Correspondence

Small bowel transit time

SIR.—Corbett et al. reported decreased intestinal transit time in patients with diarrhoea due to the irritable bowel syndrome (IBS).

In 200 patients with IBS referred to our Gastroenterology Unit from February 1984 to June 1985 we measured mouth-to-caecum transit time by H2-breath test1 with an oral load of lactulose 10 g in 100 ml water. Of these patients, 73 had diarrhoea (group D), 53 suffered from constipation (group S), 50 had irregular bowel habit (group A) and 24 had intestinal meteorism and flatulence (group M). H2-non producers were 4% in group D, 1-9% in group S, 2% in group A and O in group M.

We obtained the following results (M±SEM):

<table>
<thead>
<tr>
<th>Patients</th>
<th>H2 peak (ppm)</th>
<th>H2 mean concentration (ppm)</th>
<th>Intestinal transit time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group D</td>
<td>39.38±2.85</td>
<td>25-75±1.93</td>
<td>86.50±4.02</td>
</tr>
<tr>
<td>(n=70)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group S</td>
<td>40.67±3.89</td>
<td>26-57±3.00</td>
<td>89.00±4.97</td>
</tr>
<tr>
<td>(n=52)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>41.51±3.11</td>
<td>25-88±2.19</td>
<td>82.27±5.25</td>
</tr>
<tr>
<td>(n=49)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group M</td>
<td>38.38±5.71</td>
<td>20-05±4.27</td>
<td>86.67±7.30</td>
</tr>
<tr>
<td>(n=24)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It seems that there is no statistical significance between the variables considered: in particular, the values of mouth-to-caecum transit time in our series of patients show no substantial differences between patients with diarrhoea and patients with constipation. Moreover, the mean intestinal transit time found in our patients with irritable bowel syndrome does not differ from that of a previously studied control group (87-76±6-01 min, n=43).

Our data does not support the hypothesis that in the IBS there are abnormalities in small intestinal motility: on the contrary, they suggest that IBS is a colonic disorder.

F LAMI, CARLA CALLEGGARI, AND M BOZZOLA
Cattedra di Clinica Medica III
dell’Università di Bologna,
Polclinico S. Orsola,
via Massarenti 9,
Bologna 40138,
Italy.

References


Reply

SIR.—Thank you for the opportunity to comment on the letter from Dr Lami and his colleagues. We are surprised that they found no difference in mouth to caecum transit times between subgroups of patients with irritable bowel syndrome or between patients and normal controls. They have mentioned our initial report of rapid mouth to caecum transit in diarrhoea predominant patients,1 this finding was reproduced using a solid meal containing baked beans,2 a result that was confirmed by an independent group, using a dual isotope technique.3 In our solid meal study, we also demonstrated slow mouth to caecum transit in constipation predominant patients and the differences in transit between the patient subgroups were even more pronounced when the division was based on stool weights rather than reported symptoms.2

We cannot explain why Dr Lami and his colleagues did not find differences in mouth to caecum transit from the brief account given in their letter, though we suspect it is related to criteria they used to select their patients.

The data are uninterpretable unless we know the criteria used to diagnose irritable bowel syndrome, the severity and frequency of symptoms, whether the patients had any other illness or were taking any drugs and their definition of what constitutes mouth to caecum transit time. The composition of the control group should also be stated.

Their concluding paragraph is not justified. Disturbances in small bowel4-6 and oesophageal7 function have been reported by other workers.

If Dr Lami and his colleagues feel their data seriously challenges the concept of a relationship between small bowel motor activity and symptoms in the irritable bowel syndrome, it would be more helpful to the readers if they could seek to publish their findings as a full paper, giving methodological and patient details.

P A CANN AND N W READ
Clinical Research Unit, H Floor,
Royal Hallamshire Hospital,
Glossop Road,
Sheffield S10 2SF.
Correspondence, Books

References


Books


Recollection in tranquillity is more impartial and judicious than are dispatches from the front line; thus, when it comes to publishing a magisterial overview of a scientific topic, there is a lot to be said for choosing one that is relatively dormant. Reviews in areas of explosive growth, such as gut peptides can be out of date before they are even published. To describe the study of intestinal absorption as relatively dormant is not reflection on the scientists involved, as all fields of study go through cyclical phases of relative growth and relative quiescence. The last 'golden age' of intestinal absorption, which lasted from the beginning of the fifties until the midseventies seems to have had three phases. First, there was the demonstration of active transport in animal intestine by pioneers such as Fisher, Parsons, and Smyth in this country and Code in the USA. Triggered by Hans Ussing's development of the isolated epithelial membrane preparation, there followed a phase of rigorous mathematical modelling led by biophysicists such as Curran, Schultz and Curran. Finally, using the intubation techniques developed by Ingelfinger, there were the studies of human absorptive physiology, led by Fordtran, Soergel and Phillips in the USA, Dawson in the UK, and Bernier in France.

It is appropriate that this massive review of intestinal absorption is sponsored by pharmacologists; those who work on drugs have a vested interest in understanding the processes of intestinal permeation. The selection of contributors is catholic, covering many disciplines and countries, and includes many, such as Dawson, Parsons, and Turnberg from this country, who have made major contributions. Likewise, the range of topics is very wide. Newer methodologies, such as the use of vascular perfusion and of brush border membrane vesicles, are covered in depth, as are the classic methods on which current knowledge rests. The preoccupations of pharmacologists will be satisfied by chapters on topics such as laxatives, secretagogues, opiates, and heavy metals.

As is usual with this series, these volumes are edited and produced with care, and the price is astronomical. The question of whether an individual should spend the cost of an Aegean holiday on two books really does not arise. But because it is, to my mind, the best work of reference currently available in this important field, librarians will need to think hard about including it in their budgets.

DAVID WINGATE


The 100 almost entirely North American authors writing in this book have covered all aspects of gastrointestinal biliary tract and liver and pancreatic disease. The sections tend to be direct and personal in style, which is refreshing, well indexed but sparsely or unreferenced. Problems of differences of drug names in the United Kingdom and North America seem less apparent than in general and particularly cardiorespiratory medicine and so do not interfere with understanding. There is, however, inevitable difficulty through the differential rate of drug approval. Thus cimetidine is discussed in some detail whereas ranitidine is hardly mentioned and chelated bismuth not at all. Coverage is also patchy. I enjoyed, for instance, the detailed treatment plans, the direct statement of problems and suggestions for resolution and found some sections, such as that on anorexia nervosa, full of excellent advice.

Among the cons, in the section on cimetidine interference with drug metabolism is mentioned but...