incidence of allergic complications than those with no detected antigen in blood.³ Furthermore, high concentrations of antigen in CSF at diagnosis with slow disappearance of antigen were associated with neurological damage. Thus, while I agree with the authors' two conclusions, which, I respectfully submit, are self-evident, there are well-known immunological techniques which can improve diagnostic accuracy and which also have some prognostic and epidemiological value.

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¹ Greenwood, B M, Whittle, H C, and Dominic-Rajkovic, O, *Lancet*, 1971, **2**, 519.

² Evans-Jones, L G, et al, *Archives of Disease in Childhood*, 1977, **52**, 320.

³ Whittle, H C, et al, *American Journal of Medicine*, 1975, **58**, 823.

SIR,—Drs Oliver Smales and Nicholas Rutter (3 March, p 588) have once again drawn attention to the difficulties in diagnosing meningococcal meningitis, particularly in an early infection or when antibiotics have been used.

The detection of meningococcal, pneumococcal, and haemophilus antigen by counter-current immunoelectrophoresis is a well-established diagnostic procedure, as efficient as Gram stain and culture combined, and cheap and easy to perform; and it gives an answer in 45 minutes.^{1 2} The technique is particularly valuable when antibiotics have already been given. It would have been interesting to know how the technique would have fared in the early cases that posed a diagnostic problem for Dr Smales and Dr Rutter.

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¹ Greenwood, B M, Whittle, H C, Dominic-Rajkovic, O, *Lancet*, 1971, **2**, 519.

² Whittle, H C, et al, *American Journal of Medicine*, 1975, **58**, 823.

SIR,—I am glad that Dr O R C Smales and Dr N Rutter (3 March, p 588) have called attention to the importance of a second lumbar puncture when the initial result is unexpectedly normal in patients clinically suspected of having meningitis. I have several times found a second sample taken within two or three hours to be grossly abnormal, perhaps because of layering in the spinal canal. If meningitis is strongly suspected clinically, it may be well worth while obtaining another specimen as soon as the normal report is received.

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Epilepsy and learning

SIR,—Your leading article on epilepsy and learning (3 March, p 576) suggests that school medical officers should have an opportunity to hear about pupils' learning problems from school teachers. This comes about only if the child is known to suffer from epilepsy. Parents do not necessarily share this information with the school. The school doctor can also be uninformed because both family doctors and hospital paediatricians increasingly consider medical information confidential.

Dr Dorothy M Sell (10 February, p 416) makes this point about sharing medical information in general about children with special educational needs. Information about an epileptic child with behaviour and learning problems in class is helpful; to know about epileptic children before they start a swimming lesson can be vital.

Incidentally, your reference to school doctors "of the new style" having particular schools is relevant only in the context of the DHSS circular you cite: it is a new style for the DHSS. Before 1974 it was the old style, and in the 14 years preceding 1974 I worked in four different parts of the country and always had my own particular schools. Most likely school doctors have had their own particular schools since 1907.

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Stopping lithium prophylaxis

SIR,—Dr D G Wilkinson (27 January, p 235) reports withdrawal symptoms in a patient with bipolar manic depressive psychosis who had stopped taking lithium after taking it for six years.

In a controlled study of prophylactic treatment of alcoholism by lithium carbonate¹ 20 patients (11 depressed and nine non-depressed) took lithium for a mean time of 41.0 weeks. Each patient was examined at intervals of six weeks, and the lithium dose was adjusted to give serum concentrations of 0.8-1.2 mmol (mEq)/l. The mean lithium level was 0.86 (SE 0.03) mmol/l—0.91 (SE 0.05) mmol/l for non-depressed patients and 0.80 (SE 0.03) mmol/l for depressed patients. The lithium was abruptly withdrawn at the end of the study (mean time 41 weeks) and no withdrawal signs were reported by the patients.

While the withdrawal signs reported by Dr Wilkinson were diagnosed as an acute toxic confusional state, the description of the patient after stopping the lithium would fit the diagnosis of a bipolar manic depressive psychosis in relapse.

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¹ Merry, J, et al, *Lancet*, 1976, **2**, 481.

Early evidence of asbestosis

SIR,—I cannot agree with your expert's reply to the question about guidelines for examining employees of a building firm who handle asbestos (10 February, p 388), where it was stated that "the earliest evidence of asbestosis is seldom radiological." In examining workers one rules out biopsy or necropsy evidence which might show pulmonary fibrosis too slight to affect either radiological, physiological, or clinical findings. It is also assumed that your expert agrees that the presence of asbestos fibres or typical ferruginous bodies (asbestos bodies) in sputum can indicate only asbestos exposure and not asbestos disease.

I have just concluded a search of the literature since 1960 on the subject of early diagnosis of asbestosis. Seven papers which reported the findings of authors with extensive

experience of routine examination of asbestos workers¹⁻⁷ concluded that the use of high-quality x-ray films was the best means of routine surveillance. This can well be supplemented by simple lung volume measurements with a robust instrument such as the vitalograph. Regular comparison with the baselines provided by initial examinations enables each man to be used as his own control for early diagnosis.

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¹ Pilat, L, et al, *La Medicina del Lavoro*, 1971, **62**, 495.

² Cassan, G, et al, *Archives des Maladies Professionnelles, de Médecine, du Travail et de Sécurité Sociale*, 1973, **34**, 560.

³ Lewinsohn, H C, *Royal Society of Health Journal*, **92**, 2.

⁴ Beverley, W H A, *Journal of the Society of Occupational Medicine*, 1973, **23**, 61.

⁵ Weill, H, et al, *Archives of Environmental Health*, 1975, **30**, 88.

⁶ Weill, H, et al, *Archives of Environmental Health*, 1976, **31**, 172.

⁷ Smither, W J, in *Proceedings of the 3rd International Conference on Pneumoconiosis*, ed H A Shapiro, p 80. Cape Town, Oxford University Press, 1970.

* *Our expert writes: "The point I wished to make in my brief answer was that unlike, say, silicosis, in which the earliest non-invasive evidence is usually radiological, one should not rely on radiology alone as a monitoring check for asbestosis. Diagnosis of a condition in which the early radiological changes are slight and sometimes equivocal demands that as many other indices as possible should be looked for. Radiology apart, even with sophisticated lung function facilities I would still attach importance to auscultation of the chest for late inspiratory crackles. Details concerning early diagnosis are well discussed by Parkes.¹ I, of course, agree with your correspondent about the finding of asbestos fibres or ferruginous bodies in the sputum and, as in my original answer, I strongly endorse the value of pre-exposure baselines for the various tests."—ED, *BMJ*.

¹ Parkes, W R, *Occupational Lung Disorders*. London, Butterworths, 1974.

Minor hazard of amniocentesis

SIR,—Your leading article on the hazards of amniocentesis (16 December, p 1661) has prompted us to comment on what we have found to be a minor hazard associated with prenatal diagnosis. All laboratories engaged in chromosomal analysis from amniotic fluid cells have experienced, or at least are aware of, the problem of maternal cell contamination. We have recently experienced a source of "maternal cell contamination" hitherto unreported to the best of our knowledge.

A specimen was received labelled as amniotic fluid for chromosome analysis. A culture was initiated in the usual manner using the cell pellet from the specimen obtained after centrifugation. The cells were observed to be growing a few days after culturing, and had an epithelial-like appearance. This cell type from amniotic fluid usually undergoes senescence in a few weeks, and satisfactory chromosome preparation can be difficult to achieve if not obtained early.¹ The procedure used here for amniotic cell chromosome analysis is to subculture primary cultures once before harvesting the cells. Our attempt to subculture the cells from this specimen after approximately 10 days in culture was not successful.

Meanwhile, an aliquot of the fluid was sent to another laboratory for α -fetoprotein assay, as is the routine practice. This laboratory reported that there was no α -fetoprotein in the specimen, and that it