establishment of an artificial airway (usually by endotracheal intubation) becomes necessary, there is almost invariably some fall in inspired oxygen, sometimes a rather prolonged one, when the child is removed from the croupette or tent. This fall in inspired oxygen, particularly in the presence of hypercapnia, can lead to cardiac arrest. Better to continue close observation of the child in room air, appropriately humidified, so that if intubation becomes necessary, no fall in inspired oxygen need arise. I would agree that intubation should be carried out either in the intensive care unit or in the operating theatre; I have also been impressed by the benefit of having a (necessarily somewhat stoical) mother with the child at all stages up to the time of intubation, in terms of allaying anxiety and preventing possible panic in the child.

Two further points: Dr Valman refers to intercostal recession as an indication of significant obstruction, but surely the sterno-epigastric recession is much more characteristic, and also allows easier and probably more valid quantification? Cyanosis should be regarded as a late and avoidable phase; it has been my experience that increasing tachycardia and restlessness are early signs of hypoxia.

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Corrective shoes for children

SIR,—In your leading article on corrective shoes for children (28 June, p 1556) you note the diminishing enthusiasm of orthopaedic surgeons and paediatricians for prescribing shoe modifications for children with intoeing and flat feet. This may have been overdone in the past—though, as you point out, no controlled trial studies are available to assess whether these measures achieve anything or not. Nor are there any controlled trials to support your assumption that most adult foot deformities are due to the constrictive action of tight shoes in infancy; tight inelastic socks may be a worse hazard. We have to evaluate these matters on a basis of common sense.

An intoed gait is usually due to an excess of anteversion of the femoral necks, which prevents the hips from being sufficiently externally rotated for the child to walk with a normal out-toed gait; there is no primary foot deformity and attention to the feet will not correct this trait. Fortunately it usually, though not always, corrects itself in time. But meanwhile the child walks with the heel of the shoe striking the ground on its inner side and not half way between the midline and its outer side as it should do. This puts a valgus stress on the foot and ankle, and also incidentally on the knee. It also wears down the inner side of the shoe, which becomes trodden over into valgus, with excessive wear on the inner side of the heel. Here I would agree with you that this deformity of the shoes has a deforming effect on the feet by enhancing the already incipient pes planovalgus. It should not be allowed to occur.

I therefore submit that it makes sense to fit the shoes in such a case with Thomas heels with inner side wedges and valgus stiffening of the uppers. This will at least prevent the feet from being continually stretched into a planovalgus deformity by the deformed shoes, a state of affairs which can reasonably be expected to produce a permanent deformity in a child with particularly lax joints.

It is better to assess whether these shoe modifications are necessary by examining the worn shoes than by the examination of the child. Perhaps this conventional management is, after all, correct.

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Indomethacin and perforated duodenal ulcer

SIR,—Not only has a relationship been established between peptic ulceration and the use of non-steroidal anti-inflammatory drugs, as stated by Mr M R Thompson and others (28 June, p 1618), but a special relationship has been established between the site of this peptic ulceration and the use of these chemicals.

A combined study by this department and the department of gastroenterology demonstrated that when 32 upper gastrointestinal ulcers in 25 arthritic patients were compared endoscopically with 290 ulcers in a controlled population 50% of the ulcers in the arthritic group were in the gastric antrum, while only 6% of the non-arthritic group were in this anatomical area. The difference was shown to be highly significant statistically ($p=0.001$).¹

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¹ Cook D, Walters JM, Donnelly P, McCarthy CF. *Ir J Med Sci* 1979;148:290.

Infected hip prostheses

SIR,—I enjoyed the leading article on infected hip prostheses (24 May, p 1241). However, I should like to question two of the statements.

There is no in-vivo evidence that antibiotics are in high concentration at the interface between bone and cement. While there is clear evidence of the effectiveness of antibiotics in bone cement in vitro, it is only speculation that antibiotics are in high concentration outside the bone cement in patients. Indeed, we have shown that cephaloridine, normally excreted in the urine, when added to bone cement does not appear in the urine in quantities greater than 4% of the total dose after 48 hours.¹ This suggests that the majority of the antibiotic may well be locked into the cement, for if it was at the bone-cement interface it should eventually diffuse through the bone and be excreted in the urine.

The other statement in the article that I am concerned about is that the local circulation to bone can be temporarily stopped by surgery, presumably when reaming the femur prior to inserting the prosthesis. I believe there is no evidence to substantiate this; for Rand *et al*² have shown that there is a greater bone blood flow in the fractured canine tibia following intramedullary fixation than when a plate is applied to stabilise the bone, reflecting the ability of bone circulation to adjust to surgical procedures. It has also been shown that antibiotics given intravenously in high doses at the induction of anaesthesia can be measured in bone in concentrations well

above the mean inhibitory concentration for the pathogenic organisms commonly encountered.^{3,4} Hence with the increased blood flow that occurs with intramedullary fixation there could be a higher rather than a lower concentration of antibiotics in bone.

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¹ Hughes SPF, Field C, Kennedy M, Dash CH. *J Bone Joint Surg* 1979;61B:96-100.

² Rand JA, An K-N, Chao FYS, Kelly PJ. *Trans Orthop Res Soc* 1980;5:144.

³ Hughes SPF, Benson MKD, Dash CH, Field C. *J Antimicrob Chemother* 1975;1:41-6.

⁴ Shurman DJ, Hirschman HP, Kaiyama G, Moser K, Burton D. *J Bone Joint Surgery* 1978;60A:359-62.

*. It is indeed speculation, and was so phrased in our leading article, that the antibiotic is in highest concentration at the bone-cement interface, though this is what would be expected in a normal diffusion gradient. There is much evidence, mostly histological, of local circulatory arrest and bone death for several millimetres below a fracture surface. Antibiotics in the blood after surgery might therefore fail to reach the bone surface in high concentration. We may legitimately speculate on the curious way in which antibiotic in the cement seems to be so much more effective than antibiotic in the bloodstream.—ED, *BMJ*.

Cutting the cost of the National Health Service

SIR,—There has recently been correspondence about saving costs in the NHS. I calculate that if an average general practitioner always prescribed generically the following drugs he would save about £1000 per year in prescribing costs: frusemide, indomethacin, methyl dopa, nitrazepam, diazepam.

Patients would be no worse off as they would be receiving active ingredients identical with those they receive when prescribing is by proprietary name. Pharmaceutical companies would still make adequate profits to enable them to carry out research into potential new drugs, and the NHS would save enough to build an extra new hospital a year or put more into primary care in the inner cities and other underprivileged areas.

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Review Body awards

SIR,—The Government's recent proposal to investigate the Review Body and index-linked pensions, coupled with the appearance of letters from doctors who feel they have been awarded too great an increase (7 June, p 1379; 14 June, p 1455), cannot pass without comment.

The very nature of a doctor's life necessitates putting the patient first and oneself second. It is of the greatest importance therefore to keep a system of pay review that does not involve the profession in unnecessary confrontation, as this would only divert our energies from more important problems.

Some kind of social equality seems inevit-