

## Points

### Pre-employment chest radiographs

Dr JOHN M GRANGE (Department of Microbiology, Cardiothoracic Institute, University of London, London SW3 6HP) writes: Dr S J Jachuck and others (23 April, p 1187) have questioned the necessity and desirability of routine pre-employment chest radiographs for National Health Service employees. Another topic in need of debate is the value of regular radiological screening during employment. When annual screening was in widespread use in several countries only 12-15% of notified cases of pulmonary tuberculosis were detected by this means. Most cases were diagnosed as a result of patients presenting with symptoms.<sup>1</sup> The reason given was that many people progress from having inapparent infections to active disease in a short time. Even when radiographs were obtained every four months (an unacceptably short interval with respect to radiation exposure) 21% of detected cases had extensive disease. In one recent study two doctors developed active tuberculosis four and five months after a clear pre-employment radiograph.<sup>2</sup> A distinct disadvantage of regular screening is that people with symptoms may be tempted to wait for their next appointment rather than seek medical attention immediately.<sup>1</sup> Radiography of asymptomatic grade three or four reactors to Heaf testing may occasionally reveal evidence of active tuberculosis. On the other hand, the disease in someone who is infected but whose radiograph is clear may reactivate at any time, and regular radiographs over a long period would be of limited value. It would be better to emphasise to NHS employees the need to seek medical advice promptly if they develop chest symptoms rather than to place reliance on radiological screening.

1 Toman K. Mass radiology in tuberculosis control. *WHO Chronicle* 1976;30:51-7.

2 Belfield PW, Arnold AG, Williams SE, Bostock AD, Cooke NJ. Recent experience of tuberculosis in junior hospital doctors in Leeds and Bradford. *Br J Dis Chest* 1984;78:313-6.

Dr FRED A FESTENSTEIN (London Chest Hospital, London E2 9JX) writes: I was surprised by the views of Dr S J Jachuck and others on pre-employment chest radiographs (23 April, p 1187). It is important for National Health Service employees to have pre-employment chest radiographs not only for early detection of pulmonary tuberculosis among the new entrants but also for medicolegal purposes to provide a baseline record in the event of subsequent pulmonary disease. It would be unwise to rely on evidence of BCG vaccination and the tuberculin skin test alone as guides for screening. With the expected increase in infection with human immunodeficiency virus in the community low or absent tuberculin hypersensitivity will need to be interpreted with caution as infected people become immunologically compromised and no longer react to the tuberculin skin test. It is, therefore, vital that pre-employment radiological screening continues.

### Measles mortality

Dr A O H TELLEGEN (1077 GE Amsterdam) writes: Mr Peter Aaby and others (30 April, p 1225) suggest that clustering of cases, not nutritional state, determines the mortality from measles. In the early 1970s I worked in Kenya and noticed that the mortality from measles was low when there were few cases but rose during epidemics. I discussed this in the 1972 annual report of my hospital and suggested that a more virulent strain of virus had emerged that year. I rejected nutritional state as a factor because 1972 was a wet, fertile year and the nutritional state should not have declined. The patients were evenly divided between Kisii, who lived mainly on maize, bananas, and potatoes and among whom protein deficiency was common, and Maasai, who lived only on milk. Despite the different diets the changing pattern of measles affected both groups. In later years I decided that it was a heavier virus load, not a more virulent strain, that caused these effects.

### Performance indicators

Professor W A WALLACE (Department of Orthopaedic and Accident Surgery, University Hospital, Nottingham NG7 2UH) writes: Dr Stella Lowry comments, "Like any other tool, performance indicators have disadvantages of which users should be aware" (2 April, p 992). Regrettably, she is not aware of the problems arising from the use of performance indicators in orthopaedics.

Fig 1 in her paper is a scattergram showing length of stay against turnover interval in orthopaedic surgery. Orthopaedic surgery is favoured for many of these analyses because of the large numbers of patients seen and the cost implications of many orthopaedic treatments. Unfortunately, the data presented are relatively meaningless because of the custom in Britain of combining traumatic work with orthopaedic work.

In 1981 the Duthie report on orthopaedic services stated that it was essential to separate trauma workload from that for elective orthopaedic surgery. The two are quite different. The Department of Health has received representations over the past 10 years asking for the figures for trauma and elective orthopaedic surgery to be separated. So far it has turned a blind eye to this request. If performance indicators in orthopaedic surgery are to make any sense in future these two branches must be separated.

### Alcohol and road safety

Mr BARRY SHEERMAN (Parliamentary Advisory Council for Transport Safety, London SW7 2BU) writes: It was good to see the news item on the Medical Commission on Accident Prevention's report *Strategies for Accident Prevention* (2 April, p 1007), but I was surprised by the way you highlighted Lord Porritt's comment on alcohol. You quote him as saying, "I am in agreement with nearly all that has been said, but would issue a little caveat because, as I am sure you will understand, too much stress on the role of alcohol in accidents will only produce antagonism." He in fact added, "This aspect of the subject should be borne in mind, despite the fact that I, like you, believe alcohol is a very big factor in all accidents and not only road accidents." Opinion surveys and general impressions suggest that drinking and driving is becoming less socially acceptable. Indeed, a survey last August found that 77% of those questioned were in favour of random breath testing. Doctors should take every opportunity to discuss drinking and driving with their patients. After all, three deaths every day and 20 000 casualties every year in road accidents are related to alcohol.

### New drugs

Dr K SUMMERS (Syntex Pharmaceuticals Limited, Maidenhead, Berkshire SL6 1RD) writes: Professor J Feely and others (5 March, p 705) state that information about nocardipine in patients with liver disease is not yet available. The pharmacokinetic and pharmacodynamic profiles of nocardipine at a dose of 20 mg twice daily have been studied in 12 patients with hepatic disease and six age and sex matched healthy subjects during seven days of treatment.<sup>1</sup> In the group with liver disease oral clearance was one fifth of that in volunteers and the terminal half life was prolonged six and a half times. No changes in blood pressure were noted (perhaps because these were all normotensive subjects), and the authors concluded that this dose of nocardipine is appropriate in patients with hepatic disease.

1 D'Heygere F, Ling T, Waddell G, Harlow B, McIntyre N. Evaluation of steady state plasma levels of nocardipine in liver impaired patients. *Eur Heart J* 1987;8:144.

### Insulin for the non-insulin dependent?

Professor J S GARROW (St Bartholomew's Hospital Medical College, London EC1M 6BQ) writes: Dr Ron Taylor (9 April, p 1015) writes: "If dietary compliance

is as complete as the patient can achieve and if maximal doses of oral agents are really being taken the need for insulin is evident." He agrees that patients switched to insulin do tend to gain weight and that severe insulin resistance is characteristic of patients with maturity onset diabetes. Increasing obesity increases this insulin resistance.<sup>1</sup> Dr Taylor gives no indication about how we can assess when dietary compliance is as complete as the patient can achieve. If the doctor is sure that dietary measures will fail this pessimism is transmitted to the patient and the diagnosis of dietary failure becomes self fulfilling. If doctors resort to insulin without giving dietary treatment a fair trial many obese non-insulin dependent diabetics will become even more obese and insulin resistant.

1 Sims EAH, Danforth EJR, Horton ES, Bray GA, Glennon JA, Salans LB. Endocrine and metabolic effects of experimental obesity in man. *Recent Prog Horm Res* 1973;29:457-96.

### Home visiting by consultants

Dr R N BALDWIN (Department of Geriatric Medicine, University of Liverpool, PO Box 147, Liverpool L69 3BX) writes: Dr J M Grimshaw and others (2 April, p 1003) outline the practice of home assessment visits by junior medical staff. This practice should be distinguished from a domiciliary visit by a consultant, which is "to advise the general practitioner regarding the diagnosis or management of a patient." If the junior staff are referring to other agencies or performing a second visit then the department of geriatric medicine is taking over the care of these patients. The junior staff cannot, however, maintain continuity of care, and the general practitioner is likely to be called in at time of crisis. Surely it is better to encourage more joint visits by consultants and general practitioners to patients who can be managed at home. This cooperative approach is likely to be most effective since the general practitioner can contribute information about the patient's medical and social background while the consultant can offer advice about future management. The general practitioner will still be seen as the primary source of referral for the patient and her family. Doctors in geriatric medicine should resist the temptation to bypass the primary care team and should seek means of being more reactive to acute problems.

### Cervical biopsy

Dr M B GILLET (Arrowe Park Hospital, Upton, Wirral, Merseyside L49 5PE) writes: Dr Nicky Britten's experience of colposcopic examination and cervical biopsy is unfortunate (23 April, p 1191), but I have a bone to pick with her acquaintance who told her that "most samples are much larger than necessary, and that he only uses a tiny part of the samples sent to him." It is foreign to the experience of most histopathologists that specimens taken at colposcopy are larger than necessary. In any case, it is bordering on negligence to examine only part of the specimen. It is essential to process and examine the whole specimen to exclude cervical intraepithelial neoplasia or invasive carcinoma.

### Letter from Fiji

Dr T G HAWLEY (Auckland Hospital Board, Wellesley Street East, Auckland 1, New Zealand) writes: Professor Harry Lander (27 February, p 620) writes of the establishment of the University of the South Pacific in 1968 and of how it undertook to provide the basic year of training for medical and dental students studying for diplomas. He then says that the diploma of surgery and medicine was consequently reduced to four years. This is incorrect. From 1968 the first year spent in the school of medicine kept the descriptive title "Medical I," thus following the custom in New Zealand medical schools rather than that in the United Kingdom. "Medical I" was relocated and renamed. The course remained five years long although the portion spent in the school was shortened to four years.