small series, the incidence of malignancy must be extremely small. We have not seen any instance in the children under follow-up in the Leeds General Infirmary. If malignant degeneration is an intrinsic property of congenital lung malformations, then it is inherently illogical not to resect the disappearing lesions, which are detectable only postnatally on computed tomography. In addition, there is a case report of malignancy arising in the lung after resection of the cystic abnormality, which implies the need for long-term follow-up, regardless of whether surgery has been carried out.¹

The natural history of congenital lung malformations detected antenatally is almost certainly not the same as the lung malformations, which present clinically in postnatal life. It is our opinion that infants are being submitted to lung resection unnecessarily.

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References

- 1 Calvert JK, Boyd PA, Chamberlain PC, *et al*. Outcome of antenatally suspected congenital cystic adenomatoid malformation of the lung: 10 years' experience 1991–2001. *Arch Dis Child Fetal Neonatal Ed* 2006;**91**:F26–8.
- 2 Papagiannopoulos K, Sheppard M, Bush A, *et al*. Pleuropulmonary blastoma: is prophylactic resection of congenital lung cysts effective? *Ann Thorac Surg* 2001;**72**:604–5.

Congenital cystic adenomatoid malformations may not require surgical intervention

Although technological advances have contributed much to the management of childhood diseases, they have often resulted in decision quandaries. One such example is that of congenital cystic lung lesions. In their paper, Calvert *et al* describe the outcome over a period of 10 years of suspected congenital cystic adenomatoid malformations (CCAMs) in 28 children.¹

These are often detected on antenatal ultrasound, and parents were previously reassured after a normal chest radiograph in the neonatal period. With the advent of computed tomography (CT) scanning, however, hitherto undetected lesions are now being identified. Calvert *et al* recommend that all babies with antenatally diagnosed CCAMs have a CT scan, a recommendation with which we agree. However, they also recommend that all asymptomatic lesions should be surgically removed if they have not resolved within the first year. This statement, from surgical authors, is not based on any scientific rationale and may be misleading to parents who have to decide between surgical intervention and conservative management. The authors state that surgery is often considered in asymptomatic patients because of the risk of malignancy, infection, or pneumothorax. However, the evidence to support this comes only from case reports. It is not known whether subjecting patients to a potential lobectomy to remove a small, possibly benign lesion, with an undefined outcome may result in more harm than good.

There is clearly a need for longitudinal studies to assess the outcome of these lesions. To address this, we are currently undertaking a multicentre, long term, follow up surveillance study of prenatally diagnosed cystic lung lesions (the LoTOS, long term outcome study, currently funded by Birth Defects Newlife). In our experience of around 90 cases with a prenatally detected cystic lung lesion, in survivors with radiological findings compatible with cystic adenomatoid malformation, about 58% have had conservative management. Surgical intervention has been carried out in the other 42%, 62% of these because of symptoms and only 38% electively. There is an urgent need to provide an evidence base for the management of Orphan lung diseases, such as CCAM,² which is currently dependent on physician or surgeon personal bias, as demonstrated by Calvert *et al*.¹

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References

- 1 Calvert JK, Boyd PA, Chamberlain PC, *et al*. Outcome of antenatally suspected congenital cystic adenomatoid malformation of the lung: 10 years' experience 1991–2001. *Arch Dis Child Fetal Neonatal Ed* 2006;**91**:F26–8.
- 2 Jaffé A. Orphan lung diseases in childhood: still unadopted? *Thorax* 2005;**60**:892–4.

Re: Therapeutic hypothermia following perinatal asphyxia

The article written by Edwards and Azzopadi¹ is excellent. Whole-body hypothermia is proving to be the treatment of choice for neonates with perinatal asphyxia.^{2–3} Not only is there benefit to the babies aged 18 months⁴ but it is beneficial in the neonatal period also. We, at Sheri Kashmir Institute of Medical Sciences, Srinagar, Kashmir, India, studied 20 neonates with severe perinatal asphyxia who received whole body hypothermia and 15 neonates who served as controls. Randomisation was carried out by computer-generated random numbers. In babies with hypothermia, skin and rectal temperatures were maintained at 33.5°C for 72 h followed by slow re-warming. The study aimed at looking for death or abnormal neurological examination at the time of discharge. Although there were no significant differences between the patients who died in the two groups (15% *v.* 33%, *p*>0.05), hypothermic neonates were less likely to have abnormal neurological examination at discharge (*p*<0.001). The study shows that whole-body hypothermia can be beneficial in the immediate neonatal period and, in combination with other treatments, can reduce the chances of having neurodevelopmental delay in babies aged 18 months.

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References

- 1 Edwards AD, Azzopadi DV. Therapeutic hypothermia following perinatal asphyxia. *Arch Dis Child Fetal Neonatal Ed* 2006;**91**:F127–31.
- 2 Eicher DJ, Wagner CL, Katikaneni LP, *et al*. Moderate hypothermia in neonatal encephalopathy: efficacy outcomes. *Pediatr Neurol* 2005;**32**:11–17.
- 3 Shankaran S, Laptook AR, Ehrenkranz RA, *et al*. Whole-body hypothermia for neonates with hypoxic-ischemic encephalopathy. *N Engl J Med* 2005;**353**:1574–84.
- 4 Gluckman PD, Wyatt JS, Azzopadi D, *et al*. Selective head cooling with mild systemic hypothermia after neonatal encephalopathy: multicentre randomised trial. *Lancet* 2005;**365**:663–70.

Palliation bias is being overlooked in neonatal hypothermia trials

I thank Edwards and Azzopadi for their review¹ of the trials on therapeutic hypothermia after perinatal asphyxia.^{2–4} Unfortunately, the evaluation of data quality fails to acknowledge a major shortcoming common to all three reported trials—"palliation bias". A clear palliation bias in the control arm completely invalidates the use of death as an outcome measure, be it singly or in the composite form including disability. The efficacy study reported by Eicher *et al*² is the only one that gives some account of the contribution that withdrawal of care makes to the death statistic, and it serves well to show that this is highly important. The criteria for withdrawal of care are not standardised and can be assumed to vary with differences in philosophy across units and between caregivers. More importantly, two factors must be recognised that will erroneously inflate the death rate in the control arm: (a) a commitment to treatment for 72 h in the cooling arm, which discourages early withdrawal in the ventilator-dependent infant, and (b) parents who agree to participate in the trial are primed by a consent process that underlines the prospect of benefit in the presence of treatment. It is also incorrect to assume that the addition of disability to form the composite outcome will buffer this problem by taking into account the disability rate in the "extra survivors".

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References

- 1 Edwards AD, Azzopadi DV. Therapeutic hypothermia following perinatal asphyxia. *Arch Dis Child Fetal Neonatal Ed* 2006;**91**:F127–31.
- 2 Eicher DJ, Wagner CL, Katikaneni LP, *et al*. Moderate hypothermia in neonatal encephalopathy: efficacy outcomes. *Pediatr Neurol* 2005;**32**:11–17.