Commentary

In this paper the authors present excellent overall results in the treatment of gastroschisis with a high rate of primary closure of the defect (93%) and a low mortality (7%). However, the numbers of cases available for comparison (nine in the regional centre and 34 from peripheral units) are not large. It is possible that the excellent management of cases has masked any differences in the condition of babies after regional versus peripheral hospital delivery.

The principal conclusion of the paper is that delivery in a regional centre without surgical services conveys no benefit over peripheral hospital delivery. For the conclusion to be valid, there must have been no policy of referral of 'higher risk' cases from the peripheral to regional unit and the two groups of cases must have been 'matched' or comparable. Assuming this to be so, there remains the striking fact that whereas eight out of nine regional cases were diagnosed prenatally by ultrasound, only nine out of 34 peripheral cases were similarly diagnosed. This may be ascribed to different policy of ultrasound scanning (anomaly scan versus booking scan) or to considerably greater regional centre expertise. In any event, a secondary conclusion from the paper is that prenatal diagnosis of gastroschisis conveys no benefit.

The putative advantages of prenatal diagnosis initially claimed were that it would allow the possibility of elective preterm delivery and caesarean section and a higher rate of primary repair. These have not been demonstrated in clinical practice.² However, other advantages of parental counselling and in utero transfer should also be considered.⁴ For many parents, the opportunity to be forewarned of the baby's problem allows them to adjust emotionally and prepare practically for the postnatal period. It is essential that counselling is by experts, that expectations are realistic, and that support and advice is continued throughout the pregnancy.

Inexpert or inadequate counselling may indeed be counterproductive.

Transfer of the baby in utero to a regional centre (hopefully, adjacent to a neonatal surgical unit) allows two main advantages. Firstly, the baby may be examined immediately, the bowel protected from further damage and surgery arranged expeditiously. Secondly, both parents are close to the baby and can be fully involved in discussion. Nicholls et al recognise that one death (associated with intestinal torsion) may have been avoided by a regional centre delivery. However, a second death occurred in a baby operated on at 11 hours (a long delay) and the third death occurred in a baby whose small bowel was described as 'almost certainly necrotic at delivery'. Could a policy of regional centre delivery have helped these babies?

The possibility of detecting incipient bowel damage in utero by ultrasound scanning and thereby opening the opportunity for elective preterm delivery has been raised.⁵ To date, this has proved difficult to realise but increasing ultrasound expertise and further analysis of the problem offers hope of reducing the mortality and need for staged surgery and producing a shorter hospital stay and fewer long term sequelae of gastroschisis. Regional centres are most likely to succeed in this.

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