

much less than that of a HBeAg-positive mother. It is of particular interest that the child born to our anti-HBe-positive carrier mother and the case reported previously both developed an acute infection, in contrast to children of HBeAg-positive mothers, who became asymptomatic carriers. The only evidence of hepatitis B infection in these children after elimination of antigen was the presence of antibody.

It is thus necessary to perform serial screening on children born to HBsAg-positive mothers, for anti-HBs as well as HBsAg, in any study of e₁anti-e₁ as a possible marker for vertical transmission.

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¹ Okada, K, *et al*, *New England Journal of Medicine*, 1976, **294**, 746.

² Mayumi, M, Miawakawa, Y, *New England Journal of Medicine*, 1976, **295**, 171.

³ Berquist, K R, *et al*, *Lancet*, 1976, **1**, 1026.

⁴ Gerety, R J, *New England Journal of Medicine*, 1976, **395**, 170.

Finger clubbing

SIR,—Your leading article on finger clubbing (24 September, p 785) does not mention one very interesting facet of this syndrome—its reversibility when it is caused by chronic pulmonary disease, as the following case report illustrates.

The patient is a woman now 66 years old. She has been a very heavy smoker since I first met her in 1948, smoking over 60 mentholated cigarettes a day. Over the years she developed increasing cough and constantly purulent sputum. She gradually developed typical clubbing of the fingers and toes, with widening of the terminal phalanges and curvature of the nails in both the transverse and longitudinal directions. She stopped smoking immediately before a radical mastectomy in 1972 and has not resumed the habit since that time. When last seen in June 1977 her cough was minimal and there was no evidence of finger clubbing.

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Research priorities

SIR,—I doubt if many will dare to comment on this topic (leading article, 5 November, p 1174), because it is known to be the prerogative of the "big battalions." Although we are in a technological era in which one would expect a few centres of excellence to produce the most rapid results, the people who work in such institutions tend to recognise only the feasibility of their own particular bent. Indeed, research workers often reach the stage when their main objective is self-justification in order to keep either family stability or simply their own prestige.

Both medicine and the economic situation are dynamic changing situations which have to be subject to feedback information and revitalisation with new ideas from the periphery. Individuality must not be stifled. Five-year

plans and appointments are important. Research priorities have tended to be based on emotive issues or on the demands of medical or social pressure groups, as with the feeling that one must contribute to cancer, leukaemia, or multiple sclerosis. In fact virus biochemistry is probably not yet sufficiently mature. There has to be an appraisal of scientific advances or vogues in terms of their practical value by people working in a wider medical context. However, in these days of super-specialisation there are few who can combine a knowledge of the laboratory bench and all the technical nuances with real medical perspective.

There are more sobering thoughts, such as that the rift between medicine and pathology has resulted in a burial of many contributions from the latter in unread texts. Worse still, the really good advice to stop smoking, drinking, and eating to excess and to exercise more will always go unheeded by the majority of the public.

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SIR,—Your leading article on research priorities (5 November, p 1174) omits one important factor concerning waste of money when little is available. Not only is money wasted on "poor quality so-called research projects," but the amount of duplication of research also wastes scarce funds.

If everyone before starting on a research project were to spend a couple of hours in a reasonable medical library finding out whether this or a closely related project had been done before it could result in a considerable reduction in this wastage and the money thus saved could be used in a positive manner. It could even be that the meagre funds prove not to be so inadequate after all if this factor could be eliminated or reduced.

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Frusemide-induced pancreatitis

SIR,—There appeared in your journal in 1975¹ a report of frusemide-induced pancreatitis. Since our group uses large amounts of frusemide intravenously in an intensive care unit, at that time we studied 20 patients who received more than 250 mg of frusemide as a bolus. In no instance was it possible to demonstrate a rise in the serum amylase activity after drug administration. For that reason these studies were discontinued. However in a three-week period in March 1977 we observed three patients who developed pancreatitis following intravenous frusemide administration. All three patients were Black male adults with a history of chronic alcoholism. In brief, their clinical histories were as follows.

(1) A 46-year-old man presented in diabetic stupor and renal failure. Pre-frusemide serum amylase activity was 400 IU/l. He was given 500 mg frusemide and 12 h later was noted to have marked abdominal tenderness; the serum amylase activity was 3200 IU/l. A plain abdominal radiograph showed marked pancreatic calcification. The patient died in renal failure 48 h later.

(2) A 56-year-old man presented in gross congestive cardiac failure, for which 250 mg frusemide was administered. The serum amylase level rose from 210 IU/l to 2700 IU/l 8 h after frusemide

administration in association with severe abdominal pain. The patient was treated conservatively and recovered.

(3) A 49-year-old man presented with haematemesis and melaena due to bleeding oesophageal varices. Frusemide (250 mg) was administered for anuria. Eighteen hours later the patient complained of abdominal pain; the serum amylase activity was found to be 3900 IU/l compared with 460 IU/l pre-frusemide. The patient ultimately recovered.

In these three patients the pre-frusemide serum amylase values were obtained by recovering serum from the routine blood samples taken on admission to the intensive care unit. Since seeing them we have studied a further 15 patients, with no history of alcoholism and/or pancreatic disease or diabetes, who received frusemide. A pre-frusemide serum amylase estimation was made, followed by hourly estimations for 6 h and either a 13-h or 24-h level. In none of these patients could we demonstrate a significant rise in the serum amylase activity.

We conclude that frusemide in high dosage is unlikely to produce pancreatitis in the vast majority of patients and that this potential risk does not represent a contraindication to the use of frusemide. Possibly, however, this drug should be used with caution in the presence of acute or chronic pancreatic disease.

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¹ Jones, P E, and Oelbaum, M H, *British Medical Journal*, 1975, **1**, 133.

Tietze's syndrome

SIR,—I was interested in Dr G V Gill's report (20 August, p 499) and Dr M Härkönen's letter (22 October, p 1087) concerning Tietze's disease. Like many diseases, once one becomes aware of it and starts to look for it, one finds it. In general practice I see one or two cases most years.

It can, indeed, be resistant to oral anti-inflammatory drugs and to physiotherapy and may persist many months. I have not tried lignocaine and corticosteroid injections but must do so, evidently. Perhaps methylprednisolone acetate would be the most effective, with its more prolonged action, for it seems to work better in other tissue injections.

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Teaching general practice

SIR,—The first column of your leading article on this subject (22 October, p 1042) explains why general practice is difficult to teach in an academic setting and why some academic institutions may resist its introduction into the curriculum on equal terms with other disciplines. In it you appear impartial and perceptive.

The second column presents a contrast. In it you seem to imply (1) that the proper teaching of general practice in such a setting is not consistent with "a major clinical commitment" on the part of the teachers, and (2) that the broad spectrum of skills and perception relevant to general practice must be selectively reduced so that academic