Using a similar cot we calculated the angle to be 9°24'. Even on the highest tilt position provided by the manufacturers the angle is  $15^{\circ}33'$ . In a series of 24 measurements on eight babies in our nursery we found that even while asleep none could be tilted to  $45^{\circ}$ without sliding. The mean angle at which they slid was  $37^{\circ}34'$ . This would put the coefficient of static friction for infants in our nursery at 0.765 (similar to that for steel) and would suggest that without some form of mechanical support or velcro nappies  $20^{\circ}$ might be a working maximum.

> K N Wilkinson Linda Cowe

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## Ear syringing

SIR,—I was interested to read your article (9 February, p 374) on ear syringing by Dr Stuart Carne. May I comment on the question of the risk of damage to the drum or meatus if the patient is a child or a restless adult?

When I was young I was taught to syringe ears in the ear department at Barts, where the tradition was to use an 8-oz bladder syringe for the purpose. It is imperative that this, or any ear syringe, should be held correctly. The pinna of the ear should be held between the index and the middle fingers of the operator's left hand, with the hand resting against the side of the patient's head. The operator's left thumb should then be put in such a position that the ear syringe will rest on the thumb at the point where the nozzle joins the barrel.

In this way, however much the patient moves the operator's hand, the syringe will move with the head, thus reducing any risk to an absolute minimum. Anyone who damages an ear when syringing it and who has not taken this elementary precaution may well find that with the modern trend of damages for negligence he is being sued for damages.

A G S BAILEY

## Setting up a drip

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SIR,—With reference to the article on setting up a drip (16 February, p 463), one factor that improved my success rate in finding a penetrable vein was the practice in suitable cases of placing the arm or forearm proposed in a bowl of fairly hot water.

In conjunction with the use of a tourniquet for about 30 to 60 seconds, the arm should be suspended at a lower level than the rest of the body. For example, in a supine patient the upper arm should be allowed to point toward the floor by the side of the bed. Before actual penetration the area should, of course, be dry and sterile.

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MICHAEL JOLLES

SIR,—In their excellent article on setting up a drip (16 February, p 463) Drs Barbara Bannister and C W H Harvard list as the first problem "No veins are visible or palpable," a common and daunting happening for the pressed junior doctor. Rather than proceeding to perform a "cutdown" or attempt to cannulate the subclavian or jugular vein, may I suggest a very simple and physiological way of increasing the blood flow in the arm and thereby dilating the superficial veins even in the most shocked patient?

If the patient's hand and forearm are immersed in hot water, at a temperature just bearable to one's own hand, and left to soak for approximately 10 minutes, the blood flow in the skin vessels is many times increased and the superficial veins become visible and easy to puncture. We have an arm bath available for this purpose but a bowl is suitable if large enough for immersing the hand and most of the forearm. The temperature of the water must be maintained by adding hot water.

I have used this method for many years and demonstrated and taught it to generations of house physicians, who are invariably impressed at the efficiency and simplicity of the procedure. It is an equally useful technique for venepuncture in blood sampling, and probably gives more reliable results as the sample is of free-flowing blood. J HART

Joyce Green Hospital, Dartford, Kent

SIR,—I was surprised to read that Drs Barbara Bannister and C W H Havard (16 February, p 463) neglect to use local anaesthesia for setting up a drip or inserting a central venous catheter. The intradermal injection of lignocaine with a 25-gauge needle is simple and quick, and has three advantages.

Firstly, it is not nearly as painful as having a 16-gauge needle and cannula pushed through unanaesthetised skin (I have made observations on myself and others). Secondly, any flinching that the patient is going to do occurs on injection of the local anaesthetic and not at the moment of insertion of the cannula. Thirdly, the 25-gauge intradermal needle can be used to break the skin at the site of injection. This allows a smooth and sensitive approach to the vein, enabling one to feel the different resistances of the tissues that the needle and cannula are passing through. It also prevents the cannula rucking up on the needle.

Finally, the use of paper tape to secure a cannula is an open invitation for the drip to be accidently torn out by the patient, the nurse, the trolley side, movement of the drip stand, etc. If it can come out it will, and always in the hypotensive patient, or the patient with no veins. There is no substitute for swathing the cannula, etc, in Elastoplast or other similar tape.

W G Notcutt

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## Meningococcal infection

SIR,—Dr P Jan Geiseler (23 February, p 566) gives the results of his review of 1316 cases of bacterial meningitis in support of his contention that "the practice of pretreatment with suboptimal doses of antibiotics prior to hospitalisation is to be condemned."

The mortality rates for his two groups are, however, 7.1% (pretreated) and 8.7% (untreated). Though the decrease in mortality in the pretreated group does not reach statistical significance ( $\chi^2 = 1.15$ ; p > 0.1) and the figures cannot be used as a simple justification of pretreatment, they certainly do

not condemn it. It is indeed likely that the indication for pretreatment was the greater severity of the illness when first seen by the GP, and therefore that the prognosis of the pretreated group would have been far worse had the treatment been withheld pending hospitalisation.

Statistics can tell many tales, and perhaps greater caution is needed before condemning GPs out of hand.

Cornelius Katona

Barton, Cambs

## Cardiac tamponade

SIR,—Your leading article (23 February, p 505) on cardiac tamponade is timely, but the final sentence is irreconcilable with effective clinical practice. You rightly say that most physicians see cardiac tamponade only sporadically but that it constitutes a real emergency calling for prompt treatment. Most cases are going to occur in the district general hospital and will be the responsibility of the general physician. If he waits for the arrival of an experienced operator or relies on the availability of a thoracic surgeon most of the patients will not survive. May I suggest that your final sentence should read, "The prerequisites for aspiration are the strong possibility of the presence of a life-threatening amount of pericardial fluid and the presence of a punctilious operator.'

In a previous leading article, "The physicians' dilemma'' (24 February 1979, p 507) you commented on the decline of the general physician, and similar anxieties have been expressed on both sides of the Atlantic. Your approach to the management of cardiac tamponade highlights one of the main reasons for this decline-that is the progressive transfer from the generalist to the specialist of many of the activities which have previously fallen within the generalist's sphere. The training of general physicians should ensure that they have a working knowledge of all emergency procedures which may be required, albeit rarely, within the confines of the district general hospital and such procedures will include the management of cardiac tamponade.

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SIR,—I was interested to read the statement in your recent leading article (23 February, p 505) that "cardiac tamponade is rare in the postmyocardial infarction syndrome (Dressler's syndrome)." This conclusion is, I feel, somewhat misleading.

Dressler's syndrome is an infrequent complication of myocardial infarction, probably occurring after no more than 3% of cases.<sup>1</sup> However, in Dressler's syndrome, cardiac tamponade has been reported in at least three clinical situations. The first is tamponade due to non-haemorrhagic pericardial effusion.<sup>2</sup> This was mentioned in your editorial and is, as stated, unusual. Secondly, tamponade may follow leakage of a ventricular aneurysm. Recent reports have suggested that Dressler's syndrome is encountered more frequently when myocardial infarction is complicated by ventricular aneurysm,3 and as these are prone to leakage or rupture<sup>4</sup> haemopericardium should be borne in mind as a cause of unexplained cardiac failure in Dressler's syndrome.

Thirdly, tamponade may follow inappropriate anticoagulant therapy. Although this is