Correspondence

Small bowel transit time

SIR,—Corbett *et al*¹ 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 test² 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 0 in group M.

We obtained the following results (M±SEM):

Table H₂ production and mouth-to-caecum transit time in IBS

Patients	H ₂ peak (ppm)	H ₂ mean concentration (ppm)	Intestinal transit time (min)
Group D (n=70)	39.38±2.85	25.75±1.93	86.50±4.02
Group S (n=52)	40.67±3.89	26.57±3.00	89.00±4.97
Group A (n=49)	41.51±3.11	25.88±2.19	82.27±5.25
Group M (n=24)	38.38±5.71	20.05±4.27	86.67±7.30

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.

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References

- 1 Corbett C, Thomas S, Read NW, Hobson N. Electrochemical detector for breath hydrogen determination: measurement of small bowel transit time in normal subjects and patients with irritable bowel syndrome. *Gut* 1981; **22**: 836–40.
- 2 Bond JH, Levitt MD. Investigation of small bowel transit time in man utilising pulmonary H₂ measurements. *J Lab Clin Med* 1975; **85**: 546–55.

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 bowel^{4–6} 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.

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