makes the water very alkaline so an acid has to be added to bring the pH to the acceptable level of 7.2-8.0. If the pH is right and there is free chlorine in the pool, it is very unlikely that problems will ever be encountered.

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Abortion and maternal deaths

SIR,—Mr Caspar Brook (28 August, p 524) correctly quotes our study as having shown that a majority of women seeking therapeutic abortion contact the health services at an early stage in pregnancy and suffer delays thereafter.¹ These findings were subsequently supported by others.²⁻⁴ However, he did not make it clear that our study related to a period before the University Hospital of Wales was opened and before any members of the current professorial team had arrived in Cardiff.

Mr Brook touches on another point (help with terminations) which is perhaps best illustrated by a quotation from a report on Welsh patients in 1975 produced by the British Pregnancy Advisory Service: "Overall, Welsh women are more likely to get NHS abortions than English women unless they live in Cardiff. The differences are so great between Cardiff and Swansea that they cannot be accounted for in medical resource terms only." Like other local variations, this is a reflection of the prevailing moral positions of gynaecologists in their interpretation of the Abortion Act.

Surely we have already tolerated for too long the dual iniquities whereby on the one hand gynaecologists with sincerely held convictions have to resist pressure to interpret the Act more liberally⁵ and on the other hand a woman's address is the most important determinant of whether or not she will have to pay for an abortion. Dr Selwyn Crawford⁶ and others⁷ have suggested that a way out of this dilemma is to remove work involving the termination of fetal life from mainstream gynaecology. This is the way the non-profit-making private sector has overcome the problem. When are we going to see a similar development within the NHS?

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¹ Chalmers, I, and Anderson, A B M, *Lancet*, 1972, 1, 1324.

² Johnstone, F D, and Vincent, L, *Lancet*, 1973, 2, 717.

³ Committee on the Working of the Abortion Act, *Report*, vol III, London, HMSO, 1974.

⁴ Coles, R J, *Journal of Biosocial Science*, 1975, 7, 357.

⁵ Walley, R, *British Medical Journal*, 1976, 1, 1456.

⁶ Crawford, J S, *Lancet*, 1975, 2, 407.

⁷ *Lancet*, 1975, 2, 912.

Teaching teaching

SIR,—Dr D P Mason's Personal View (14 August, p 418) reveals that he has learnt much from his first year as a trainer and indeed, by his side-swipes at academics, reveals that he has also learnt much about learning (equals teaching) by reading and by contacts with others.

Teachers in general practice are taking on this task as a second professional commitment.¹ Many teaching skills are practised by all general practitioners in the very nature of their

work. Extra skills are desirable in teachers and, while a talented few may have these intuitively, most of us need to acquire and practise them with our peers.

Courses for teachers are organised in such a way that participants learn mostly from each other and not from "educationalist peers." Perhaps Dr Mason would contribute to a teacher course more than he would gain from the experience of it, but would that be a good reason for abstention?

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¹ Byrne, P S, and Long, B E L, *Learning to Care*, Edinburgh and London, Churchill Livingstone, 1973.

Postural effect of diazoxide

SIR,—The management of severe hypertension has been improved considerably by the introduction of intravenous diazoxide. The standard therapy is 300 mg given by fast injection, though the need for rapidity has been challenged. The response is generally prompt and may be sustained long enough to permit maintenance therapy to be instituted after a single dose. Failure of effect may lead to repeating the same dose, doubling it, or using alternative agents. If the speed of the first injection was slow then rapid repeat injection is recommended by the manufacturers. This case report suggests that posture may be important in the response to diazoxide.

A 53-year-old woman developed a sudden severe headache. Her own doctor prescribed chlorthalidone for this after finding her blood pressure to be 160/120 mm Hg. Her symptom improved, but she again developed a severe occipital headache after three weeks. On admission to hospital her blood pressure was 230/130 mm Hg. Her retinae showed arterial narrowing, haemorrhages, and blurred margins to the nasal half of both optic discs. She promptly had a generalised convulsion, which was controlled by diazepam 10 mg intramuscularly. An intravenous injection of 300 mg of diazoxide was given as quickly as possible, with an ill-sustained moderate fall in blood pressure to 190/110 mm Hg. After four hours, when the blood pressure had reached 210/125 mm Hg, a repeat injection was given, in approximately 1½ minutes, with a temporary marked fall in blood pressure to 130/70 mm Hg. After a further three hours a further injection of diazoxide was considered since the blood pressure had risen to 250/140 mm Hg, but before this was given the bed was tilted 10° foot down. A satisfactory fall in blood pressure to a mean level of 170/95 mm Hg occurred and this was sustained for 10 hours. It was then possible to start therapy with oral bethanidine. Blood sugar was monitored and did not exceed 9.4 mmol/l (170 mg/100 ml). Blood urea was normal.

The patient was stuporous throughout. There was intermittent right facial weakness, hyperreflexia in the right arm was noted, and the left plantar response was extensor. A lumbar puncture revealed uniformly bloodstained cerebrospinal fluid with a pressure of 320 mm fluid. The chest radiograph showed a normal heart size and the electrocardiogram marginal left ventricular hypertrophy. Angiography subsequently showed an aneurysm of the left posterior communicating artery. During and after neurosurgery the anti-hypertensive therapy had to be temporarily withdrawn and the blood pressure rose again to a persistent level of 180/120 mm Hg.

Diazoxide has been approved in Britain for use in hypertensive crises for several years now. A number of articles have appeared on its use. None of them mention the possibility of tilting the bed to potentiate the effect, though

postural hypotension is mentioned as an uncommon side effect. Apparently this refers only to vertical posture. The onset of effect is agreed to be within a matter of minutes. There is a wide range of opinion about the duration of action, variously stated as 2-6 hours,¹ 1-18 hours,² 3-8 hours,³ and 4-24 hours.⁴ Frusemide is claimed to combat the fluid-retaining effect and thus potentiate the hypotensive action.²

In the case reported here there was an unsatisfactory response to intravenous diazoxide on two occasions. The blood pressure had risen alarmingly only 2½ hours after the second injection and the question arose of repeating diazoxide or using alternative agents. After bed tilting these became unnecessary. This suggests that the effect of the diazoxide was potentiated. It seems very unlikely that this manoeuvre itself could have controlled such severe hypertension. In view of the subsequent relapse of hypertension after surgery and withdrawal of specific therapy spontaneous remission cannot reasonably be claimed to account for the effects noted.

However, severe hypertension may be labile and the response to diazoxide ill-defined in amount and duration. The correct timing of repeat injections is a matter of individual judgment. The findings reported indicate that lack of response may be remedied by tilting the patient's bed before further therapy is considered. It could be that this ought to be an integral part of diazoxide therapy from the start in all but comatose patients likely to inhale vomit.

Professor I A D Bouchier kindly gave permission for this case to be reported.

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¹ Laurence, D R, *Clinical Pharmacology*, 4th edn, ch 18, Edinburgh, Churchill Livingstone, 1973.

² Moser, M, *American Heart Journal*, 1974, 87, 791.

³ Page, L B, and Sidd, J J, *New England Journal of Medicine*, 1972, 287, 1074.

⁴ Avern, J, and McLeod, D C, *Drug Intelligence and Clinical Pharmacology*, 1973, 7, 459.

Risk of haemorrhage in oxytocin stress test

SIR,—Though the oxytocin stress test has proved to be of considerable value in antenatal monitoring,^{1 2} it could be dangerous in patients with placenta praevia, as illustrated by the following case.

A 31-year-old Malay woman, gravida 6, para 3, was admitted with suspected intrauterine growth retardation. She was uncertain of her menstrual history. There was no relevant obstetric history and no predisposing causes were elicited to account for the intrauterine growth retardation. The positive findings were a lax abdomen with a single fetus in breech presentation. The oxytocin stress test as described by Weingold *et al*² was performed on two occasions separated by an interval of three days. On both occasions the tracings showed a normal pattern. However, a day after the second test the patient began to have intermittent vaginal bleeding not associated with any apparent contractions. An immediate placental scan with radioactive indium showed the presence of a major placenta praevia. This was confirmed subsequently at examination under anaesthesia and lower-segment caesarean section. A baby boy of 3000 g was safely delivered. The baby did not show features of intrauterine growth retardation.

Oxytocin stress tests and antenatal cardiotocography are becoming more commonly used to diagnose placental insufficiency in many