

Valsalva manoeuvre. This requires only an electrocardiographic unit and a sphygmomanometer. A Valsalva ratio of less than 1.50 without heart disease or antihypertensive medication is suggestive of an autonomic neuropathy.<sup>1</sup> Evidence of an autonomic neuropathy favours the diagnosis of a Guillain-Barré syndrome with autonomic bladder involvement.

If there is no evidence of an autonomic neuropathy then cauda equina compression is more likely. In this case every effort should be made to transfer the patient to a hospital where there is the necessary expertise for myelography and surgery. Failing this a trial of anti-tuberculous chemotherapy should be considered.

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<sup>1</sup> Levin AB. *A J Cardiol* 1966;18:90.

### Stringent prescribing in general practice

SIR,—I was interested to read the article by Dr G N Marsh on stringent prescribing in general practice (31 October, p 1159). I have recently been preaching a similar message to the staff of this hospital and find his experience useful. I would, however, like to take issue with his comments on the use of time off work as a potent treatment for minor illness. There is no doubt in my mind that this is indeed the case but it is important to consider the cost, which would greatly exceed that of the average prescription for even one day off work.

I feel from my experience in industrial medicine that it is too easy for the medical profession to become remote from industry and not consider the cost and effect of certifying people as unfit for work. I am not suggesting that doctors should callously neglect real need for certification but do feel strongly that every case needs to be justified and that a period off work is certainly an expensive alternative to a prescription.

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### Haematology in developing countries

SIR,—The recommendation that simple laboratory tests, including a blood film examination, should be encouraged as a valuable support to the diagnosis, epidemiology, and management of anaemia in poor areas of Asia, Africa, and the oil-rich Arab nations (22 August, p 559) is most welcome. With anaemia contributing drastically to the childhood morbidity in such areas,<sup>1</sup> the two United Kingdom centres at present engaged in training the physicians and health personnel from overseas could play a very constructive role in this connection by embarking on operational research projects.

The most suitable guideline for trainees from the developing world can be provided only if a first-hand knowledge of the existing facilities and working environment in areas where anaemia is hyperendemic is available to the instructors in these centres. This can be made possible by their making regular visits to such remote and rather backward areas for an independent appraisal of the field situation. This feedback information, apart

from providing them with an insight into the magnitude of the problem, will help them to make suitable modifications to their existing haematology courses. Of course, their visits overseas will pave the way for carrying out, in their own establishments, operational research by mimicking the existing field conditions.

The field experience would incidentally also deter any tendency towards the absolute condemnation of a not very accurate or precise haematological method. For instance, use of a spectrophotometer in an advanced centre<sup>2</sup> may yield accurate data on haemoglobin assay; and the otherwise rejected<sup>3</sup> Sahli method will continue to be the sole ray of hope, for a decade or so, for diagnosis and management of anaemia in millions of children living in the underdeveloped world.

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<sup>1</sup> Joint FAO/WHO Expert Group. *Requirements of ascorbic acid, vitamin D, vitamin B<sub>12</sub>, folate and iron*. Geneva: World Health Organisation, 1970. (WHO Technical Report Series No 452.)

<sup>2</sup> Rowland HAK. *Trans R Soc Trop Med Hyg* 1966; 60:143-64.

<sup>3</sup> WHO. *Manual of basic techniques for a health laboratory*. Geneva: World Health Organisation, 1980:377.

### "Now you need an x-ray examination . . ."

SIR,—Professor P E S Palmer's leading article (10 October, p 933) describing the World Health Organisation's efforts to improve diagnostic radiological facilities throughout the world was most timely and informative. Great efforts have been made by the WHO's Basic Radiological System Advisory Group to devise an appropriate technology that will be applicable in developing (poor) countries; certainly good radiographic technique is essential to the correct diagnosis of many common conditions and injuries.

The Basic Radiological System overcomes to some extent the shortage of trained radiographic personnel that exists in many developing countries; however, the most serious limitation to the provision of adequate x-ray services is the high cost of x-ray film. The Basic Radiological System uses conventional large-size film, which is expensive and which will continue to rise in cost as world silver supplies become more scarce. In many parts of the world a significant amount of chest and skeletal radiodiagnosis is based on conventional fluoroscopy, which is much less diagnostic than radiography in the detection of fractures or pulmonary infections, because of the lack of sufficient x-ray film.

Certainly, better radiographic methods are required if basic radiological facilities are to be made available to those that need them. However, the appropriate technology must address the problem of film costs. Film of the 100-mm size can give adequate diagnostic images of the chest and skeleton with radiation doses not significantly greater than for large-size film. Such chest units were the mainstay of mass x-ray campaigns, and similar machines are still used in United Kingdom hospitals to reduce film costs. The radiation doses involved would in any event be very much less than for fluoroscopy, which is the present alternative. Further development of 100-mm film methods for cranial, spinal, and abdominal imaging is not inconceivable, but will require research and development by equipment manufacturers.

I believe that manufacturers' involvement

in the production of basic radiological equipment for the developing world is to be welcomed. However, the WHO programme will fail unless attention is paid to the cost of radiographic film and of processing.

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### Outbreak of rotavirus gastroenteritis among premature infants

SIR,—We were interested in the report by Dr G Rocchi and others (3 October, p 886) on rotavirus infection in the newborn, suggesting it was a relatively benign condition, but find that our experience is quite different.

In 85 cases of rotavirus excretion in our newborns we found that 36 were asymptomatic. Forty-two (50%) babies had diarrhoea and, of these, 17 had bloody diarrhoea, 18 had abdominal distension, and 13 had abnormal bowel patterns on x-ray examination. Three of these infants had perforations, two required enterostomy, and one baby died. Interestingly, rotavirus was recovered from the peritoneal fluid of one of the infants who had a perforation. Twenty-four infants had either weight loss (10% of their birth weight) or weight gain which was unusually slow (that is, less than 10 g a day for a week or more) or both. In each case the date of onset of symptoms correlated with rotavirus excretion within six days. Rotavirus detection was performed by enzyme immune assay.

We have shown a temporal relation between the excretion of rotavirus and symptoms in these infants and, clinically, feel that rotavirus is a significant pathogen in this age group. A full report is currently being prepared.

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### Teratogenic risks of antiepileptic drugs

SIR,—Your leading article on the teratogenic risks of antiepileptic drugs (22 August, p 515) suggests that carbamazepine and sodium valproate appear to be preferable to phenytoin or phenobarbitone as the first-choice drug for treating appropriate types of epilepsy in young girls and women in their reproductive years.

The number of cases of pregnancy and concomitant carbamazepine treatment reported so far is about 200<sup>1-3</sup> and the number of reported pregnancies and valproate treatment is two dozen.<sup>4</sup> Both numbers are far too small to permit conclusions about the teratogenicity of these drugs. Even less is known of their possible effects on the physical and mental development of the exposed children. Recognition of the toxic effects of the older antiepileptic drugs took decades,<sup>5</sup> and the side effects of the new drugs that are now known may still be only the tip of the iceberg. Despite its recent introduction, sodium valproate therapy has been associated with several fatal cases of liver and pancreatic