Diagnosis and Treatment of the Irritable Bowel Syndrome

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Introduction

Irritable bowel syndrome (IBS) is one of the most common conditions encountered in family practice, accounting for about 12% of general practice visits. The incidence of IBS in western communities varies from 10-15%, with a female to male ratio of 2:1.[1] The incidence of IBS varies minimally with age. It is most important when diagnosing IBS in the patient above 45-50 years of age that organic disease is excluded with appropriate tests. Only 30% of patients with IBS symptoms seek health care. Patients with IBS have a significantly impaired quality of life, have to take more time off work and use a greater proportion of health care resources.[2]

The medical practitioner should probably make this diagnosis on a daily or at least weekly basis. It is puzzling, therefore, that the condition is not diagnosed with more certainty, and without ordering a multitude of tests. The answer lies in the fact that IBS is a *functional disorder,* and as such, there is no visible or measurable abnormality. There is no laboratory, radiological or pathological test that is going to confirm or refute the diagnosis. This makes the practitioner, who has been trained in observational skills, somewhat uncertain about making the diagnosis. This article will address the issues surrounding the diagnosis and treatment of IBS.

Diagnosing IBS

If one had to pose the question of how to make the diagnosis of pneumonia or myocardial infarction, the family doctor would have no hesitation in giving the diagnostic criteria. If however, he or she were asked to name the diagnostic requirement for IBS, many would stumble. The first requirement therefore is to learn the current definition of IBS.[3] (See Box 1)

The time period built into the definition is most important. Symptoms of shorter duration may indicate organic pathology, such as diverticulitis or appendicitis. The longer the history, the more likely it is that the patient has a functional bowel disorder.

It is during history taking that the diagnosis is likely to be made or refuted. One has to listen carefully for clues that may point to the diagnosis of IBS. Key words or phrases that may alert one include pain, bloating, worsening of symptoms after meals, and constipation or diarrhoea. Patients often complain of "looking like a 9-month pregnant woman" and "I cannot fit into my clothes by late afternoon and evening". One can then ask pertinent questions to add detail to the history.

Box 1: Diagnostic criteria for IBS.

The Rome 2 criteria for the diagnosis of IBS:

Symptoms of abdominal pain or discomfort for at least 12 weeks in the preceding year (the 12 weeks need not be consecutive), having at least two of the following three features:
- Relieved with defecation
- Onset associated with change in stool frequency
- Onset associated with a change in stool form or appearance

Additional symptoms, which, if present, support the diagnosis of IBS:
- Abnormal stool frequency (more than three bowel movements per day or fewer than three bowel movements per week)
- Abnormal stool form (lumpy/hard or loose/watery stools)
- Abnormal stool passage (straining, urgency or a sense of incomplete evacuation)
- Passage of mucus
- Bloating or abdominal distension

Pertinent questions that should be asked include:

- What has made you seek medical advice at this time? Often, a close friend or family member may have been diagnosed with a serious disease such as an intestinal cancer. The patient is obviously concerned that he or she has a serious disorder, and one that they may have neglected.
- Are you aware of any trigger factors that aggravate your symptoms? One is particularly trying to identify foods or stress as precipitating episodes of IBS. A detailed dietary history is required. Enquire specifically about the effects of lactose and fructose, and gas-forming foods such as legumes and leafy vegetables. Estimate the fibre intake, as a low intake may contribute to constipation.
- Describe your stool pattern. Patients with IBS may have diarrhoea or constipation, or may alternate between constipation and diarrhoea. The Bristol stool chart may help patients identify the type of stool they are passing.
- The patient's past medical and surgical history may be important. Patients with IBS often give a history of excessive health-seeking behaviour, and may have had multiple operations at a relatively young age.

A careful history is vital in allowing the doctor to detect "red flags" or alarm symptoms, requiring prompt further investigation. (See Box 2)

Box 2: Red flags for urgent referral and further investigation

- A short history of symptoms
- Worsening symptoms, such as severe chronic diarrhoea
- Onset of symptoms at age greater than 45 years
- Family history of colorectal cancer or inflammatory bowel disease
- History of anaemia
- Rectal bleeding
- Unexplained weight loss of more than 5kg

Table I: An approach to treatment of IBS

Dimension of symptom	Type of approach
Intensity	
• Mild	Reassurance
• Moderate	Intervention
• Severe	Multi-modal intervention
Frequency of symptoms	
• Occasional	"On demand" therapy
• Intermittent	Limited course of therapy
• Continuous	Continuous therapy
Specific symptoms	
• Pain, discomfort, bloating	Prokinetic, spasmolytic, anti-depressant
• Constipation	Prokinetic, bulking agent, osmotic laxative
• Diarrhoea	Anti-diarrhoeal

Physical examination.
One should perform a careful physical examination, looking for signs that may indicate an alternative diagnosis. These include pallor, evidence of weight loss, features of thyroid malfunction, hepatosplenomegaly and an abdominal mass. A rectal examination must be performed when there has been rectal bleeding or a change in bowel habit, to rule out a low rectal cancer or polyp. Abdominal scars may be important, as women with IBS have significantly higher surgery rates. This is particularly true after cholecystectomy, appendicectomy and hysterectomy.

Laboratory and radiological examinations should be carefully selected. Where appropriate a full blood count, erythrocyte sedimentation rate (ESR), C-reactive protein (CRP) and TSH-levels may be requested. In patients with IBS diarrhoea, a stool sample may be taken for MCS and parasites. This is useful to rule out enteric infections and inflammatory bowel disease.[4]

An abdominal X-ray is valuable in assessing faecal loading of the colon. More specialised tests include colonic transit studies and anorectal function tests, but these are generally in the realm of the specialist.

A sigmoidoscopy may be useful to rule out other causes of diarrhoea in the younger patient. Those presenting at age 50 or older should be referred for colonoscopy. Colonoscopy in the younger patient carries a very low yield, and is seldom necessary.

Treatment of patients with IBS
Perhaps the most important aspect in the treatment of the patient with IBS is the therapeutic relationship between patient and doctor. This requires the doctor to listen carefully to the patient, to identify the patient's concerns and expectations, and to set realistic therapeutic goals. The patient needs to understand that the symptoms can generally be controlled, but that a cure for IBS is not possible at this stage. The patient requires reassurance and one should explain how the diagnosis was made. Involve the patient in the treatment plan and schedule follow-up visits.

Try and encourage proper eating habits, such as having five daily servings of fruit and vegetables. Fibre intake should be gradually increased to 20-25 g/day; some patients will report increased pain, bloating and flatulence with fibre, thus limiting its value.[5] Referral to a dietician will usually benefit IBS sufferers.

Table I sets out a reasonable approach to the treatment of patients with IBS, taking into account the severity of symptoms.The need to tailor the treatment to the patient's symptoms must be stressed. It makes little sense to prescribe continuous therapy for the patient with mild or intermittent symptoms. Irritant laxatives must be avoided if at all possible. Osmotic or bulking agents should rather be used. Anti-spasmodic agents such as mebeverine (Colofac®) or hyoscine (Buscopan® or Spasmopep®) may be of value in relieving painful episodes of IBS. Tegaserod (Zelnorm®), a $5HT_4$-agonist, has the benefit of improving pain, constipation and bloating through its action on the autonomic nervous system.[6] It allows one to use one drug rather than two or three to address the different symptoms. Tegaserod is intended for use in female patients with IBS constipation. Diarrhoea may occur in 10% of tegaserod users, usually in the first few days of treatment.

Anti-diarrhoeal preparations such as loperamide are usually effective in controlling the diarrhoea in IBS-diarrhoea.

In the patient with underlying anxiety or depression, an anti-depressant may be of value. Low dose tricyclic anti-depressants, e.g. amytriptyline 10-25 mg daily, are often effective in reducing symptoms.[7] Psychotherapy, including relaxation and stress-management, hypnotherapy, psychology or psychiatric counselling, may be required.[8]

Indications for referral
1. The presence of "red flags" as indicated above.
2. The presence of severe psychopathology e.g. anxiety, depression.
3. Non-responders to initial therapy or worsening symptoms.
4. Severe cancer phobia

Conclusion
IBS is an extremely common yet debilitating disorder. An accurate and confident diagnosis can be made without over-investigating the patient. Diagnosing IBS effectively will lead to a more satisfactory outcome for both patient and doctor.

See CPD Questionnaire, page 45

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