4 Prentice AM, Jebb SA. Obesity in Britain: gluttony or sloth? *BMJ* 1995;311:437-9.

5 Riboli E. Nutrition and cancer: background and rationale of the European prospective investigation into cancer and nutrition (EPIC). *Ann Oncol* 1992;3:783-91.

Long term outcome by method of delivery of fetuses in breech presentation

Policy of planned caesarean section could have appreciable costs

EDITOR,—P J Danielian and colleagues contend that a policy of vaginal breech delivery in selected cases of breech presentation is as safe as elective caesarean section with respect to long term disability.¹ In their editorial in the same issue M Hannah and W Hannah point out the need for a large randomised prospective trial to answer this question but assert that a policy of planned caesarean section for all breech deliveries would not only limit women's choices but give rise to substantial costs.²

Unfortunately, in our litigious society and with claims for compensation for severe disability regularly exceeding £1m when avoidable obstetric causes are found to have occurred, the situation may be murkier. According to Danielian and colleagues' study, one out of 1645 babies (that is, 0.0006 babies) presenting by the breech was born with severe disability "possibly attributable to delivery." A study to detect an increase in possibly avoidable causes of disability (the critical issue) at this level—say, 0.000 in the planned caesarean group versus 0.0006 in the intended vaginal delivery group—with 80% power and 5% significance would require over 26 000 breech births, and so the question remains unanswered. Given the numbers required, it may remain so. It might be argued that this proportion is an unreasonably low one to study, but, as such claims for compensation seem to go in favour of the plaintiff when doubt exists, the extra indemnity premium for a policy of selective vaginal breech delivery could be as much as £900-1000 for each intended vaginal breech delivery. This needs to be borne in mind when the financial costs of a policy of planned caesarean section are considered.

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1 Danielian P, Hall M, Wang J. Long term outcome by method of delivery of fetuses in breech presentation at term: population based follow up. *BMJ* 1996;312:1451-3. (8 June.)

2 Hannah M, Hannah W. Caesarean section or vaginal birth for breech presentation at term. *BMJ* 1996;312:1433. (8 June.)

External cephalic version at term should be considered

EDITOR,—P J Danielian and colleagues report a 20% rate of long term disability among fetuses delivered by the breech, irrespective of mode of delivery.¹ This raises the key issue of whether there is an inherent abnormality associated with such fetuses. Braun *et al* initially suggested that fetuses with a wide range of morphological and functional damage more commonly present by the breech.² Hyten postulated that neurological deficit in the fetus disrupts normal muscular control, allowing for persistent extension of the legs and preventing the assumption of a normal fetal attitude.³

If it is presentation by the breech in utero or at delivery that puts the infant at greater risk of long term morbidity then external cephalic version at term might be considered. The literature suggests that this has a 65% success rate and significantly reduces the caesarean section rate (37%, compared with 83% in controls).⁴ The procedure is also cost

effective and safe, with a perinatal mortality of <1% and risks of fetomaternal transfusion and entanglement in the cord of 3% and 1%, respectively.⁴ Data suggest that, regardless of birth weight and gestation, fetuses presenting by the breech have a higher perinatal mortality and morbidity rate than fetuses with cephalic presentation.⁵ Furthermore, there are no published data comparing short and long term morbidity between infants delivered by the breech and those delivered by the vertex after spontaneous version or external cephalic version at term.

What is needed, therefore, is a prospective randomised study comparing morbidity rates in infants delivered by the breech and infants delivered by the vertex after external cephalic version at term, irrespective of the mode of delivery. Such a study would help address the important issue of whether the raised morbidity rate is an inherent problem with fetuses that present by the breech at term or purely a function of malpresentation at delivery.

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2 Braun FHT, Jones KL, Smith DW. Breech presentation as an indicator of fetal abnormality. *J Pediatr* 1975;86:419-21.

3 Hyten FE. Breech presentation: is it a bad omen? *Br J Obstet Gynaecol* 1982;89:879-80.

4 Zhang J, Bowes WA, Forney JA. Efficacy of external cephalic version: a review. *Obstet Gynaecol* 1993;82:306-12.

5 Brenner WE, Bruce RD, Hendricks CH. The characteristics and perils of breech presentation. *Am J Obstet Gynaecol* 1974;118:700-9.

Outcomes of breech presentations not diagnosed until labour need to be studied

EDITOR,—P J Danielian and colleagues report the long term outcome among infants delivered by the breech at term by the intended mode of delivery.¹ I was surprised that the authors do not mention the group of fetuses in which breech presentation was not diagnosed until the women presented in labour.

The proportion of breech presentations diagnosed in labour varies in the published literature between 9% and 33%^{2,3} and is therefore not insignificant. As the paper does not describe this group separately it can be assumed only that most of the breech presentations that were diagnosed in labour were included in the "intended vaginal delivery" group and therefore that intended vaginal delivery is not the same as planned vaginal breech delivery.

A generally accepted aim of antenatal care is to detect malpresentation in order to offer external cephalic version and to assess the mode of delivery, the commonly held belief being that excess perinatal mortality and morbidity is associated with undiagnosed breech presentation. This belief has been challenged, but only short term outcomes were described.⁴ A study such as that by Danielian and colleagues looking at the long term outcomes in this group is therefore needed.

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1 Danielian PJ, Wang J, Hall MH. Long term outcome by method of delivery of fetuses in breech presentation at term: population based follow up. *BMJ* 1996;312:1451-3. (8 June.)

2 Bingham P, Hird V, Lilford RJ. Management of the mature selected breech presentation: an analysis based on the intended method of delivery. *Br J Obstet Gynaecol* 1987;94:746-52.

3 Cockburn J, Cheun Foong, Cockburn P. Undiagnosed breech. *Br J Obstet Gynaecol* 1994;101:648.

4 Nwosu EC, Walkinshaw S, Chia P, Manasse PR, Atlay RD. Undiagnosed breech. *Br J Obstet Gynaecol* 1993;100:531-5.

Evaluation should have included long term follow up of the mothers

EDITOR,—We agree with the recommendations in P J Danielian and colleagues' paper and the accompanying editorial that a large randomised controlled trial is required to determine which is the safest and most acceptable mode of delivery in breech presentation at term.^{1,2} We are concerned, however, that the discussion, particularly in the editorial, does not mention the need for long term follow up of the mother.

The authors of the editorial state that "increased maternal morbidity is an inevitable consequence of abdominal delivery" on the basis of evidence from the Cochrane meta-analysis of two randomised controlled trials that compared the policy of planned caesarean section with that of planned vaginal birth. Both of these trials measured maternal morbidity by short term variables such as blood transfusion, headache after spinal anaesthetic, wound infection, febrile morbidity, and length of stay in hospital.^{3,4} These measures are extremely important, but longer term measures of maternal morbidity, such as urinary incontinence, faecal incontinence, and dyspareunia, should also be included (along with measures of infant morbidity) to evaluate modes of delivery comprehensively.

Few studies have investigated the long term health problems of women after childbirth. Our study of 1010 members of the National Childbirth Trust focused on postnatal sexual health and showed high levels of morbidity up to two years after the birth.⁵ This was significantly associated with the mode of delivery: dyspareunia was most common in women who had had assisted vaginal deliveries and least common in those who had had a caesarean section (table 1). Nearly all the women who had an assisted delivery had an episiotomy (93%); this compared with a rate of episiotomy of 20% in those who had unassisted vaginal deliveries.

Table 1—Number (percentage) of women who had dyspareunia after childbirth by mode of delivery

	Vaginal unassisted delivery (n = 743)	Forceps or ventouse delivery (n = 143)	Caesarean section (n = 122)
Dyspareunia	144 (19)	75 (52)	16 (13)
No dyspareunia	599 (81)	68 (48)	106 (87)

$\chi^2 = 81$, df = 2, $P < 0.0001$.

Vaginal deliveries of babies presenting by the breech are rarely straightforward and therefore may result in considerable maternal morbidity. Any evaluation that does not include long term follow up of the mother will give only a partial perspective on the effect of breech delivery on mothers and children.

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1 Danielian PJ, Wang J, Hall MH. Long term outcome by method of delivery of fetuses in breech presentation at term: population based follow up. *BMJ* 1996;312:1451-3. (8 June.)