these symptoms inaccurately. The investigation also included patients with various organic diseases as controls. It is unclear, however, what symptoms led these patients to present, and it is likely that some of these patients also had irritable bowel syndrome (IBS) and the gall stone group (who may have had incidental gall stones discovered during their evaluation). Such misclassification could have diluted the discriminant value of symptoms between patients with irritable bowel syndrome and controls.

Our second concern relates to the statistical analyses. The authors seem to have relied largely on univariate analyses (x² tests). As 78 tests of association were conducted (13 symptoms times six comparison groups), however, several spurious significant results could have been obtained just by chance alone. One way to adjust for the number of tests undertaken would be to multiply each p value by the number of comparisons. When evaluated in this way, only p values less than 0.0006 would be significant at the 5% level. While the authors did use a multiple logistic regression analysis, it appears the analysis is likely to have seriously overestimated the discriminant value of the symptoms identified; it is well recognised that estimates based on a single data set are typically biased. Further, if large numbers of univariate prospective and control series need to be tested to confirm the discriminant value of any symptom model developed.

Finally, the authors' contention that multiple logistic regression can be used to estimate the ‘overall risk’ depends rather heavily on having the ‘correct’ model – for example, no other unobserved confounding variables and no interactions among the symptoms tested in the model – but this was not documented in the article.

Dr Maxton and colleagues have provided some intriguing hypotheses, but based on the data presented the diagnostic value of ‘non-colonic’ features for irritable bowel syndrome remain, in our opinion, unclear.


Reply

Sir,—Thank you for giving us the opportunity to reply to the letter from Dr Prather and colleagues. We have previously shown that the prevalence of the non-colonic symptoms referred to in the paper are very significantly more common in patients with irritable bowel syndrome than in normal control groups and therefore felt it appropriate to repeat this work. Each symptom was carefully defined before the project began and the exact wording used decided before patient recruitment. A single symptom minimise possible differences of interpretation. Irritable bowel syndrome is a common disorder and, as Dr Prather suggests, could easily coexist with other organic diseases. In the absence of a diagnostic test for irritable bowel syndrome, there is no easy way of preventing or excluding this possibility. As Dr Prather rightly points out, however, this would reduce rather than increase the discriminant value of the symptoms in separating organic from functional bowel disease thus making our findings more reliable. The gall stone patients included in the study all had symptoms suggestive of this disorder at first clinic attendance which improved after cholecystectomy. None had gall bladder disease as an incidental finding.

The statistical problem of multiple comparisons is well known (which is why multiple regression and discriminant analysis was used in the paper) and is therefore well known. Nevertheless, we have previously shown that the statistical power of our study is high enough to detect a significant difference between the groups. It would be impossible to test all the possible interactions between symptoms, but a large number of potential confounders were controlled for in the study.

In conclusion, we do not believe that irritable bowel syndrome is a diagnosis of exclusion. It is a diagnosis in its own right applicable to all people who suffer from this condition.

C M PRATHER
Mayo Graduate School of Medicine
AR ZINSMEISTER
Division of Gastroenterology,
Mayo Clinic,
Rochester, Minnesota 55905,
USA


BOOK REVIEW


This is a multichapter (37), multi-author (58), international (though predominantly US) textbook on ulcerative colitis and Crohn’s disease. The editor’s aim was to produce an up to date and concise clinical overview of these inflammatory bowel diseases, their diagnosis, and treatment. It is laid out in seven sections — aetiology and epidemiology, clinical features, diagnosis, prognosis, medical and surgical management, and management problems.

The book is extraordinarily uneven. Contrast the first section, 40 pages on genetics and probably the best chapter in the book, with the five pages on aetiology or seven pages on inflammatory mediators. The sections on clinical features and diagnosis encompass six chapters, which between them duplicate or triplicate the routine assessment of the two conditions. Some excellent endoscopic pictures are mixed with out of focus histopathology, but histopathological appearances are presumably regarded as so recherché that the section on dysplasia is not illustrated. A number of full, worthwhile, and extensively referenced sections — for example, those on the use of corticosteroids or on the natural history of these diseases, based not on the evidence but on the placebo arms of published studies — contrast strangely with, for example, the Tennessee experience on T cell apheresis. This is an uncontrolled study on 63 patients (from the reference list, I cannot see that it has appeared in any peer reviewed form) ‘in which the chances of . . . undergoing spontaneous remission was statistically zero’. Few people who have experience of inflammatory bowel disease will recognise such a group.

There are better books on inflammatory bowel diseases, from both the scientific and the clinical view point.

H J F HODGSON

All titles reviewed here are available from the BMJ Bookshop, PO Box 295, London WC1H 9JE. Prices include postage in the UK and for members of the British Forces Overseas, but overseas customers should add £2 per item for postage and packing. Payment can be made by cheque in sterling drawn on a UK bank, or by credit card (Mastercard, Visa, or American Express), stating card number, expiry date, and full name.
Inflammatory bowel disease - diagnosis and treatment

H J F Hodgson

Gut 1992 33: 425
doi: 10.1136/gut.33.3.425-a

Updated information and services can be found at:
http://gut.bmj.com/content/33/3/425.2.citation

These include:

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/