present. There should be some evidence of upper motor neurone damage such as large amplitude stable "F-responses," or the presence of "H-reflexes" in muscle groups where these are not usually seen. (2) Normal sensory action potentials. (3) Muscle biopsy demonstrating the features of denervation. (4) Biopsy of a sensory nerve (for example, sural nerve) which shows no abnormalities. (5) Normal biochemical and haematological findings—for example, normal B_{12} , folate, and creatinine phosphokinase values.

The second difficulty, as Mitchell and Olczak point out, is to show a definite association between treatment of the carcinoma and improvement in the neurological illness. In only three other cases in the literature was such improvement demonstrated.¹⁻³

Our patient is a 64-year-old man (we and V Gallai described this case to the May 1979 meeting of the Italian Society of Neuropathology). He presented in October 1978 with a history of cough, dyspnoea, and progressive shoulder girdle weakness. He was found to have weakness, wasting, fasciculation, and pathologically brisk reflexes in the upper limbs, with weakness and brisk reflexes in the lower limbs. Electromyographic studies of the affected muscles demonstrated lower motor neurone denervation, the surviving motor units being of long duration with amplitudes up to 8000 μ V. There were unusually prominent F-responses in the hand muscles and an H-reflex was recorded in (R) abductor hallucis. Both the sensory nerve fibre action potentials and the motor conduction velocities were normal. Biopsy of an affected muscle (right deltoid) showed only the changes of denervation. Biopsy of the right sural nerve gave normal results. Chest x-ray showed a mass in the lingula of the left lung, which on biopsy proved to be a squamous cell carcinoma of the bronchus. Subsequent treatment of the carcinoma with radiotherapy resulted in simultaneous shrinkage of the tumour and improvement in the neurological illness—an improvement which has so far been maintained.

The association of motor neurone disease with carcinoma is an important one to make, but we feel that the documentation must be very careful in order to exclude other conditions such as polymyositis, peripheral neuropathy, and myelopathy, which are already well documented as occasional complications of carcinoma.⁴

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¹ Lord Brain, Croft, P B, and Wilkinson, M, *Brain*, 1965, 88, 479.

² Stephens, T W, Rousgas, A, and Ghose, M K, *British Journal of Diseases of the Chest*, 1966, 60, 107.

³ Croft, P B, and Wilkinson, M, *Brain*, 1969, 92, 1.

⁴ Anderson, G, *Paramalignant Syndromes in Lung Cancer*. London, Heinemann Medical Books, 1973.

Psychiatric symptoms and hallucinogenic compounds

SIR,—I would like to reply to matters raised by Dr P Petch (9 June, p 1568) and Dr D Jacobs (7 July, p 49) following my report on persistent psychiatric symptoms after eating psilocybin mushrooms (19 May, p 1319).

Only a dozen or so of the numerous species of fungi native to the British Isles are hallucinogenic. The commonest of these are *Psilocybe semilanceata* and *Amanita muscaria*.¹ Hallucinogenic fungi can be divided into two groups according to the psychoactive drugs present in them. Fungi in the first group contain psilocin and psilocybin. Examples

include *Psilocybe semilanceata*, *P montana*, and *P coprophila*. Three other genera are included in this group—namely, *Panaeolus*, *Stropharia*, and *Hyphaloma (cyanescens)*.

The distinguishing characteristics of *P semilanceata* are its cap, which has a diameter of between about 5 and 25 mm and is one and a half times as tall. It is of conical or hemispherical shape and it has a prominent nipple, and the margin of the cap is curved inwards. The stem is 2.5 mm thick, up to 76 mm tall, and cream coloured, paler than the cap. The edges of the gills are white, and are attached in an adnate-to-adnexed fashion with little spacing between them.

P semilanceata contains from 0.1 to 0.4% psilocybin by weight of the dried mushroom.¹ Hence 30-40 g of fresh or 5 g of dried mushroom contain from 3 to 12 mg of psilocybin. The dose of psilocybin required to produce hallucinations in humans is from 3 to 6 mg or 0.1 mg per kg body weight. In practical terms this is achieved by eating about 30 small mushrooms. I am satisfied that my patient described to me the features of *P semilanceata*, and that he ate a sufficient quantity to suffer ill effects. The effect of the mushroom is augmented by drinking alcohol. An electroencephalogram was done on this patient, but it proved to be normal. I am unable to add any comments to the hypothesis of Dr D Jacobs (7 July, p 49) that these symptoms represent temporal lobe dysrhythmic abnormality.

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¹ Cooper, R, *A Guide to British Psilocybin Mushrooms*, ed C Render, 2nd edn. London, Hassle Free Press, 1978.

Tuberculous paraplegia

SIR,—The old adage quoted in your leading article on tuberculous paraplegia (2 June, p 1442) might be rewritten to read "The treatment of tuberculosis changes with time and place." Certainly the treatment of Pott's paraplegia is changing now as many surgeons become disenchanted with the difficulties, complications, results, and expense of radical surgical procedures. Our experience is no exception.¹

Between 1965 and 1975, in the orthopaedic centre at Tunis, we treated 63 patients with Pott's paraplegia, 37 by bed rest and chemotherapy (streptomycin for three months, isoniazid and ethionamide or rifampicin or aminosalicylic acid for 18 months) and 26 by anterior decompression as well, the selection of treatment being arbitrary. We drew the following conclusions. The more proximal the vertebrae affected and the more marked the kyphosis, the greater was the incidence of paraplegia. Chemotherapy alone was more effective than combined medical and surgical treatment. Sixty-eight per cent of the medical group had complete neurological recovery but only 35% of the surgical group. Medical treatment was safer than surgery, having a mortality rate of 6% compared to 23%.

Even when paraplegia was complete, or had been present for more than a year before starting treatment, recovery was still possible. Complete neurological recovery was unlikely, however, if the patient had total paraplegia and anaesthesia with urinary retention. Patients in either group who had no neuro-

logical improvement within six months of the beginning of treatment were unlikely to recover.

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¹ Sliman, N, *et al*, Les Paraplégiés Pottiques. Congrès France-Italien des Groupes d'Etude de la Scoliose. Rome, 1977.

Indications for Keflex

SIR,—Once more out of my *BMJ* fell an advertising slip asking the question "How can you free the family from throat infections?" The answer to this apparently is supposed to be with Keflex, 500 mg twice daily. The text inside indicates that this is an inexpensive routine treatment for acute throat infections, by which it means streptococcal pharyngitis.

Treatment with penicillin is considerably cheaper and surely at least as effective. The only reason for not using penicillin for the treatment of streptococcal pharyngitis would be if the patient were known to be allergic to penicillin; and in this situation the cephalosporins would also be contraindicated because of the possible cross-sensitivity, and erythromycin would be the better choice. I think that the *BMJ* should not allow the inclusion of this advertising handout.

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*.*We sent a copy of this letter to the manufacturers, whose reply is printed below.—Ed, *BMJ*.

SIR,—Thank you for the opportunity to comment on the letter from Dr K A Harden, who raises some important and interesting issues.

I do not accept that cephalosporins are contraindicated in patients who are allergic to penicillin. Probably no more than 10% of patients who are allergic to penicillin will be allergic to cephalosporins, and this may make them a very suitable choice in this particular group. With the much better blood levels achieved they are probably a better choice than erythromycin.

One of the main areas for concern in therapeutics is that of compliance, and it is likely that patients will be more compliant if they have fewer daily doses to remember. It could well be that Keflex would be particularly suitable if this were a major concern in an individual situation, as it can be used in a twice-daily dosage for throat infections.

Finally, on the question of cost, it is true that Keflex is considerably more expensive than the cheapest generic penicillin. However, most physicians prefer the medicines they prescribe to come from companies who have a consistent record of high quality products. In this situation Keflex is not a particularly expensive product.

BRIAN GENNERY

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Gutter treatment for ingrowing toenails

SIR,—The authors of the article "Gutter treatment for ingrowing toenails" (21 July, p 168) are to be congratulated in achieving a 56% cure rate with a non-surgical method of

treatment. Moreover, the treatment is logical because in most cases of embedding the shape of the nail is normal.

Since, however, the normal anatomy is preserved, an average follow-up of less than one year might be inadequate to determine the recurrence rate. Ingrowing toenails are multifactorial in their causation, but a very frequent finding is drastic cutting of the toenails,¹ which removes support from the pulp of the toe and allows it to prolapse around the edges of the nail. Therefore the long-term success of any conservative treatment of ingrowing toenail must depend on the careful elimination of causative factors, and in particular the avoidance of cutting the nails short.

The authors have correctly described the operation for segmental excision of the germinal matrix (first advocated by Heifetz²), but unfortunately they also call this operation a "wedge resection" procedure. The classical wedge resection operation consists of removal of an elliptical wedge of tissue consisting of nail wall, nail plate, and nail matrix. This is a highly unsatisfactory operation because the very structure which it is most important to expose fully—namely, the germinal matrix—is least well exposed because it lies at the apex of the wedge. Not surprisingly, this operation has a high recurrence rate and should not be confused with segmental excision of the germinal matrix.

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¹ Fowler, A W, *British Journal of Surgery*, 1958, **45**, 382.
² Heifetz, C J, *Journal of the Missouri State Medical Association*, 1945, **42**, 213.

SIR,—Articles on the treatment of ingrowing toenails appear at frequent intervals. I wonder if the simplest method has been forgotten.¹

The sharp edge of broken glass is used to pare down the centre of the nail until the centre line is quite thin and the pink nail bed shines through. The instrument may be made from a microscope slide by making scratches on the opposite edges near the centre, then breaking it—if the slide is broken without first grooving with a file it fragments. After the nail is thinned the free edges can be raised by packing with pluglets of cotton wool; but this step is not usually necessary, as once the nail is thinned pressure on the underside of the toe causes the nail to buckle, lifting its edges from the inflamed area.

I have used this method since I saw it described and have had few or no failures. The patient hobbles into the surgery and 15 minutes later walks out in comfort.

R B USHER SOMERS

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¹ Chapman, P F, *British Medical Journal*, 1934, **2**, 1073.

Depot neuroleptics in a community mental health service

SIR,—Although, like Dr B Blake (7 July, p 48), I have found clopenthixol decanoate (Clopixol) an effective antipsychotic in a number of schizophrenic patients with paranoid delusions and hallucinations inadequately controlled by other long-acting neuroleptic injections, in one respect my experience differs from his. I have encountered very few complaints of extrapyramidal or other side effects when

using a starting dosage of 100–200 mg, and my impression is that side effects with this neuroleptic are less frequent than they are with other depot preparations. Clopenthixol decanoate does not appear to have a mood-elevating effect such as I have seen with flupenthixol decanoate (Depixol); but its effect on nuclear symptoms has enabled a number of patients to work in the community in quite demanding occupations.

I would be interested to hear from any reader who has experience of clopenthixol decanoate in patients with intractable obsessional neurotic illness. I have seen a reasonably successful response in such a patient who had failed to respond to all other treatment tried.

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Too few necropsies

SIR,—My efforts to build up a picture of the long-term behaviour of sarcoid heart disease¹ are repeatedly frustrated by the lack of adequate necropsy when the patient dies. The only ultimate proof of involvement of the heart with sarcoidosis is by necropsy histology. A number of patients with this diagnosis, who had been followed for many years, have had no necropsy after death, even though the desirability of this was abundantly clear and I am sure that the relatives would not have objected. In other cases—particularly coroners' cases—necropsy examination has been quite superficial and inadequate, and vital material in the heart has been thrown away without histological examination.

One imagines that my experience in sarcoid heart disease is not unique and I would make an appeal for a more energetic and careful necropsy policy where there is a good indication. I understand that there is a shortage of pathologists but that, on the other hand, pathologists have discussed with some concern the fall-off in necropsy rate—could some of this perhaps not be due to the lack of help given to the clinician by a less-than-thorough postmortem examination?

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¹ Fleming, H A, *British Heart Journal*, 1974, **36**, 54.
² Fleming, H A, *British Heart Journal*, 1979, **41**, 379.

History of medicine collections

SIR,—Your leading article (4 August, p 293) on the Wellcome Museum of the History of Medicine offers reassurance to many of us who have been concerned by the gradual disappearance of the museum from its familiar—and convenient—site on the Euston Road. Presumably we can now assume that the unique collection accumulated by Sir Henry Wellcome, much of it still not catalogued or documented, is now safe from threat of dispersal. It is heartening to learn that the new museum is maintaining the tradition of informing and entertaining the lay public, particularly the young, but also extending the opportunity for scholarship in this field. One hopes that amateur medical historians will be encouraged to make use of the collection and library facilities.

The expressed intention of developing an archive of contemporary medical objects is

particularly important, because the efficiency of supplies officers for the NHS and the refurbishing of general practitioners' surgeries in recent years have resulted in a wholesale destruction of the nineteenth and early twentieth century which may result in a paucity of these specimens in most collections. Since inevitably display facilities in the new museum will be inadequate and duplication of items common, can we hope for the imaginative development of travelling collections or outstations for the museum? Many local museums and most if not all provincial medical schools would find room to display loan collections, perhaps on a rotating basis. They could also act as collecting stations for those impedimenta of medicine which are still collecting dust in the cupboards and cellars of practice premises. There are still wooden stethoscopes, glass and metal syringes, early obstetric forceps, and the like which will end up in the dustbin or a flea market unless a proper home is found for them.

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Measles and vaccine protection

SIR,—Dr G A Jackson's doubts about the efficacy of measles vaccination (4 August, p 332) may be very misleading. It appears that he has based his conclusions on the number of cases in vaccinated children as a percentage of the total number of notified cases of measles in a year. If he had taken the total number of vaccinated children in the district council area as the denominator he would have found about the 90% protection he was looking for.

Dr Jackson was wise not to use significance tests in the analysis of his results; with a response rate of 76% and doubtful validity of the answers to his questionnaire, it was certainly not worthwhile. It would have been useful for him to have defined the two levels of severity of the illness and the complications. A higher percentage of "severe" cases with "complications" in vaccinated children compared with unvaccinated children could also have been due to variability of the assessors—presumably the recipients of the questionnaire—that is, the parents.

K SHEIKH

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Rubella vaccination

SIR,—I refer to Dr T S Wilson's letter (28 July, p 272) which seemed to criticise a policy of screening adult women for rubella immunity. However, his doubts were not clear.

Dr Wilson wonders if the immense amount of laboratory investigation is "nowadays really necessary." Is he questioning the value of conducting such a survey at all? Is he questioning the habit of serotesting before vaccination? Is he suggesting that some condition obtains *nowadays* that formerly did not?

Congenital rubella is responsible for a high incidence of fetal death (spontaneous and therapeutic abortions), neonatal death, and, of course, congenital defects (deafness, cardiovascular abnormalities, mental retardation, blindness, spasticity, etc). In the UK, over 500 children were born between 1971 and 1978