Correspondence

Serological markers in fulminant hepatitis B

SIR,—We were surprised that the interesting study of serological markers in fulminant hepatitis from King's College Hospital¹ did not mention the possibility of delta infection in some patients.

Delta hepatitis is more likely to result in fulminant hepatic failure than ordinary hepatitis B, as some of the authors have themselves described elsewhere.² In this unit, one third of patients with HBsAg positive fulminant hepatitis have serological markers of acute delta infection,³ and the majority of cases of fulminant delta hepatitis occur in conjunction with acute hepatitis B, as witnessed by positive hepatitis B core IgM tests, rather than in chronic hepatitis B virus (HBV) infection.

Although the delta agent requires the presence of HBV to establish itself, it subsequently suppresses the production of HBV markers. This has been best observed in chronic HBV infection complicated by superinfection with delta, both in man^{4,5} and in chimpanzees.⁶ It is uncertain what happens to HBV replication in acute HBV with delta infection. Patients with acute delta hepatitis are invariably HBsAg positive but the effect of simultaneous delta infection on the level and persistence of markers of acute HBV infection has, as far as we are aware, not been studied. It would be of interest to screen all the patients with fulminant hepatitis described by Gimson *et al*¹ for markers of acute delta infection, including those who at presentation were already anti-HBs positive.

K M DE COCK, S GOVINDARAJAN,
AND A G REDEKER

University of Southern California,
School of Medicine,
Rancho Los Amigos Hospital
Liver Unit,
Downey, California,
USA

References

- 1 Gimson AES, Tedder RS, White YS, Eddleston ALWF, Williams R. Serological markers in fulminant hepatitis B. *Gut* 1983; **24**: 615–7.
- 2 Smedile A, Farci P, Verme G *et al*. Influence of delta infection on severity of hepatitis B. *Lancet* 1982; **2**: 945–7.
- 3 Govindarajan S, Chin K, Redeker AG, Peters RL. Fulminant B viral hepatitis: role of delta agent. *Gastroenterology*. 1984 (In press.)
- 4 Moestrup T, Hansson BG, Widell A, Nordenfelt E. Clinical aspects of delta infection. *Br Med J* 1983; **286**: 87–90.

5 Frommel D, Allain JP, Courouce AM, Derosé S, Trepo D, Crivelli O, Rizzetto M. Long-lasting abatement of HBsAg synthesis induced by acute delta infection. *Lancet* 1983; **1**: 656–7.

6 Rizzetto M, Canese MG, Gerin JL, London WT, Sly DL, Purcell RH. Transmission of the hepatitis B virus-associated delta antigen to chimpanzees. *J Infect Dis* 1980; **141**: 590–602.

Reply

SIR,—We thank Drs De Cock, Govindarajan, and Redeker for their interest in our paper. At the time of study of these sera an assay for markers of delta infection was not available. Subsequent serological analysis by Dr M Rizzetto revealed that all the patients in this series were negative for delta antigen and antibody.

In a further analysis of 45 patients (18 of whom were reported in the paper by Smedile *et al*¹ and all of whom were IgM anticore positive, seven (19.4%) of 36 HBsAg positive cases had delta markers, whereas one (11.1%) of nine HBsAg negative cases showed evidence of delta infection. We have seen fulminant hepatic failure in three patients who were HBsAg positive but IgM anticore negative and two of these showed evidence of delta infection.

A E GIMSON, A L W F EDDLESTON,
AND ROGER WILLIAMS

Liver Unit,
King's College Hospital
Medical School,
Denmark Hill,
London.

Reference

- 1 Smedile A, Farci P, Verme G *et al*. The influence of delta infection on severity of hepatitis B. *Lancet* 1982; **2**: 945–7.

Book reviews

Current hepatology Vol 3 Edited by G L Gitnick. (Pp. 365; illustrated; £55.00.) New York: John Wiley, 1983.

I very much enjoyed volume 3 of *Current hepatology*. Firstly, the individual writers are good and, secondly, the topics are well chosen. Although it is perhaps invidious to pick out from such excellence, the chapter on cirrhosis by Galambos and Riepe is particularly useful in that it brings together information that is usually very widely

scattered. It includes an excellent appraisal of a number of papers published during the past year relating to changing patterns in the aetiology of cirrhosis and the effects of various treatment measures. Diagnostic techniques needed to establish cirrhosis ranging from the latest analysis of standard liver function tests to the more sophisticated imaging techniques, are also covered. There is also a very clear explanation of metabolic measurement by which liver function and mass can be assessed in quantitative terms.

The review by Hal Conn of the great deal of work in portal hypertension published during the past 12 to 18 months is a masterly one. The new studies on the control of acute bleeding from varices by pharmacological measures as well as the long term prevention of recurrent bleeding, are well analysed. What Conn does, and other authors do to a lesser extent, is not only to present sufficient data for the reader to make a valued judgement, but also to give their own critical assessment of the data and bias. There are also chapters on hepatitis and the serology of liver diseases which give a very good account of what are difficult areas because of the great volume of publications coming from different parts of the world.

This is not just a collection of abstracts of published papers, but a real overview of the literature and progress in hepatology. Furthermore, the editor claims that it has been possible to reduce the delay in publication from one half to one third of that taken usually with an annual review.

ROGER WILLIAMS

Functional disorders of the digestive tract Edited by W Y Chey. (Pp. 344; illustrated; price not stated.) New York: Raven Press, 1983.

This book proceeds from a conference held at Rochester, New York, though this fact is concealed in the preface. It must have been an exhausting meeting, with 40 speakers covering a very wide range of topics from satiety to rectal motility. Speakers treated their brief of producing a written paper with varying degrees of seriousness. Some conscientious ones wrote balanced and well referenced reviews (this is especially true of sections on the enteric nervous system) but most produced brief reviews of their own recent work with prints of their slides.

Despite the title there is far more physiology (peptides, nerves, motility, and electricity) than clinical material. The magnitude of the clinical problems was highlighted by Mendeloff: in 1976, 96 000 Americans were discharged from hospital with a main diagnosis of irritable bowel syndrome

(plus 19 000 with psychogenic gastrointestinal disorders). It is odd, however, to read a review of epidemiology in 1983 and find no mention of a prevalence survey published in 1980 (*Gastroenterology* 1980; 79: 283). Odd too, that IBS ('the big one') is relegated to the end of the book. Gas and biliary dyskinesia each put in an appearance but more important clinical problems like heartburn, non-ulcer dyspepsia, and simple constipation are barely mentioned. And does intestinal pseudo-obstruction really belong in this book?

One gets the impression that clinicians had little to say in planning this meeting and that there was little communication between clinicians and scientists. All in all, a book for the neuro-physiologist or motility man rather than the beleaguered clinician who battles daily with abdominal women.

K W HEATON

Surgery of the alimentary tract By R T Shackelford and G D Zuidema. (Pp. 705; illustrated; £49.00.) Eastbourne, E Sussex: W B Saunders, 1982.

This is an excellent book. It is very well written, is comprehensive and by its concise style has managed to keep its size within reasonable bounds. The printing is clear and the illustrations are good – although sometimes the relevant text does not appear on the same page which means some unwelcome turning of pages at times. By modern standards the price is average (£49).

This is the third volume of a three volume series, and although colonic and anorectal surgery is advancing very rapidly it manages to be virtually up to date in its contents. Tight editorial work has kept the style uniform, and there is a good balance to the selection of material. This volume would prepare a final FRCS candidate admirably, and would update a busy general surgeon with most techniques of proven value for treating diseases of the lower alimentary tract. A very tiny number of statements are controversial: the authors do not seem to have appreciated the latest evidence supporting immediate one stage colectomy for obstructing carcinomas of the colon, and there is no guidance for how best to resect colon cancers in difficult situations – for example, the splenic flexure area. It is also surprising to see subcutaneous alcohol injections still being advocated for intractable pruritis. Although the Koch pouch is fully described the 'pelvic pouch' operation (Parks procedure) is not discussed. Local procedures for low cancers of the rectum and anus (including radiotherapeutic methods) are inadequately discussed.