vomiting associated with the tube being in the second part of the duodenum; 1 baby, a term infant with birth asphyxia and convulsions, developed necrotising enterocolitis.

Unlike the experiences of Dryburgh only one of our infants was being ventilated. It is our practice to feed dextrose-electrolyte solutions via an umbilical arterial catheter for the first 5 days of life to infants who are receiving assisted ventilation. Only if assisted ventilation persists beyond 5 days do we consider transpyloric or total parenteral feeding.

In our unit we have expertise for total parenteral nutrition both by peripheral and central catheters, but the technique is demanding of both medical and nursing time, it is costly, and it requires strict biochemical and bacteriological monitoring, and constant handling of the infants. The transpyloric method of feeding was learned by the nursing staff in a very short time, and generally we expect to be feeding an infant within 8 to 12 hours of having started to pass the tube. Since this method was introduced the number of babies with medical problems requiring total parenteral nutrition has fallen from 36 in 1978 to 13 in 1980.

One aspect does cause us concern, and this relates to our second most common complication—loose stools in association with distal placement of the catheter tip (despite adequate fixing of the tube to the nose). Disturbances in electrolyte and fluid balance that result can cause a sudden deterioration in the infant's condition and may even play a role in the pathogenesis of necrotising enterocolitis. Could the glabella-heel length be too long for babies of very low birthweight? We are currently carrying out a study to find the answer to this question.

Reference

- ¹ Dryburgh E. Transpyloric feeding in 49 infants undergoing intensive care. *Arch Dis Child* 1980; **55**: 879–82.

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Methods for reducing water loss in low birthweight babies

Sir,

Brice *et al.* understate the complications of applying soft paraffin to the skin of small neonates to reduce evaporative heat loss.¹ Babies coated in soft paraffin are difficult to nurse and it is impossible to apply adhesive ECG electrodes or thermistors without first thoroughly cleaning the area of skin with a solvent. If transcutaneous oxygen electrodes are used care must be taken not to contaminate the membrane with a film of paraffin which could reduce the sensitivity and response time.

There is a cheap and effective alternative to soft paraffin, and that is to wrap the baby in freezer cling film. This can be applied over the monitoring electrodes, it is self sealing, and provides a close, transparent, and flexible wrap impermeable to water vapour.

Reference

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Isotope scanning to diagnose osteomyelitis

Sir,

The paper by Anderson *et al.*¹ illustrates the difficulties in confirming a diagnosis of osteomyelitis. The diagnosis was presumptive in 86 of the 217 cases, radiology and bacteriology being negative. We note that bone scanning was not used in any of these cases although the technetium isotope was introduced into clinical use in 1971. Nor was its role in the investigation of osteomyelitis mentioned in the subsequent discussion. We have found scanning to be a useful tool in the early diagnosis of osteomyelitis at a stage when conventional radiology is negative.²

Technetium-99m in combination with methylene diphosphonate is highly specific for bone. The radionuclide is thought to act either by exchange with the phosphate ion pool of the skeleton or by incorporation into immature collagen.³ The technique of bone scanning is within the capabilities of many radiology departments and its accuracy is in the order of 95%. The rare false-negatives are due to infarction of the blood vessels supplying the infected area of bone.

We suggest that had bone scanning been available it would have increased the number of positive diagnoses and it would also have detected patients with multifocal osteomyelitis.

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