2014). Probiotics are found in food types that contain live active cultures, such as some yoghurts, and in fermented foods, such as kefir and sauerkraut. They are also available as a dietary supplement. Healthcare professionals should be careful when evaluating research into the effectiveness of probiotics versus a placebo, because of the varying methodologies in researching probiotic species, preparations and dosage (Whelan and Quigley 2013, Wall et al 2014).

Rectal irrigation
Rectal or transanal irrigation can be used to assist rectal emptying, when patients with IBS do not respond adequately to conservative methods of treatment, such as those discussed earlier in the article. This treatment is used in patients with IBS-C, IBS-D and IBS-M. For patients with IBS-C, rectal irrigation shortens colonic transit time and ensures regular emptying, thus improving overall bowel frequency and routine. The introduction of water into the lower bowel softens stool in the rectosigmoid region, making it easier for patients to defecate any remaining hard stools.

For patients with IBS-D, rectal irrigation is used to prevent new faeces from reaching the rectum by efficiently emptying the distal colon and rectum. This can mean that the patient’s need to empty their bowels is reduced, by an average of two days (Emmanuel et al 2013). There are several rectal irrigation systems available for patients to trial; each system should be selected based on the individual’s needs, following a thorough assessment that includes an anorectal assessment. The patient’s mobility, dexterity and other additional factors determine the appropriate system for use (Collins and O’Brien 2015).

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TIME OUT 7
Identify and learn about three different types of irrigation system, with particular reference to the use of each in the management of the sub-classifications of IBS. Identify the irrigation systems used in your area of practice and list the reasons for their use.

Biofeedback therapy
In the author’s practice, biofeedback therapy is a complex package of care that includes symptom assessment, education on bowel anatomy and physiology, bowel and muscle re-training, behaviour and dietary modification, and psychological support (Collins and O’Brien 2015). Biofeedback therapy is provided in an outpatient setting, with patients attending an average of four to five times, at intervals of four to six weeks. The initial assessment lasts 60 minutes and involves the specialist physiotherapist or nurse obtaining a comprehensive patient history. At follow-up appointments, which last 30-40 minutes, the patient’s symptoms and progress are reassessed and management plans are adapted accordingly.

The aim of biofeedback therapy is to enable patients to regain control of their bowels. It has been shown to be superior to standard therapy in patients with disordered
defaecation and pelvic floor dysfunction (Rao et al 2010), and involves an instrument-based learning process to reinforce normal evacuation, and regular feedback to reinforce correct function. The patient should adopt a squatting position, raise the feet on a footstool, breathe normally, avoid holding their breath and use their abdominal muscles to achieve a ‘brace and bulge’ or ‘brace-pump’ technique (Collins and O’Brien 2015), while pushing downwards and backwards into the rectum. This reduces the patient’s need to strain and results in more effective and complete defaecation.

Sometimes patients can develop a chaotic bowel pattern in which gaining control might seem impossible. However, bowels respond well to routine, so it is important for the healthcare professional to support patients to establish a daily toileting routine at an optimum time for them. This is generally first thing in the morning on getting out of bed, or after a meal (Collins and O’Brien 2015).

Patients with IBS-C should be discouraged from resisting the urge to defecate, because this can cause further slowing of colonic transit time. In contrast, patients with IBS-D, who are likely to experience urgency because of loose stools and an increased risk of incontinence, should undertake urge-resistance training. This educates the patient on how to resist the urge to open their bowels in response to urgency, by actively contracting the external sphincter muscle and using a distraction technique (Haslam and Laycock 2008), for example reciting the alphabet backwards or counting down from 100 in sevens. Applying pressure on the perineum can also help to ‘switch off’ the pelvic floor. Continuing this on an ongoing basis reduces the feeling of urgency.

Strengthening the sphincter complex allows patients to regain control of their bowels. Strengthening the pelvic floor complex also enables improvements in pelvic floor strength, co-ordination and overall function. Pelvic floor muscle re-training should follow a thorough rectal or vaginal internal assessment in females, or rectal internal assessment in males, and exercise programmes should be individually tailored to the ability of the patient (Haslam and Laycock 2008).

**Conclusion**

Assessment and management of IBS can be challenging. Patients should be treated on an individual basis according to their presenting symptoms, which can be numerous and complex. Diet, lifestyle, stress and anxiety are common aggravating factors in IBS; changes in these factors may result in worsening symptoms. Management of these factors is essential for patients with IBS. The provision of reassurance and support by healthcare professionals can minimise patient anxiety and distress. Healthcare professionals assessing and treating patients with IBS should have a broad knowledge of the range of treatments available, so that they can advise and inform patients, offer individualised care and management plans, and monitor the effectiveness of interventions.

**TIME OUT 8**

Nurses are encouraged to apply the four themes of The Code (NMC 2015) to their professional practice. Consider how knowledge of the symptoms, treatment and management of IBS relates to the themes of The Code.

**TIME OUT 9**

Now that you have completed the article, you might like to write a reflective account as part of your revalidation.

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**References**


