

forum for the fairly small number of anaesthetists (now increased to over 100 home members) who spend a substantial part of their time with neonates, infants, and young children. It was recognised from the outset that there were also many anaesthetists who spend some time in paediatric anaesthesia often for children over the age of 3.

In an annual scientific meeting of one and a half days it is not possible to provide a forum for the first group and an educational programme for the last. For that reason, after much deliberation, it was decided that members of the association should spend roughly half of their time in paediatric anaesthesia. This is interpreted to include anaesthesia, paediatric intensive care, and a heavy on call paediatric commitment, and all these activities can be aggregated.

To meet the educational need of anaesthetists with a lesser paediatric commitment the association has held two day seminars on paediatric anaesthesia in alternate years. These were initially highly successful, but the seminar for 1989 was cancelled owing to insufficient numbers. It probably indicates that the demand has been met by the welcome upsurge in seminars and similar teaching programmes in paediatric anaesthesia organised by the College of Anaesthetists, the Association of Anaesthetists, and the section of anaesthetics of the Royal Society of Medicine. Members of the Association of Paediatric Anaesthetists have made large contributions at these and other specialist meetings.

The association is now considering a more flexible educational programme to replace the two day seminar. It may be a "refresher" day open to non-members preceding the annual scientific meeting. The association has also been invited to hold a session on paediatric anaesthesia at the winter meeting of the Association of Anaesthetists in January 1991, which will be for the anaesthetist who may only occasionally anaesthetise children. Postgraduate education in paediatric anaesthesia is being catered for by several organisations and is all the richer for that.

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1 Spargo PM. Perioperative deaths among children. *Br Med J* 1990;301:343. (11 August.)

## Hereditary (primary) haemochromatosis

SIR,—I would like to add a caveat to Dr Niall D C Finlayson's statement that screening would probably benefit patients with hereditary haemochromatosis.<sup>1</sup>

Recently I was asked for an opinion on a man who had been screened and found to have a ferritin concentration of 398 µg/l (normal 20-180 µg/l). He was seeking to extend his mortgage through extra life insurance. He volunteered the information that his father had haemochromatosis, and the insurance firm promptly doubled his premium.

Tests confirmed the raised ferritin concentration, normal liver and pancreatic function, and the presence of the HLA-A3 antigen. He was otherwise healthy—a non-smoking, normotensive 40 year old marathon runner who consumed 12 units of alcohol a week. My letter to the insurance firm, stating that I would give him venaesection to prevent the effects of his iron loading potential and that he was therefore a better than average risk now that the problem had been discovered, resulted in his premium being reduced to one and a half times the original amount quoted.

I have advised him to approach other insurance firms armed with my letter and your editorial, hoping for a more sympathetic outcome. This raises the point yet again that screening has

implications for patients' lifestyles that we and they may not appreciate.

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1 Finlayson NDC. Hereditary (primary) haemochromatosis. *Br Med J* 1990;301:350-1. (18-25 August.)

## Liver function tests

SIR,—M F Laker suggested that measuring the activity of alanine aminotransferase rather than aspartate aminotransferase may improve the specificity of investigations for liver disease,<sup>1</sup> a view adopted by many on the assumption that alanine aminotransferase is more hepatospecific than aspartate aminotransferase.<sup>2</sup> We believe that this is not necessarily correct and that there are several cases in which aspartate aminotransferase may provide an equally reliable assessment of hepatic dysfunction.

The ability of laboratory analyses to distinguish categories of hepatobiliary disease was assessed in a prospective, computer based graphical evaluation by probabilistic test analysis.<sup>3</sup> With a cut off point of 200 U/l (reference range up to 20 U/l) aspartate aminotransferase was a powerful discriminator between viral hepatitis and other forms of hepatobiliary disease with a sensitivity of 91% and specificity of 95%. To achieve a comparable degree of discrimination a cut off point of 300 U/l was required for alanine aminotransferase (reference range up to 20 U/l).

Another important case is hepatotoxicity caused by drugs such as paracetamol and isoniazid, which often results in both an appreciably raised aspartate aminotransferase activity and a raised aspartate aminotransferase: alanine aminotransferase ratio.<sup>4</sup> This suggests that aspartate aminotransferase may be a more sensitive marker in this condition.

Stability of the enzymes in serum is also important if there may be a delay between separating the sample and analysis, for instance at weekends. Aspartate aminotransferase is stable when refrigerated (4°C) or frozen (-20°C and -80°C),<sup>5</sup> whereas alanine aminotransferase is considerably less stable and refrigeration is preferred to freezing.

Although alanine aminotransferase is considered by many to be more hepatospecific, the usefulness of aspartate aminotransferase in managing hepatobiliary disorders should not be underestimated and deserves to be critically re-examined against the background of published reports.

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- 1 Laker MF. Liver function tests. *Br Med J* 1990;301:250-1. (4 August.)
- 2 Aach RD, Szmuness W, Mosley JW, et al. Serum alanine aminotransferase of donors in relation to the risk of non-A non-B hepatitis. The transfusion-transmitted viruses study. *N Engl J Med* 1981;304:989-94.
- 3 Borsch G, Baier J, Glocke M, Nathusius W, Gerhardt W. Graphical analysis of laboratory data in the differential diagnosis of cholestasis: a computer assisted prospective study. *J Clin Chem Clin Biochem* 1988;26:509-19.
- 4 Himmelstein DU, Woolhandler SJ, Adler RD. Elevated SGOT/SGPT ratio in alcoholic patients with acetaminophen hepatotoxicity. *Am J Gastroenterol* 1984;79:718.
- 5 Niblock AE, Leung FY, Henderson AR. Serum aspartate aminotransferase storage and the effect of pyridoxal phosphate. *J Lab Clin Med* 1986;108:461.

## Research struggles in eastern Europe

SIR,—I am writing concerning Alexander Dorozynski's news item.<sup>1</sup> Getting east European members to Western meetings is expensive but it can be done.

The European Spine Society is having a meeting

at the University of Zurich. The university has always refused any trade advertising but on this occasion has allowed a trade exhibition on the understanding that the money be used to bring east Europeans to the meeting.

Most meetings in Britain expect to make a profit, and unfortunately this profit is used for administration and often to finance the travelling of members of the executive. In the European Spine Society nobody attends meetings without paying his or her own costs, which, of course, considerably reduces the meetings' cost.

The drug and instrument companies are keen to advertise the fact that they are financing east Europeans to attend Western meetings. It also allows companies to meet the surgeons they are supporting and, with the passage of time, to have access to east European markets.

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1 Dorozynski A. Research struggles in eastern Europe. *Br Med J* 1990;301:305-6. (11 August.)

## Mortality in patients with bleeding peptic ulcer

SIR,—Mr K E Wheatley and colleagues clearly show the importance of a defined protocol in achieving a low mortality from bleeding peptic ulcers.<sup>1</sup> It is not so clear, however, whether low mortality can be achieved only in specialised units. Two studies from hospitals with specialist units have reported low overall mortality figures (5.5% and 4.8%) using similar protocols,<sup>2,3</sup> but we have obtained comparable results in a district general hospital without such a unit.<sup>4</sup> An identical protocol for the indications for surgery was used (again without using endoscopic stigmata) and over one year an overall mortality of 4.6% was recorded. Only one patient out of 60 with proved bleeding peptic ulcers died.

We therefore suggest that although specialist units confer many logistic advantages in managing patients with gastrointestinal bleeding, they are not the most important factor in achieving a low mortality. The key is an agreed clear policy of management and active cooperation between specialties.<sup>1,5</sup>

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- 1 Wheatley KE, Snyman JH, Brearley S, Keighley MRB, Dykes PW. Mortality in patients with bleeding peptic ulcer when those aged 60 or over are operated on early. *Br Med J* 1990;301:272. (4 August.)
- 2 Holman RAE, Davis M, Gough KR, Gartell P, Britton DC, Smith RB. Value of a centralised approach in the management of haematemesis and melena: experience in a district general hospital. *Gut* 1990;31:504-8.
- 3 Sanderson JD, Taylor RFH, Pugh S, Vicary FR. Specialised gastrointestinal units for the management of upper gastrointestinal haemorrhage. *Postgrad Med J* 1990;66:654-6.
- 4 Clements D, Aslan S, Foster D, Stamatakis J, Wilkins WE, Morris JS. Acute upper gastrointestinal haemorrhage in a district general hospital. Audit of an agreed management policy. *J R Coll Physicians Lond* (in press).
- 5 Madden MV, Griffith GH. Management of upper gastrointestinal bleeding in a district general hospital. *J R Coll Physicians Lond* 1986;20:212-5.

## Correction

### Papal policy, poverty, and AIDS

A printer's error occurred in this letter by Dr J Guillebaud (1 September, p 440). The last sentence should have read, "Can anyone explain to me why it is not wrong thus to ensure . . . that millions of sperm die in the fallopian tubes without fertilising an egg, yet it is wrong to ensure, within marriage, that they die instead in a rubber condom."