

THE IRRITABLE BOWEL SYNDROME

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The irritable bowel syndrome (IBS) has traditionally been a diagnosis made by exclusion and, as a consequence, a heterogeneous group of unexplained abdominal disorders is often included under this heading leading to diagnostic and therapeutic confusion. Were a more definitive approach towards diagnosis and classification adopted, better understanding and management might result. For instance, it seems illogical to presuppose that IBS characterized by diarrhoea would necessarily respond to the same therapeutic measures as that in which constipation predominates, yet many clinical trials make no attempt to evaluate response to therapy in terms of initial symptomatology.

Recently attempts have been made to define symptom complexes which might lead to a more positive diagnosis of IBS [1,2], and among these abdominal distension has emerged as a particularly useful distinguishing feature. Symptoms such as pain relief by defecation, a feeling of incomplete evacuation, and mucus in the stool are all common in IBS – but they do not satisfactorily discriminate it from other forms of colonic disease [3].

Thus in order to diagnose classic irritable bowel syndrome the patient should exhibit the triad of abdominal pain, distension and an abnormal bowel habit characterized by either frequent defecation, constipation or a combination of the two. Not all patients would conform to this definition but it may go some way to preventing patients with, for example, intractable psychogenic abdominal pain being lumped together with IBS. However, there must remain an element of diagnosis by exclusion (using appropriate haematological, endoscopic and radiographic investigations) until more precise diagnostic markers are available in IBS. It should also be remembered that IBS may co-exist with other organic diseases [3], and care should therefore be taken not always to attribute symptoms to an exacerbation of the organic disorder.

AETIOLOGY OF IRRITABLE BOWEL SYNDROME

Population surveys indicate that IBS is an extremely common disorder and that a number of patients never seek medical help for their problem [4,5]. Thus studies,

particularly those of a psychological nature, on patients who do come under medical care may be identifying the reason they seek help rather than shedding light on aetiology. Therefore the finding of a high incidence of *psychopathology* [6,7] or chronic illness behaviour in patients with IBS needs to be interpreted with some caution. In addition it would not seem unreasonable to suppose that the unrelenting course of IBS in some patients, in conjunction with failure to find a solution to their problem, might lead to the development of psychological problems of a purely secondary nature.

Many patients with IBS complain that eating makes their symptoms worse. This has led to considerable interest in the role of *food intolerance* with suggestions that exclusion diets can lead to dramatic improvements [9]. However it should be noted that this has only been reported in the relatively small sub-group of patients with diarrhoea and, when applied to patients with other bowel habit abnormalities, the exclusion diets produce very disappointing results [10]. An alternative explanation for the exacerbation of symptoms by food is that it is merely secondary to the release of neuropeptides or gut hormones associated with eating and not related to food intolerance at all.

There is evidence that patients with IBS have *increased sensitivity to visceral pain* [11,12]. Balloons inflated to the same degree in the sigmoid colon produce significantly more pain in patients with IBS than controls [11]. Installation of gas into the small bowel of IBS patients gives similar results [12]. Recently it has been shown that the inflation of balloons at various sites in the colon of patients with IBS can induce pain at a wide variety of different sites not necessarily confined to the abdominal region [13].

The measurement of *motility* in IBS has been bedevilled by the use of a wide variety of different experimental techniques and designs. This, taken with the lack of uniformity of patients studied, makes comparison of results almost impossible. Several studies have revealed that abnormalities of colonic motility can be demonstrated in patients with IBS. These include an increased segmental activity in constipated patients, hypomotility with diarrhoea [14], and exaggerated contractile responses to food, stress, bile acids, cholecystokinin and parasympathomimetics [15,16]. However, at present these are not sufficiently consistent to be of diagnostic value. It is also becoming clear that the motility disturbance of IBS is not, as was originally thought, confined to the colon – which makes the term ‘irritable colon’ obsolete. There is now good evidence that both the small bowel [17] and the oesophagus [18] can exhibit abnormal motility patterns in these patients. Recently, urodynamic studies on the bladders of patients with IBS have demonstrated that 50% of these subjects have abnormal bladder function with 33% exhibiting detrusor instability [19]. Taken together, this motility data lends support to the theory that IBS may be a much more diffuse disorder of smooth muscle or its innervation than has hitherto been recognized.

The more diffuse nature of the disorder may help to explain the wide variety of different symptoms of which these patients complain [20]. Compared with controls, IBS patients have a high incidence of genitourinary symptoms such as frequency, urgency and, in women, dyspareunia. Chronic backache and constant lethargy and tiredness are also common complaints as are heartburn, nausea and early satiety.

All these symptoms make the patient appear to be a chronic complainer, and in many instances, lead to extensive and inappropriate investigation or on occasions unnecessary surgery.

CONVENTIONAL TREATMENT OF IRRITABLE BOWEL SYNDROME

The treatment of IBS remains unrewarding for both patient and physician alike. Probably the worse thing a patient can be told is that there is nothing wrong with them, or that it is all in the mind. It is much better to tell them they have a definitive disorder of bowel muscle function, which will not show up on the various tests. Often the patient will have a fear of more serious disease and the positive side of investigation in excluding such disorders should be emphasized. The mainstays of therapy remain bulking agents and spasmolytics [21], although there is surprisingly little evidence for their efficacy. Bulking agents do appear useful in relieving constipation, but probably have little effect on pain and distension. By the time of referral patients are often consuming large amounts of bran and, if they belong to the sub-group characterized by loose bowels, reduction of bran intake can paradoxically lead to considerable improvement. No antispasmodic has been shown to have a marked effect on all the symptoms of IBS and they are best used in patients in whom pain is predominant. Some patients find that an 'as necessary' approach to the use of spasmolytics may be more effective than continuous medication. Some anti-depressants may ease abdominal pain and this action may be related to anti-cholinergic properties, as the beneficial effect is not confined to those patients with psychiatric illness. Anti-diarrhoeals are useful only in relieving diarrhoea and faecal incontinence, and β -blockers and dopamine receptor antagonists have only placebo actions in IBS.

UNCONVENTIONAL APPROACHES TO THE THERAPY OF IRRITABLE BOWEL SYNDROME

Many patients continue to do badly despite a wide variety of different medications and this has led to the application of more unconventional approaches to therapy. *Transcutaneous nerve stimulation* (TENS) is now being increasingly used for control of various types of chronic pain. In a recent uncontrolled study TENS has been shown to be useful in patients with intractable abdominal pain [22] although the effect on bowel habit and distension was not reported. If the controlled trial, which is now being undertaken by the same group, confirms this preliminary data then TENS may prove to be a useful adjunct to therapy.

Psychotherapy has also been assessed in IBS [23,24] and reported to be successful. In a controlled trial of *hypnotherapy* in severe intractable IBS we reported that patients experience dramatic improvement of all their symptoms when compared with a control group [25]. In further studies we have shown that patients under the age of 50 do particularly well, whereas the response over that age is disappointing. In addition, patients with atypical symptoms or psychopathology also show a rather poor response rate [26]. The overall success rate of hypnotherapy

is 84%, but it is time-consuming and consequently can only be offered realistically to severe refractory cases, despite the fact that milder cases would probably respond even more dramatically.

The enigma of the irritable bowel syndrome continues to challenge and frustrate the gastroenterologist. If the condition could be better defined this might make the results of research into it more intelligible, leading to more effective forms of therapy.

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