Symptoms compatible with the diagnosis of irritable bowel syndrome (IBS) are common in western societies. Investigations should be reserved for those with a family history of IBD, colorectal neoplasia or those with worrisome symptoms or signs.

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Presented at the Update in Medicine, St. John’s, Newfoundland, April 2000.

Symptoms compatible with the diagnosis of irritable bowel syndrome (IBS) are common. Population-based epidemiologic studies suggest a high prevalence within the general population. This condition may affect up to 25% of women and 20% of men in western countries. Less than one-third of affected individuals, however, seek help from their primary-care physician, and only 30% of these are ever referred to a gastroenterologist or other specialist.

Patients with irritable bowel syndrome often report a poor quality of life. This may relate to concerns over the diagnosis, uncertainty as to how to deal with the symptoms, or fear of a serious underlying condition, such as cancer. Those affected, use health-care resources more than...
individuals without this condition. Irritable bowel syndrome is second only to the common cold as a reason for workplace absenteeism.

Despite the frequency of this condition and the health-care-seeking patterns of those affected, most of the research has been centered in specialty referral clinics. Even though IBS is often a chronic, intermittent condition, pharmacologic intervention studies have usually involved short trial periods of only a few months. Clearly, these results may not be applicable to a more general population.

Diagnosis of IBS should be made with confidence based on typical symptoms. It should not be considered a diagnosis of exclusion (i.e., after a series of unnecessary blood tests, x-rays and endoscopic procedures have failed to demonstrate any structural pathology). This condition is not a psychosocial illness, as, unfortunately, has been suggested in some older literature.

Diagnosis

The diagnosis of IBS should be made on the basis of positive historical features in the absence of so-called “red flags.” These “red flags” include bleeding and weight loss, and may be associated with structural inflammatory or neoplastic pathology. The severity of symptoms in IBS typically varies over many years. This condition usually onsets in late adolescence or early adult life. It is not unusual, however, to have symptoms compatible with IBS follow the abrupt onset of an infectious gastroenteritis.

Several symptom-based criteria have been devised to aid in making a positive diagnosis of IBS. These include the Manning criteria, as well as the Rome, and subsequently updated Rome II, criteria.¹ These criteria have been validated over time, and if three or more are present, IBS can be predicted with a good degree of sensitivity and specificity. The more symptoms that are present, the more likely the diagnosis of IBS. Several studies have shown that a diagnosis of IBS based on these criteria is valid over a prolonged follow-up of years, with about a 90% to 95% certainty. This has to be tempered, however, with the realization that conditions that are not present at the time of diagnosis may develop over time. There is nothing that prevents a long-term sufferer of IBS from developing inflammatory bowel disease or colon cancer. A recent questionnaire-based study of individuals with a new diagnosis of inflammatory bowel disease (IBD) suggested that the symptoms that finally led to the diagnosis of Crohn’s disease were present for an average of five years prior to the diagnosis. The symptoms of IBD may be nonspecific and also can vary in intensity over time.

The Manning criteria consist of a history of abdominal pain that is chronic, or recurrent, and is associated with an altered bowel habit. The criteria involve two or more of the following symptoms: pain relieved by defecation, pain associated with loose stools, pain associated with more frequent stools, abdominal distension, a sense of incomplete rectal evacuation, or the
presence of mucus in stools. Mucus in the stool is common in patients with IBS, but is often seen as a marker of inflammation or infection if confused with pus. If weight loss, rectal bleeding, anemia, fever, nocturnal symptoms, a family history of gastrointestinal (GI) malignancy, IBD or Celiac disease is present, or the symptoms are of new onset in someone over the age of 45 to 50, then these “red flags” require that diagnostic investigations be performed prior to making a firm diagnosis of IBS.

It is important to perform a thorough physical examination, specifically looking for masses in the abdomen. A rectal exam always should be performed to rule out fissures and to look for telltale tags that may occur in cases of Crohn’s disease.

When making a diagnosis of IBS, it is important to obtain an adequate and appropriate dietary history, inquiring specifically about symptoms that could be attributable to lactase deficiency (often over-suspected by the public). Unnecessary avoidance of the calcium in dairy products may have serious long-term implications, such as osteoporosis. Chronic infection with giardia or diarrhea and abdominal discomfort secondary to excess intake of osmotically active, sugar-free sweeteners, such as sorbitol, may produce some of the symptoms of IBS leading to diagnostic confusion.

Investigations

In the presence of typical symptoms, and in the absence of any worrisome historical feature, investigations may be kept to a minimum. For most cases, a complete blood cell count (CBC) to rule out anemia, leukocytosis or thrombocytosis is sufficient. Many authors have advocated a flexible sigmoidoscopy in everyone, although the recent consensus recommendations pub-
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Established in the Canadian Medical Association Journal do not support this. It is a required investigation if bleeding is present. If the patient is over the age of 50, then a flexible sigmoidoscopy and barium enema or colonoscopy should be arranged to screen for colon cancer. Some authors have suggested stool cultures for ova and parasites, and stool for leucocytes, be performed routinely. The author finds these unnecessary in all but a few select cases.

If a barium enema has demonstrated diverticulosis, remember that diverticulosis and IBS are both common. The diverticula do not cause the symptoms of IBS.

The severity and intensity of symptoms does change over time without intervention. Studies have shown that the predominant symptom pattern is usually quite robust over time. It is not rare, however, for changes to occur. The development of constipation in a diarrhea-predominant individual should not necessarily trigger a series of investigations.

**Management**

As most patients with symptoms compatible with IBS do not seek medical attention, it is necessary for physicians caring for these patients to determine why medical attention was sought. For instance, has a friend recently been diagnosed with IBD or colon cancer, or are these chronic symptoms a marker for the main reason why the health-care visit was initiated? Some studies have suggested that there is a higher incidence of psychosocial pathology in those who seek medical attention, although this should certainly not be assumed to be an issue in everyone who is seen. These issues may require careful exploration in select individuals.

It has been clearly shown that a positive diagnosis with a complete discussion of the issues surrounding IBS is an important foundation upon which to base the management of these patients. One should explain the pathophysiology of IBS, address specific concerns and provide a clear management plan. In fact, the more clearly this is enunciated with the patient, the firmer the physician-patient interaction will be, and the less likely the patient will be to return for a further opinion or request investigations at a later date.

Pharmacologic intervention should not be the primary method of dealing with these patients, and, as much as possible, discussion of lifestyle issues, dietary manipulation and education should be the mainstay of the therapeutic relationship.

Fiber supplementation has been advocated by many as the foundation of the management of IBS patients. An analysis of published trials revealed serious concerns about methodology, with the result that no firm scientific data exist to support this approach. In fact, persistence with ever-increasing amounts of fiber may lead to more discomfort with gaseousness, bloating and an altered bowel habit. This may occur particularly with excess insoluble fiber, such as is that found in fruits and vegetables.

Active patient participation in their care with such measures as a symptom diary with dietary
notations may help identify precipitating events or situations. Occasionally, if stress is felt to be, or has been, demonstrated to be a component of the patient’s symptom complex, then formal relaxation exercises or cognitive behavioral therapy may be helpful. This is probably outside the area of expertise of most primary-care physicians and gastroenterologists, and may be handled more appropriately by a licensed psychologist.

If education, reassurance, dietary advice and the therapeutic relationship fail to provide benefit for the IBS sufferer, then directed pharmacologic intervention may be considered. This approach works best if the predominant symptom is identified.

When looking at the results of trials based on pharmacologic intervention, it is important to be aware there is a huge placebo response. The inherent support offered by a trial designed with time factored in for patients to be educated by both the investigator and trial support personnel may account for some of this. This placebo effect may be as high as 70% in many trials.²

For the diarrhea-predominant individual, judicious use of anti-diarrheal agents, such as loperamide can be tried. The author believes these agents are best used for short periods only, such as around very specific social events, where immediate access to washroom facilities may be difficult. Other products, such as psyllium may be helpful.

Constipation may best be managed with increased fiber intake, but as with the management of constipation, whatever the underlying etiology, it is important to ensure adequate intake of caffeine-free liquids and adherence to regular exercise. Osmotic, non-irritant laxatives are preferred if any laxative needs to be used, even if only for a short time.

Abdominal pain may be the most difficult

In a select group of patients, severely affected by IBS, a multidisciplinary team, including a physician, dietician and psychologist or psychiatrist may be required.
Symptom to manage. Agents, such as trimebutine and pinaverium bromide, available in Canada, have the potential to reduce abdominal pain, though the effect is probably modest. A recent systematic review of a randomized control trial has suggested, however, that such smooth muscle relaxants are beneficial when abdominal pain is the predominant symptom.3

It is not unreasonable to try trimebutine or pinaverium bromide if either has previously failed. Occasionally, tricyclic antidepressant agents, such as amitriptyline, in a very low dose may help. One always has to be aware that its use may aggravate constipation and, therefore, increase the abdominal pain. Narcotics should be avoided at all costs.

A recent systematic review of randomized control trials suggested that peppermint oil and some Chinese herbal medicines warranted further study in the management of IBS.4

5-hydroxy tryptamine (5-HT3) receptor antagonists have shown significant benefit for abdominal pain and diarrhea-predominant groups of IBS patients.4 One such preparation was released for use in the United States in 2000, but was voluntarily withdrawn from market due to concerns related to reports of ischemic colitis. 5-HT4 agonists have demonstrated prokinetic activity and may be helpful with abdominal pain and constipation-predominant symptoms, however, it remains to be seen whether trials with these agents will proceed in light of the concerns with the 5-HT3 compounds. Currently, these agents are not indicated for the treatment of IBS in Canada.

In a select group of patients severely affected by IBS, a multidisciplinary team, including a physician, dietician and psychologist or psychiatrist may be required. Most patients will have fewer symptoms and an improved quality of life with the above approach.

Summary

Symptoms compatible with IBS are common in western societies, though most individuals do not seek medical attention. The importance of making a positive diagnosis and establishing an understanding and educational physician-patient relationship cannot be over-emphasized. Investigations should be reserved for those with a family history of IBD, colorectal neoplasia, or in those with worrisome symptoms or signs (so-called “red flags”). Judicious use of short-term pharmacologic therapy based at the predominant symptom of pain, constipation or diarrhea is reasonable. The active involvement of the patient in this often lifelong condition is important, as it engenders a sense of control. Psychological support and/or intervention may be appropriate in some individuals.

References

Suggested Readings