Prevalence of irritable bowel syndrome in chronic fatigue

ABSTRACT—The aetiologies of irritable bowel syndrome and chronic fatigue are unknown. Psychological as well as physical factors have been implicated in both. Fatigue is common in irritable bowel syndrome patients. The purpose of the study was to determine the prevalence of irritable bowel syndrome in chronic fatigue sufferers. A bowel symptom questionnaire was sent to all 4,000 members of a self-help group for fatigue sufferers. Of the 1,797 who responded, 1,129 (63%) fulfilled a diagnosis of irritable bowel syndrome (recurrent abdominal pain and at least three Manning criteria). This greatly exceeds estimates of irritable bowel syndrome prevalence of up to 22% in the general population. Furthermore, irritable bowel syndrome sufferers within this chronic fatigue population reported more Manning criteria (14% had all six Manning criteria) than irritable bowel syndrome sufferers in the general population. This study demonstrates an overlap of symptoms in chronic fatigue and irritable bowel syndrome. In chronic fatigue, irritable bowel syndrome symptoms may be one aspect of a more generalised disorder.

Approximately one-fifth of the population report significant and lasting fatigue [1]. The relative contributions of physical and psychological factors to chronic fatigue remain controversial. Chronic fatigue as a syndrome is associated with other symptoms such as sore throat, lymph node pain, headaches and muscle pain [2].

Irritable bowel syndrome is characterised by abdominal pain and altered bowel habit without an identifiable cause. Irritable bowel syndrome sufferers also often complain of multiple non-gastrointestinal symptoms, including fatigue [3]. In one study of irritable bowel syndrome patients attending hospital, 96% complained of constant tiredness, and 15% were more troubled by this than by their bowel symptoms [4]. This overlap of symptoms prompted an investigation into the prevalence of irritable bowel syndrome in chronic fatigue sufferers.

Methods

All members of a self-help group for sufferers from chronic fatigue states, Action for ME, were sent an abridged version of a validated bowel disease questionnaire [5]. The questionnaire included the six Manning criteria for diagnosing irritable bowel syndrome [6]: abdominal pain relieved by defecation, more frequent stools with the onset of abdominal pain, looser stools with pain onset, abdominal distension, rectal passage of mucus, and a sensation of incomplete rectal evacuation. The members of the self-help group were not screened according to any research criteria for fatigue syndromes and no attempt was made to distinguish myalgic encephalomyelitis from chronic fatigue syndrome or post-viral fatigue syndromes.

Results

Questionnaires were returned by 1,797 (45%) of the 4,000 members. Twelve were excluded because they were incomplete or because the respondent indicated a history of organic gastrointestinal disease. Of the remaining 1,785 respondents, 1,397 (78%) indicated they had had abdominal pain more than six times in the past year and 21% regularly used laxatives. Using a definition of recurrent abdominal pain and two or more Manning symptoms [7,8], 1,300 (73%) qualified for a diagnosis of irritable bowel syndrome. Since the study group was a non-healthy population, a more restrictive definition of pain plus three or more Manning criteria was used, but even using this definition, 1,129 (63%) had irritable bowel syndrome and 50% of these had consulted their general practitioner and/or hospital specialist in the past 12 months specifically for gastrointestinal problems (Table 1). Equal numbers had consulted for abdominal pain as for altered bowel habit; 15% consulted on average more than once every two months. Bowel habit was described as abnormal by 94% of the consultants and by 85% of the non-consulters. For most, this abnormality took the form of alternating diarrhoea and constipation.

Discussion

The 63% prevalence of irritable bowel syndrome in this group of chronic fatigue sufferers was much greater than estimates of its prevalence (up to 22%) in the general population, using similar questionnaire methodology [7–9]. Furthermore, irritable bowel syndrome
sufferers within this chronic fatigue population reported more Manning criteria than irritable bowel syndrome sufferers in the general population (Table 1). For example, only 1% of 1,620 questionnaire respondents in a general population study had all six Manning criteria [8], whereas 14% of our 1,785 respondents with chronic fatigue had all six symptoms.

Fifty per cent of chronic fatigue sufferers with irritable bowel syndrome had consulted a doctor within the last year for irritable bowel symptoms. This contrasts with community studies reporting that up to 33% of the general population with irritable bowel syndrome had consulted a doctor in the recent past [7,8]. The consultation rate was unrelated to the number of Manning criteria (Table 1).

Participants in our study were members of a self-help group and we did not scrutinise their diagnosis of chronic fatigue for the purpose of the study. It is possible that self-help groups for ‘functional’ illnesses without a definite organic basis attract persons who diagnose themselves. Self-diagnoses and abnormal illness behaviour patterns are likely to be found among the membership of a self-help group for a condition as contentious and emotive as chronic fatigue.

Members of a self-help group may not necessarily be representative of all chronic fatigue sufferers, and the questionnaire response rate of 45% was lower than expected. It is possible that those who did not respond to the questionnaire were less likely to have bowel symptoms than those who did. Nevertheless, the findings from this study confirm our impression that there is an overlap in symptoms between chronic fatigue and irritable bowel syndrome. Depending on which symptoms are more prominent, individuals with both conditions may be labelled as suffering from irritable bowel syndrome or chronic fatigue or both. The two conditions may overlap in their pathogenesis. Furthermore, irritable bowel syndrome and chronic fatigue, together with migraine, depression and anxiety, are often associated with fibromyalgia [10]. This suggests that these medical and psychiatric disorders may share a common pathway in their aetiology. Both chronic fatigue and irritable bowel syndrome have been associated with psychiatric disorder [11–14]. In chronic fatigue, irritable bowel syndrome may be one component of a more generalised multiple-complaint disorder.

Acknowledgement

This study was supported by Action for ME.

References

1 Chen MK. The epidemiology of self-perceived fatigue among adults. Prog Med 1986;15:74–81.
2 Holmes GP, Kaplan JE, Gantz NM, Komaroff AL, et al. Chronic fatigue syndrome: a working case definition. Ann Intern Med 1988;108:387–9.
3 Whorwell PJ, McCallum M, Creed FH, Roberts CT. Non-colonic features of irritable bowel syndrome. Gut 1986;27:37–40.
4 Maxton DG, Morris JA, Whorwell PJ. Ranking of symptoms by patients with the irritable bowel syndrome. Br Med J 1989;299:1138.
5 Talley NJ, Phillips SF, Melton LJ, Willgen C, Zinsmeister AR. A patient questionnaire to identify bowel disease. Ann Intern Med 1989;111:671–4.
6 Manning AP, Thompson WG, Heaton KW, Morris AF. Towards positive diagnosis of the irritable bowel. Br Med J 1978;2:653–4.
7 Talley NJ, Zinsmeister AR, Van Dyke C, Melton LJ. Epidemiology of colonic symptoms and the irritable bowel syndrome. Gastroenterology 1991;101:927–34.
8 Jones R, Lydeard S. Irritable bowel syndrome in the general population. Br Med J 1992;304:87–90.
9 Heaton KW, O’Donnell LJ, Braddock FEM, Moumford RA, et al. Symptoms of irritable bowel syndrome in a British urban community: consultants and non-consultants. Gastroenterology 1991;102:1962–7.
10 Hudson JI, Goldenberg DL, Pope HG, Keck PE, Schlesinger L. Comorbidity of fibromyalgia with medical and psychiatric disorders. Am J Med 1992;92:363–7.
11 Wood GC, Bentall RP, Göpfert M, Edwards RHT. A comparative psychiatric assessment of patients with chronic fatigue syndrome and muscle disease. Psychol Med 1991;21:619–28.
12 McDonald E, David AS, Pelosi AJ, Mann AH. Chronic fatigue in primary care attenders. Psychol Med 1993;23:987–98.
13 Creed F, Guthrie E. Psychological factors in the irritable bowel syndrome. Gut 1987;28:1307–18.
14 Walker EA, Roy-Byrne PP, Katon WJ, Li L, et al. Psychiatric illness and irritable bowel syndrome: a comparison with inflammatory bowel disease. Am J Psychiatry 1990;147:1656–61.

Address for correspondence: Dr David Gorard, Wycombe General Hospital, Queen Alexandra Road, High Wycombe, Bucks HP11 2TT.