# PostScript

## LETTERS

### An international replication, and the need for long term follow up studies

In 1999, a provocative letter was published in your journal[1] concerning the use of D-penicillamine (DPA) in the neonatal period. The following statement was written: ''Why, then, we wonder, has the demonstration of an effective mode of prevention of retinopathy of prematurity (ROP) in two randomised trials conducted more than 10 years ago in Hungary,[2] failed to encourage others to undertake the independent replications needed to verify or refute such a promising approach?''

Now, we (the authors of this article[2]) greatly appreciate a pilot trial conducted by Christensen *et al* which has been published in the *Journal of Perinatology*.[3] This work can be considered as the first international replication of our observation and clinical trials.

Christensen *et al*[3] recognised no immediate intolerance of the prepared solution of penicillamine given by nasogastric tube, nor did they observe any evidence of renal, haematological, or hepatic toxicity in five patients approved by the FDA. The authors emphasise that long term adverse effects of DPA administration to preterm babies are possible and they suggest that trials testing enteral 3-mercapto-D-valine (DPA) as a means of reducing ROP should go forward.

We quite agree with this viewpoint and, on the basis of our previous favourable experiences, would like to encourage other neonatal intensive care units to use DPA for the prevention of ROP. Our results suggest that DPA administration in very low birthweight infants has no serious adverse effects during the neonatal period, nor during the short term[4] and long term (10–11 years)[5] follow up.

Most existing follow up studies have been criticised for the small numbers of infants followed, the short duration of follow up, inconsistencies in reporting and defining disabilities, the absence of control groups, and the number of children who are ''lost to follow up''.[6] That is why we have decided to conduct a long term follow up study extending over thousands of adults (25–33 years of age) who were treated with DPA around their birth. This may be an enormously difficult task, and we are counting on international support from countries belonging to the European Union.

Finally, we owe a debt of gratitude to the editorial board of *Arch Dis Child Fetal Neonatal Ed* who contributed to making the publication[1] have such a successful effect.

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### What is the best evidence based management of neonatal abstinence syndrome?

Neonatal abstinence syndrome is a relatively common condition affecting neonates. This can make considerable impact on the limited cot space available in most neonatal units where there is no transitional care facility. Published reports and reviews in the last three decades have described the role of a number of pharmacological agents in the affected infant.[1–3] Morphine has become the mainstay of treatment. Although there are different scoring systems available, the most commonly used is that by Finnegan *et al*[4] for assessment and treatment of abstinence.

In our unit we recently had considerable difficulty in managing neonatal abstinence syndrome in three infants, which made us review our guidelines. In this process, we decided to survey the current practice in our region (North West region). We surveyed 17 medical neonatal units in the North West region. We requested guidelines from all the units by telephone, and 15 (88%) responses were received. The two units that did not respond were both district general hospitals. There appeared to be two patterns of morphine dosage, seemingly led by the two main regional units: one suggesting a higher dose regimen (80–100 μg/ kg every four hours) and another suggesting a much smaller dose regimen (30–40 μg/kg every four hours). A third of the units, five (33%), were not using any objective scoring system. The rest used the Finnegan scoring system with their own modification.[3]

The Cochrane review[1] did not seem to recommend a preferred regimen. From our own experience and discussions with professionals, a higher dosage start appeared to result in more rapid symptom resolution. However, we could not quantify this. The aim of this letter is mainly to open a debate on this topic and also to point out the need for appropriate trials to decide on the best regimen of management.

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### CAM lungs: the conservative approach

We would like to comment on the article by Calvert *et al*.[1] This group presents data from a retrospective audit of 28 children who were antenatally diagnosed with congenital lung malformations. The authors recommend elective resection of all congenital lung malformations that persist beyond 1 year of age, although their data provide no evidence to support this argument. Over the years, several authors have suggested that congenital lung malformations detected antenatally pose a major risk to the child's health from infection, pneumothorax and malignancy. As a result, a prevailing view has emerged that all lesions should be resected, regardless of symptoms.

The Fetal Medicine Department, Leeds General Infirmary, Leeds, UK, provides a tertiary referral service for a region with around 50 000 births per annum. We see 5–10 new patients each year with antenatally diagnosed congenital lung malformations, which suggests an incidence of around 1 in 5000–10 000 births.

We followed up a cohort of >100 children with antenatally diagnosed congenital lung malformations. Around 10% of these children showed symptoms in the neonatal period and underwent surgery. During early childhood, about 5% of children developed lower respiratory tract infection and subsequently underwent surgery. The remaining are under follow-up and remain symptom-free.

The data presented in Calvert *et al*'s audit do not support their conclusions, which are simply a reiteration of the advice of others. We are aware of reports of malignancy arising in congenital lung malformations. Given that these are single case reports or