Diagnosis and management of irritable bowel syndrome: discussion paper

P J Whorwell MD FRCP *Department of Medicine, University Hospital of South Manchester, Manchester M20 8LR*

Keywords: irritable bowel; diagnosis; therapy; pathophysiology

Paper read to Section of Hypnosis & Psychosomatic Medicine, 6 March 1989

The key to the good management of irritable bowel syndrome (IBS) is a positive attitude to both diagnosis and treatment. It should be explained to patients that they do indeed have a legitimate disorder and they should never be told there is nothing wrong with them. Appropriate investigations such as ultrasonography, endoscopy, or barium studies may be necessary depending on the clinical situation. However, the patient should be forewarned that a negative result is anticipated as the purpose of the test is to exclude other possible diseases rather than to help with the diagnosis of their disorder. In other words an absence of demonstrable pathology does not detract from the reality of their problem.

The temptation to classify as IBS all gastrointestinal symptoms that cannot be satisfactorily explained should be avoided. Patients should fulfil diagnostic criteria based on symptoms of which the three most important are abdominal pain (any site), abdominal distension and an abnormal bowel habit. Close questioning about the bowel habit may be necessary. For instance one visit to the toilet a day to open the bowels may not sound particularly abnormal but if that visit lasts over an hour it is clearly far from normal. Conversely 10 visits a day may sound like diarrhoea but if only a few small, hard pellets are expelled at each visit this would be better classified as constipation or frequent defaecation. It remains to be determined whether conditions such as non-ulcer dyspepsia, biliary dyskinesia, oesophageal spasm, proctalgia fugax and slow transit constipation form part of the spectrum of IBS or are separate entities.

Irritable bowel syndrome is exceedingly common and affects at least 15% of the population[1]. The sex incidence varies from series to series but most indicate a female preponderance. The condition shows a familial pattern[2] but whether this indicates a genetic predisposition or is a reflection of environmental factors remains to be determined. The cause is entirely unknown but autonomic or neuroendocrine dysfunction may be involved. It is not an uncommon clinical observation for IBS to appear to be precipitated by gastrointestinal infections, antibiotic usage or abdominal (particularly gynaecological) surgery. The question of food intolerance remains highly controversial. A particularly difficult issue is the role of stress and psychological factors in the pathogenesis of IBS. Stress certainly has an exacerbating influence and there is no doubt that in most series the incidence of psychopathology is in the order of 50-60%[3]. The problem is that these studies have all been on hospital-based populations raising questions such as cause or effect and selection bias. Two recent studies have examined the incidence of psychopathology in IBS subjects in the community who had not sought medical advice[4,5]. Interestingly the prevalence of psychopathology in these subjects was no greater than that of unaffected individuals.

It is now generally believed that whatever the cause, IBS represents a motility disorder of the whole gut rather than just the colon. Abnormal motility patterns have been described in the oesophagus[6], small bowel[7,8], large bowel[9,10], and anorectum[11]. In addition bladder smooth muscle abnormalities have been described[12] suggesting that IBS may represent an even more diffuse disorder of smooth muscle or its innervation. In contrast visceral sensitivity has received relatively little attention but there is some evidence for it being increased in patients with IBS[13,14]. Somatic pain tolerance is greater in IBS[15] subjects than normals indicating that they are not just chronic complainers. Thus both motility and visceral sensitivity appear to be disturbed in IBS and the relative contribution of each from patient to patient may be variable. The science of motility is rapidly advancing and it may not be too long before we have motility tests which significantly contribute to the more accurate diagnosis of IBS.

The fact that IBS is a more generalized disorder of the gastrointestinal tract than previously appreciated may partly explain why patients complain of such symptom diversity. It has recently been shown that the following 'non-colonic' symptoms are particularly prominent[16]: nausea, heartburn, early satiety, dyspareunia, urinary frequency and urgency, nocturia, constant lethargy, backache and thigh pain. These symptoms are of major practical importance as patients can often cope with them much better if they know that they are associated with their problem and are not indicative of more serious disease. In addition ignorance of these symptoms can lead to much unnecessary investigation and referral to inappropriate specialties. In particular patients with IBS are frequently referred to gynaecological clinics[17].

After the explanations outlined earlier the mainstays of treatment are bulking agents and anti-spasmodics. Bran can sometimes exacerbate a patient's symptoms and the ispaghula derivatives, particularly the modern flavoured ones, are often a more satisfactory way of providing bulk in the diet. There are many anti-spasmodic drugs available and if one does not work it is always worth trying alternatives. The 'as necessary' use of these agents is often preferable as it prevents tachyphylaxis and also maintains the placebo effect of taking a tablet for the pain. Antidiarrhoeal agents are useful in patients with true diarrhoea but are contra-indicated in the frequent defaecators mentioned earlier who do better with

0141-0768/89/100613-02/$02.00/0
© 1989 The Royal Society of Medicine

bulking agents. Psychotropic drugs should only be reserved for those instances where there is a definite coexisting affective disorder. Mild disturbances of mood respond just as well to treatment of the underlying condition coupled with sympathy and reassurance. With this conventional approach to the treatment of IBS 75% of patients will usually improve but unfortunately the remainder fail to respond or even get worse. For these individuals approaches such as exclusion diets, transcutaneous nerve stimulation, psychotherapy and even hypnotherapy have been advocated.

Exclusion diets have been tried in IBS with the production of conflicting results[18-20]. Patients with diarrhoea seem to respond best to this form of treatment and the response in those with constipation is often very disappointing. Transcutaneous nerve stimulation is worth trying in difficult patients particularly if pain is predominant[21]. Psychotherapy appears to have a beneficial effect on some patients[22,23] and we have recently reported the dramatic effect of hypnotherapy in patients with severe refractory IBS[24-26]. The efficacy of hypnotherapy in IBS has recently been confirmed by another independent study[27] and with over 200 patients treated by this technique our response rate is approximately 85% overall[28].

In summary many patients with IBS can be improved by a positive approach to management coupled with careful selection of appropriate medications. For those patients who prove refractory to therapy we usually first investigate them more fully and assess their gastrointestinal motility. If no other problems are found we try transcutaneous nerve stimulation for the pain predominant individuals and exclusion diets for those with a loose bowel habit. Hypnotherapy, because it is the most time consuming of all the options, is reserved for those in whom all other treatments have failed.

References

1 Thompson WG, Heaton KW. Functional bowel disorders in apparently healthy people. *Gastroenterology* 1980; **79**:283-8

2 Whorwell PJ, McCallum M, Greed F, Roberts CT. Non colonic features of irritable bowel syndrome. *Gut* 1986; **27**:37-40

3 Greed FH, Guthrie E. Psychological factors in the irritable bowel syndrome. *Gut* 1987;**28**:1307-18

4 Drossman DA, McKee DC, Sandler RS, *et al.* Psychological factors in the irritable bowel syndrome. *Gastroenterology* 1988;**95**:701-8

5 Whitehead WE, Bosmajian L, Zonderman AB, Costa PT, Schuster MM. Symptoms of psychologic distress associated with irritable bowel syndrome. *Gastroenterology* 1988; **95**:709-14

6 Whorwell PJ, Clouter C, Smith CL. Oesophageal motility in the irritable bowel syndrome. *Br Med J* 1981; **282**:1101-2

7 Kumar D, Wingate DL. The irritable bowel syndrome: a paroxysmal motor disorder. *Lancet* 1985;ii:973-7

8 Kellow JE, Phillips SF. Altered small bowel motility in irritable bowel syndrome is correlated with symptoms. *Gastroenterology* 1987;**92**:1885-93

9 Snape WJ, Corlson GM, Metarazzo SA, Cohen S. Evidence that abnormal myoelectrical activity produces colonic motor dysfunction in the irritable bowel syndrome. *Gastroenterology* 1977;**72**:383-7

10 Harvey RF, Read AE. Effect of Cholecystokinin on colonic motility and symptoms in patients with irritable bowel syndrome. *Lancet* 1973;i:1-3

11 Whitehead WE, Engel BT, Schuster MM. Irritable bowel syndrome: Physiological and psychological differences between diarrhoea and constipation predominant patients. *Dig Dis Sci* 1980;**25**:404-13

12 Whorwell PJ, Lupton EW, Erduran D, Wilson K. Bladder smooth muscle abnormalities in patients with irritable bowel syndrome. *Gut* 1986;**27**:1014-17

13 Ritchie J. Pain from distension of the pelvic colon by inflating a balloon in the irritable bowel syndrome. *Gut* 1973;**14**:125-32

14 Lasser RB, Bond JH, Levitt M. The role of intestinal gas in functional abdominal pain. *N Engl J Med* 1975;**293**:524-6

15 Cook JJ, Van Eeden A, Collins SM. Patients with irritable bowel have greater pain tolerance than normal subjects. *Gastroenterology* 1987;**93**:727-33

16 Whorwell PJ, McCallum M, Greed FH, Roberts CT. Non colonic features of irritable bowel syndrome. *Gut* 1986;**27**:37-40

17 Prior A, Whorwell PJ. Gynaecological consultations in patients with irritable bowel syndrome. *Gut* 1989;**30**:996-8

18 Alun-Jones V, Shorthouse M, McLaughlan P, Workman E, Hunter JO. Food intolerance: a major factor in the pathogenesis of irritable bowel syndrome. *Lancet* 1982;ii:1115-17

19 Bentley SJ, Pearson DJ, Rox KJB. Food hypersensitivity in irritable bowel syndrome. *Lancet* 1983;**2**:295-7

20 McKee AM, Prior A, Whorwell PJ. Exclusion diets in irritable bowel syndrome: are they worthwhile? *J Clin Gastroenterol* 1987;**9**:526-8

21 Sylvester K, Kendall GPN, Lennard-Jones JE. Treatment of functional abdominal pain by transcutaneous electrical nerve stimulation. *Br Med J* 1986;**293**:481-2

22 Hislop IG. Effect of very brief psychotherapy on the irritable bowel syndrome. *Med J Aust* 1980;**2**:620-3

23 Svedlund J, Ottosson JO, Sjvdin I, Dotevall G. Controlled study of psychotherapy in irritable bowel syndrome. *Lancet* 1983;ii:589-92

24 Whorwell PJ, Prior A, Faragher EB. Controlled trial of hypnotherapy in the treatment of severe refractory irritable bowel syndrome. *Lancet* 1984;ii:1232-4

25 Whorwell PJ, Prior A, Colgan SM. Hypnotherapy in severe irritable bowel syndrome: Further experience. *Gut* 1987;**28**:423-5

26 Whorwell PJ. Hypnotherapy in the irritable bowel syndrome. *Stress Med* 1987;**3**:5-7

27 Harvey RF, Gunary RM, Huiton RA, Barry RE. Individual and group hypnotherapy in treatment of refractory irritable bowel syndrome. *Lancet* 1989;i:424-5

28 Whorwell PJ. Hypnotherapy in irritable bowel syndrome. *Lancet* 1989;i:622

(Accepted 21 April 1989)