Correspondence

Splenic function in adult coeliac disease

Sir,

Corazza and colleagues¹ suggest that splenic function, as measured by the pitted red cell test, may improve in the short term after treatment with a gluten-free diet. As they point out this was not our experience in the longer term using different tests of splenic function and splenic area.² Nor, in fact, was it the experience of Corazza *et al* in an earlier study using the same pitted red cell test.³ They showed that 44% of patients with the same mean age as patients described in their present study had evidence of splenic hypofunction, a mean of 3.8 years after starting on a gluten-free diet.

Whatever changes may occur immediately after starting a gluten-free diet, their previous data support our conclusion that splenic hypofunction and splenic atrophy persist in patients after many years on a strict gluten-free diet. The practical implication stands: Howell-Jolly bodies in the peripheral blood film of patients with adult coeliac disease cannot be used as evidence of poor dietary compliance.

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References

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- 2 Trewby PN, Chipping PM, Palmer SJ, Roberts PD, Lewis SM, Stewart JS. Splenic atrophy in adult coeliac disease: is it irreversible? *Gut* 1981; **22**: 628–32.
- 3 Corazza GR, Bullen AW, Hall R, Robinson PJ, Losowsky MS. Simple method of assessing splenic function in coeliac disease. *Clin Sci* 1981; **60**: 109–13.

Reply

Sir,

We are grateful to Trewby and Stewart for their comment on our paper concerning the improvement of splenic hypofunction, as measured by pitted red cell test in early treated adult coeliacs.¹ Our results differ from those of a previous study of theirs in which, on the basis of paired routine blood film examinations, Trewby *et al* did not observe a regression of the hyposplenic changes in coeliacs after longer periods of gluten-free diet.² From their letter, however, it seems to us that some of our conclusions may have been misinterpreted.

In three out of six hyposplenic coeliacs the percentage of pitted red cells did not fall in the normal range after gluten withdrawal, and the lack of correlation between the percentage of recovery of hyposplenism and the duration of gluten-free diet led us to believe that in these three patients splenic hypofunction, probably due to splenic atrophy, was not reversible. After our paper had been accepted, we have had the opportunity to confirm the persistence of similarly raised pitted red cell counts in two of these three patients. In support of these results, we quoted a previous work³ in which one of us, studying a different patient series, had detected a raised incidence of hyposplenism in treated coeliacs. The discrepancy, therefore, between our previous and present results, suggested by Trewby and Stewart, actually does not exist. In fact in the two series the percentage of treated coeliacs with splenic hypofunction is not remarkably different – that is, 20% in the Italian series (age range 24–61 years), and 32% in the English series (age range 7–72 years).

In consequence, we do admit that hyposplenism is present in a number of treated coeliac patients and thought that this belief was made clear in our paper. Accordingly, we do agree that the presence of Howell-Jolly bodies (or pitted red cells) in the peripheral blood of adult coeliacs cannot be used as evidence of poor dietary compliance. If the main question is, as the title of Trewby *et al*'s paper suggests,² whether splenic atrophy of adult coeliac disease is reversible, then our answer is 'no', but as far as functional hyposplenism is concerned, we believe that it may be improved or reverted by gluten withdrawal. This improvement may be transient, but it is noteworthy that another two serial studies, one based on heat-damaged red cell clearance,⁴ and the other on pitted red cell count⁵ have provided confirmation of our results on remission of splenic hypofunction after gluten withdrawal.

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- 1 Corazza GR, Frisoni M, Vaira D, Gasbarrini G. Effect of gluten-free diet on splenic hypofunction of adult coeliac disease. *Gut* 1983; **24**: 228–30.
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- 3 Corazza GR, Bullen AW, Hall R, Robinson PJ, Losowsky MS. Simple method of assessing splenic function in coeliac disease. *Clin Sci* 1981; **60**: 109–13.