
Reply
Sir.—We are grateful for the comments on our recent paper which have been expressed by Dr Mikulecký from the Department of Mathematics, Queensland University. As he rightly suggests, we did not assess the statistical significance of correlations of changes in ALA synthase, PROTO-oxidase and bilirubin during rifampicin therapy because of the small number studied. In addition, we feel that elucidation of the relationship of hyperbilirubinaemia and abnormal haem biosynthesis must depend on in vitro studies which directly assess the effect of bilirubin on haem enzymes rather than on more detailed mathematical analysis of the in vivo observations.

It is reassuring to learn that reanalysis of our data using the Kruskal-Wallis test, Bonferromni modification and Friedman test gives identical results to those we obtained using the less sophisticated Wilcoxon and Mann Whitney U tests.

Finally, we agree that the precise underlying biochemical defects in the hereditary hyperbilirubinaemias remain unresolved. Hopefully, our findings have gone some way to furthering understanding in this area.

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Need for confidence intervals in reporting clinical trials
Sir,—Dr Lucey’s reply to Dr Logan’s letter (Gut 1987; 28: 916–7) is quite unacceptable. It is true that ‘given the relatively small numbers, a confidence interval . . . is likely to . . . be fairly wide and include both positive and negative values’ but Dr Lucey seems to think that this is a reason for not using confidence intervals, rather than a reason for not doing trials on sample sizes that are too small.

That such an analysis is ‘too diffuse to be meaningful’ is totally untrue. The very diffuseness is the meaningful part of it, in showing clearly that although the result was ‘not significant’ there could nevertheless be a substantial real effect that the trial was inadequate to discover. Contrary to Dr Lucey’s assertion, confidence intervals are especially valuable for trials where the result is not statistically significant.

A confidence interval from a crossover trial should be based on within subject comparisons using both periods and not on between group comparisons for one period as suggested by Dr Logan. Our main purpose in writing, however, is to give the strongest possible support to Dr Logan’s suggestion that confidence intervals should be used for the main endpoints of clinical trials, regardless of p values.

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Reference

Books


This volume is one in the Clinics and Gastroenterology series published by Saunders and consists of a number of chapters on specific topics related to developing areas in gastrointestinal endoscopy. The authors are from around the world, all being at the forefront of their field and writing well. Currently Saunders have divided this Clinics in Gastroenterology series into two with one volume aimed for North America and the other one for Europe. There are no doubt good commercial reasons for this unfortunate development and this volume illustrates well how important it is to have an international authorship of repute and not to become parochial in our view.

The volume provides a valuable update in the selected areas chosen, although unfortunately there is a considerable overlap in the chapters involving ERCP and this perhaps is not surprising bearing in mind the particular expertise of the author, Professor Meinhard Classen. Less overlap would have allowed a further chapter to have been included. The volume is aimed at the practising endoscopist intending to update him in new developments of now familiar techniques. A good illustration of this is a thoughtful chapter on the role of the endoscope in clinical trials, where some of the problems frequently encountered
Need for confidence intervals in reporting clinical trials

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