it is a pity that the design was not better. The treatment group received specific and non-specific therapy (exercise therapy and regular supervision from a nurse, with occasional medical review), while the controlled group received neither on leaving hospital. As the non-specific factors were uncontrolled, the conclusion that simple exercise rehabilitation is of benefit is invalid.

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MARTYN ROSE

Mebendazole and hydatid disease

SIR,—Mr D R Osborne (19 January, p 183) makes some pertinent observations on the dubious value of mebendazole in hydatid disease. There are, as he says, no published data on drug levels in serum or cyst fluid. Using the drug in a dosage of 60-200 mg/kg body weight/day in three divided doses given eight hourly after food, I am obtaining serum levels of 20-160 ng/ml. Levels peak about two hours after a single oral dose and may be undetectable eight to 10 hours later. These data will soon be published. Most of my patients have complicated, inoperable hydatid disease and so I do not yet have many data on drug levels in cyst fluid. It would be interesting to know the dosage Mr Osborne used and the timing of his samples. Was the drug given with food, which increases the serum level 10-fold?

Like Dr I M Lyon and Mr K W Reynolds (3 November, p 1111), I also have patients who have developed acute pain in the cyst, and tenderness and fever during treatment. I do not know the cause, but in one case serial computed tomography is showing progressive collapse of the cyst wall, which is shrinking away from the radiological margins of the cyst—a phenomenon that may well leave tissues prone to infections or immunological inflammation.

As to cost, mebendazole may be expensive but so is admission to hospital for major abdominal surgery, and the drug offers the only hope for patients with inoperable disease. Perhaps the most important point of Mr Osborne's letter is to stress the immediate urgent need for co-operative effort in and outside this country to conduct a proper trial of this drug. We must standardise our techniques of assessment and pool our data. Otherwise we shall never know if mebendazole is any good, and under what circumstances.

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

SIR,—Thank you for giving me this opportunity to reply to Dr Bryceson's letter.

The dose of mebendazole we use is 200 mg thrice daily after meals for 30 days.¹ Our samples of serum and intact daughter cysts were all taken at operation after seven days' administration of the drug, but 10 hours after the last dose.

The endogenous proliferation typical of *Echinococcus granulosus* means that living scolices are contained within the cyst. It would seem that serum levels of mebendazole are not as important as cyst wall and cyst fluid levels actually in contact with viable

scolices, especially free-floating daughter cysts.

I note with interest the patient case in whom shrinkage of the cyst wall was observed on serial computed tomography. This indicates the effect of mebendazole on the "ectocyst." However, until a therapeutic regimen can be identified which will kill daughter cysts I still argue that the treatment is not cost effective.

I wholeheartedly agree with Dr Bryceson's request for co-operation and standardisation. I would be interested to know what method he uses to measure mebendazole levels and would be happy to supply him with samples of serum, cyst wall, and cyst fluid from patients taking the drug.

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¹ Bekhti A, et al. *Br Med J* 1977;iii:1047-51.

Lumbar puncture

SIR,—I cannot agree with all that Drs C Clough and J M S Pearce have to say in their article on lumbar puncture (2 February, p 297).

The perpendicular line is commonly measured from the iliac crest and usually runs between two interspaces. The more caudal space (L3/4) is often wider and more inviting; the more cephalad is in my experience an easier route to success.

Five millilitres of lignocaine is not only generous but unnecessary and in my opinion a hindrance. The pain-sensitive structures in the area are skin, periosteum, dura, and the nerve roots. Only the skin should be anaesthetised and only 0.1 ml at the most is required. The use of 5 ml causes trouble because it obscures the palpation of the interspace.

I would recommend (in a right-handed operator) that the left thumb is placed firmly on the spinous process cephalad to the interspace being used, and parallel to the line of the spinous processes. It should be kept there while the lignocaine bleb is made and it should not be removed until after the lumbar puncture needle has been inserted through the bleb, aiming slightly cephalad, a few millimetres from the tip of the thumb. Thus the left thumb ensures that the needle is introduced in the correct skeletal midline. With very mild obesity the cutaneous midline can drop with the patient on his or her side. It also ensures that there is no slip of skin on spine as the needle is introduced through the former.

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SIR,—Dr D C Thrush (23 February, p 564) describes Queckenstedt's test as a useless ritual but might not the entire practice of manometry at lumbar puncture be so described? Those who advocate manometry should produce evidence that it influences diagnosis or management. Just before publication of the article by Drs C Clough and J M S Pearce (2 February, p 297), I discovered that in Salford Area Health Authority, approximately 1000 disposable spinal manometers were purchased in a 12-month period at a cost of £660. It may be a small sum in relation to the authority's total budget but, if the tradition of manometry was allowed to die, the National Health Service would be

saved a substantial amount of money. Even small savings cannot be scoffed at when we are in the midst of a financial crisis.

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Massive arterial thrombosis and oral contraception

SIR,—The report by Drs P M Holt and D Hollanders (5 January, p 19) on systemic arterial thrombi in a woman taking an oral contraceptive reminds us of a similar case, which we reported in 1975,¹ in a patient who presented with acute pancreatitis. At necropsy there were multiple large infarcts of several organs, including the pancreas, myocardium, and liver.

One aspect of the problem is the possibility that this complication is under-reported. We suspect that these cases may not be notified to the Committee on Safety of Medicines, and that likewise the death certificate may not mention the possible role of the contraceptive drug. We wonder whether these aspects were observed in the case reported by Drs Holt and Hollander. Publishing does not provide sufficient safeguard because we know from experience that it may be difficult to have such reports accepted by the more widely read weekly medical journals. Their recognition should not depend entirely on the "accident" of editorial acceptance.

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¹ Foster ME, Powell DEB. *Postgrad Med J* 1975;51: 667-9.

Participating in execution and medical ethics

SIR,—Dr Felicity I S de Zulueta (16 February, p 486) is concerned that doctors may be required to carry out executions by lethal injections, in those states where it is now permitted by law, and asks that the BMA should condemn all forms of participation in this. However, this point is already covered by the World Medical Association's Declaration of Tokyo, to which BMA was a signatory; and the declaration is in fact reproduced in the BMA's *Handbook of Medical Ethics*.

On a lighter note, one might ask why do they need doctors to do this. Are they afraid of the risk of air embolus or infection perhaps?

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Manpower planning and accurate information

SIR,—I provide an information service to the regional postgraduate committee of the South-west Thames RHA and so keep records of all SHO, registrar, and senior registrar posts and changes in establishment. I have recently noticed the following remarkable "changes": registrar posts have been created without recourse to the region and its manpower committee; a district has funded "a locum senior registrar" without regional or central manpower approval or educational approval;