Irritable bowel syndrome

IBS is one of the commonest gut disorders. A solid doctor-patient relationship is vital in the treatment of this disorder.

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Irritable bowel syndrome (IBS) is best defined as a functional disorder, characterised by abdominal pain or discomfort and associated with abnormal defaecation. It is extremely common, with a worldwide prevalence of 10 - 15%.[1-3]

IBS is more common in women than in men and typically presents in the third or fourth decades of life. It rarely manifests over the age of 50.[1-3] There is substantial overlap with other 'functional diseases' such as fibromyalgia, interstitial cystitis and non-ulcer dyspepsia.[1-3]

IBS is defined by symptom-based diagnostic criteria known as the 'Rome criteria'.[4]

The cardinal feature is abdominal discomfort, which is usually intermittent, peri-umbilical, and cramp-like, and typically relieved by defaecation. Invariably abnormal defaecation is present: diarrhoea, constipation, altered stool passage (urgency, incomplete defaecation or straining) or rectal passage of mucus.

Patients frequently experience bloating, distension or increased gas production. Symptoms are often exacerbated by stress.

On the basis of the predominant bowel habit IBS can be categorised into the following subgroups: IBS with constipation (IBS-C) – more commom in women, IBS with diarrhoea (IBS-D) – more common in men, and IBS with mixed bowel habits (IBS-M).[4]

Pathophysiology

While poorly understood, several mechanisms are thought to play a role in the pathophysiology of IBS, including dysmotility, visceral hypersensitivity, serotonin pathways and psychological factors.[1-4] Infection and inflammation may act as triggers and IBS frequently follows a bout of infectious gastroenteritis.[5]

Diagnosis

The diagnosis is largely clinical and not one of exclusion. A detailed history and examination including a rectal examination are of paramount importance. To establish a diagnosis of IBS the following standardised Rome III criteria must be met:

Recurrent abdominal pain or discomfort at least 3 days per month for the past 3 months, associated with 2 or more of the following:

- relief with defaecation
- onset associated with a change in frequency of stool
- onset associated with a change in form (appearance) of stool.

These criteria must have been fulfilled for the last 3 months with symptom onset at least 6 months before diagnosis.[4] There must be no evidence of organic disease and the following 'alarm' features, which would require further work-up, should be excluded:[2]

- loss of weight
- nocturnal diarrhoea
- age >50 years
- short history of symptoms
- male sex
- family history of colon cancer
- anaemia
- rectal bleeding
- recent antibiotic use.

IBS can be safely diagnosed if the Rome criteria are met and if there are no sinister features after a detailed clinical assessment. The probability of making the diagnosis in this scenario is 98%.[6] The recent British Society of Gastroenterology guidelines for diagnosing IBS recommend a few basic screening tests: in older patients a full blood count (FBC), and in IBS-D an erythrocyte sedimentation rate (ESR) or a C-reactive protein (CRP) and a FBC as Crohn's disease is a possibility.[2] Coeliac disease may also be confused with IBS-D and it is recommended that, in appropriate population groups, coeliac serology (tissue transglutaminase and endomyseal antibodies) be performed before IBS is confirmed.[2] Endoscopy or barium studies are not indicated in the initial work-up towards diagnosing IBS in the absence of alarm features.

Treatment

IBS is a difficult-to-treat condition. As with other functional disorders there is no specific cure and symptoms are chronic. The cornerstone of successful therapy lies in a good doctor-patient relationship. Patients need reassurance that this is a benign disease without life-threatening implications. It is however essential not to trivialise the distress and impact of the condition. Patients should be educated about the nature of the disorder and advised to identify dietary or psychological triggers.

Dietary therapy

It may be useful to enlist the help of a qualified dietician with advice directed at the dominant symptom.[1-3,7] Patients with IBS-C would benefit from increasing their fibre and fluid intake. On the other hand, patients with bloating and distension may be better served by restricting their fibre intake. Those with symptoms suggesting lactose intolerance may benefit from excluding dairy products for a trial period.

Standard pharmacological therapy

Pharmacological therapy should also be directed at the dominant symptom.[1-3] IBS-C is treated with fibre laxatives. If inadequate, osmotic laxatives may be added. Diarrhoea can usually be controlled

with synthetic opiates such as loperamide or diphenoxylate. More severe diarrhoea may warrant a trial of cholestyramine. Simethicone-containing agents, such as Telament, may ease bloating and distension.

Unfortunately pain is the most difficult IBS symptom to control. There are two options available: antispasmodics or antidepressants. The most commonly used antispasmodics are hyoscine and mebeverine. A recent meta-analysis demonstrated the efficacy of these agents when compared with placebo.[8] Antispasmodics are best used on an 'as needed' basis. Patients with ongoing pain warrant a trial of antidepressants. Tricyclic antidepressants have been assessed in placebo-controlled trials and found to be superior to placebo in controlling IBS pain.[9] The lowest effective dose should be used. Unfortunately these drugs may aggravate constipation and should be used with caution in IBS-C. Other classes of antidepressant, such as the selective serotonin reuptake inhibitors, may also be of value as they reduce visceral hypersensitivity.[1-3]

Invariably a number of patients fail to respond and there remains a pressing need for novel therapies. Unfortunately the success of drugs targeting the 5-HT_3 and 5-HT_4 gut serotonin receptors has been tempered by side-effects limiting their use.[10]

The 5-HT_3-receptor antagonist alosetron benefits women with IBS-D, improving global symptoms and stool form.[11] Reports of ischaemic colitis led to its withdrawal in 2000. It has subsequently been re-approved by the FDA with a number of restrictions.

The partial 5-HT_4-receptor agonist tegaserod was shown to be effective in women with IBS-C, both in relieving constipation and in reducing pain.[12] As with alosetron the use of tegaserod was subsequently restricted, in this case because of an increase in the incidence of myocardial ischaemia and stroke.[10]

Psychotherapy

Psychotherapy is of value, especially in patients with concurrent depression and anxiety, as well as in the subgroup IBS-D. There are several types of psychotherapy available, e.g. group therapy and cognitive behaviour therapy.[1-3] Hypnotherapy has distinct benefits but is not widely available.[13]

Summary

IBS remains one of the commonest gut disorders. The pathophysiology appears to be highly complex and remains poorly understood. The key to managing IBS lies in a solid physician-patient relationship and realistic expectations from both doctor and patient. Treatment is directed at the dominant symptom.

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In a nutshell

- IBS is best defined as a functional disorder, characterised by abdominal pain or discomfort and associated with abnormal defaecation.
- The diagnosis of IBS is largely clinical and not one of exclusion.
- IBS is a difficult-to-treat condition. As with other functional disorders there is no specific cure and symptoms are chronic.
- It may be useful to enlist the help of a qualified dietician with advice directed at the dominant symptom.
- Pharmacological therapy should also be directed at the dominant symptom.
- Psychotherapy is of value, especially in patients with concurrent depression and anxiety, as well as in the subgroup IBS with diarrhoea.
- IBS remains one of the commonest gut disorders. The pathophysiology appears to be highly complex and remains poorly understood.