

Therapeutic options in irritable bowel syndrome

A review of patients attending a gastroenterology clinic

SJ Langdon, CW Jackson and PJ Whorwell

Fifty consecutive patients with irritable bowel syndrome attending a gastroenterology clinic were questioned about the efficacy of various therapies they had received.

Fifty different medications had been tried, with several patients receiving in excess of 10. The patient rating for the different preparations showed individual preferences but, overall, no single medication was rated significantly superior to any other. Results of this study suggest that treatment of IBS should take the bowel habit abnormality into account, but must largely remain a process of trial and error.

Irritable Bowel Syndrome (IBS) has been shown to affect up to 15% of the population,^{1,2} with women being more commonly affected than men. Symptoms vary widely as shown in Table 1. The severity of symptoms often fluctuates considerably, although patients are seldom completely free of trouble.³ Although the underlying pathophysiology of IBS is unknown, there are at least four different patterns of clinical presentation based on the type of bowel habit experienced. These are:

- Constipation
- Diarrhoea
- Alternating constipation and diarrhoea
- Normal bowel habit.

Treatment remains symptomatic⁴ and depends to some extent on the type of bowel habit abnormality. Due to the variability and individual nature of the condition, finding the optimal treatment is largely a matter of 'trial and error' and may take many months. This delay, as well as the partial response to medication that is often experienced, can lead many patients to try alternative modes of therapy such as acupuncture, hypnotherapy or herbal remedies.

In this study, patients were asked to evaluate the various treatments they had been given in order to try and establish the relative efficacy of the multitude of available medicaments for IBS.

Method

Patients presenting at the gastroenterology out-patient clinic who had been diagnosed as having IBS for more than three months were interviewed. Interviews took the form of answering a detailed questionnaire. Information obtained from this and from the patients' case notes was then used to construct a comprehensive treatment profile. Individual treatments were assessed for efficacy by asking the patient to subjectively gauge benefit obtained from each on a linear scale from 0 to 5 (see Table 2).

SJ Langdon, BSc, Pre-Registration Pharmacist, CW Jackson, MSc, MPS, Staff Pharmacist, Clinical Development and PJ Whorwell, BSc, MD, MRCP, Consultant Physician and Senior Lecturer in Medicine, are at the University Hospital of South Manchester.

Table 1. Symptoms associated with IBS

- | | |
|-------------------------|------------------------|
| ● Abdominal pain/cramps | ● Pellet-like stools |
| ● Diarrhoea | ● Stringy stools |
| ● Constipation | ● Mucous in the stools |
| ● Abdominal distention | ● Fatigue |
| ● Nausea | ● Headache |
| ● Dyspepsia | ● Backache |

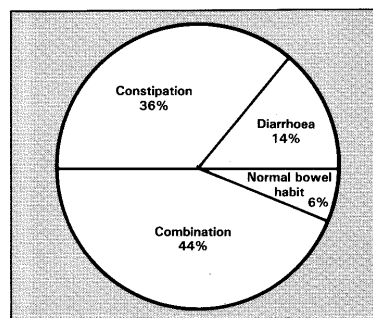


Figure 1. Percentage breakdown of IBS type at presentation.

Results

Fifty patients (43 females and seven males) were interviewed. Their ages ranged from 21 to 60 with more than two-thirds under 40 years of age. The most common form of IBS was alternating constipation and diarrhoea, accounting for 44% of those interviewed. The prevalence of each type of IBS encountered can be seen in Figure 1. Figure 2 shows the number of different preparations used per patient for the different forms of IBS.

The average number of preparations used by the constipated subjects was 4.9, for those with diarrhoea 4.0, and for those with alternating diarrhoea and constipation, 6.1. In all, 50 different medicinal preparations had been used by patients in the study.

The results of the subjective linear scale assessments of each preparation's efficacy in IBS can be seen in Table 3. The preparations included in this table are those used by

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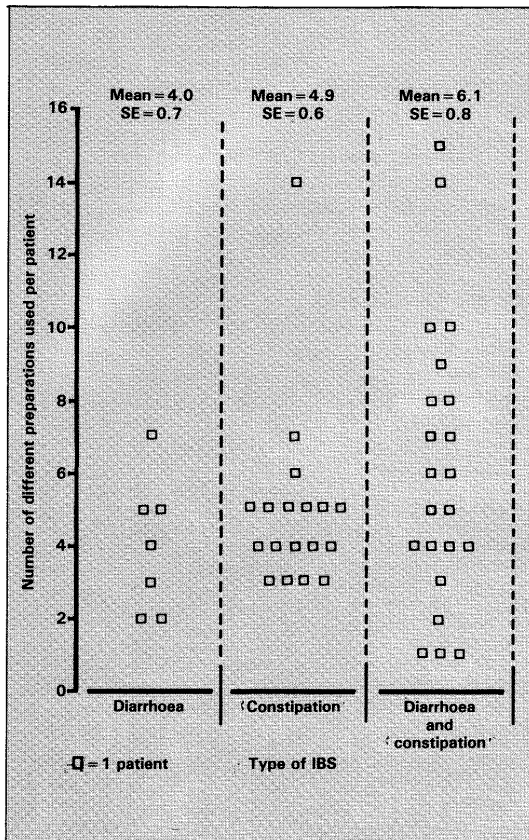


Figure 2. Number of different preparations used per patient for each type of IBS.

Table 2. Linear scale for subjective assessment of drug benefit in IBS symptoms

0	1	2
Totally ineffective even detrimental	Ineffective	Marginal improvement
3	4	5
Small improvement	Considerable improvement	Very effective

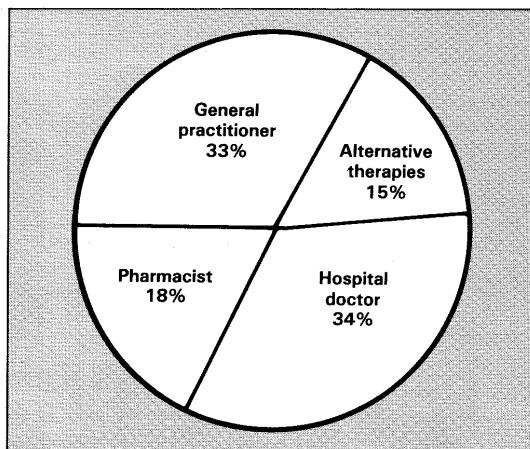


Figure 3. Source of treatments and advice for the treatment of IBS symptoms.

Table 3. Linear scale subjective assessment of effectiveness of preparations used for IBS symptoms.

Preparation	Number of patients having used preparation	Mean subjective score (0-5)	95% confidence limits for mean value
Loperamide	5	3.4	3.4 ± 1.95
Kaolin and morphine	6	3.3	3.3 ± 1.54
Regulan (Ispaghula)	11	3.1	3.1 ± 0.89
Senokot (Sennoside B)	13	2.7	2.7 ± 1.09
Co-danthromer	6	2.7	2.7 ± 1.80
Metamucil (Ispaghula)	44	2.5	2.5 ± 0.40
Normacol (Ispaghula)	13	2.5	2.5 ± 0.87
Lactulose	10	2.5	2.5 ± 0.90
Fybogel (Ispaghula)	14	2.5	2.5 ± 0.65
Merbentyl (Dicyclomine)	5	2.4	2.4 ± 1.39
Codeine phosphate	5	2.2	2.2 ± 1.95
Propantheline	10	2.1	2.1 ± 1.13
Methylcellulose	6	2.1	2.1 ± 1.80
Mebeverine	30	2.0	2.0 ± 0.41
Colpermin	5	2.0	2.0 ± 2.22

N.B. Authors descriptions of preparations reproduced to avoid confusion.

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five or more patients. The sources from which patients received their advice/treatment are shown in Figure 3. It can be seen that one-third of all treatments used did not originate from a doctor.

Discussion

The ratio of female to male patients interviewed (6:1) and their age distribution is in general agreement with accepted population data for IBS. The study highlighted the plethora of medicinal products used to treat this disorder. Fifty different preparations were tried, with the number tried per patient ranging from 1 to 15. No discernible pattern of prescribing could be seen, indicating the problem doctors have in treating this disorder effectively. Patients' subjective assessment of each drug's efficacy showed that no single agent was significantly better than another. Table 3 demonstrates that there is little to choose between the various preparations available. Thus, when a particular medication is being selected, the drugs with the least potential for toxicity should be chosen first. The bowel habit abnormality also needs to be taken into account, for instance, it would be clearly inappropriate to give loperamide to a constipated subject.

Hypnotherapy is one of the therapies offered by the gastroenterology department.⁵ It is of interest that this form of treatment scored 4.8 on the patient efficacy scale. However, hypnotherapy is very time consuming and does not represent a realistic option to the very large

number of IBS patients, and in particular to those patients with mild to moderate symptoms.

In a considerable number of patients, the failure to find a satisfactory solution to their problem has led to experimentation with less orthodox therapies. Figure 3 implies that 85% of patients had only tried standard pharmacological preparations, but that 15% had tried alternative therapies including special diets, yoga, hypnotherapy, acupuncture, herbal and homeopathic remedies. It was somewhat surprising to discover that although 66% of patients complained of nausea, only 6% had received any drugs designed specifically to alleviate this symptom. This may reflect the fact that patients with IBS often only admit to this symptom when it is specifically enquired after.

This study demonstrates some of the difficulties that doctors face when prescribing correct treatment for patients with IBS. □

References

1. Thompson WG, Heaton KW. Functional bowel disorders in apparently healthy people. *Gastroenterology* 1980; **79**: 283-288.
2. Drossman DA *et al.* Bowel dysfunction among subjects not seeking health care. *Gastroenterology* 1982; **83**: 529-534.
3. Waller SL, Misiewicz JJ. Prognosis in the irritable bowel syndrome. *Lancet* 1969; **2**: 753-756.
4. Prior A, Whorwell PJ. Management of irritable bowel syndrome. *Biomedicine and Pharmacotherapy* 1986; **40**: 4-5.
5. Whorwell PJ, Prior A, Faragher EB. Controlled trial of hypnotherapy in the treatment of severe refractory irritable bowel syndrome. *Lancet* 1984; **ii**: 1232-1234.