Letters to the Editor

Lower segment uterine scar rupture during induction of labour with vaginal prostaglandin E2

Sir,

A case of lower segment uterine scar rupture during induction of labour with prostaglandin E2 vaginal pessaries prompted us to review the literature with consideration to the relative safety of prostaglandin and oxytocin for induction of 'trial of scar' labour.

A healthy 30 year old previously had an elective lower segment Caesarean section for a breech presentation of a 3,317 g infant. Induction of labour at term was arranged in her second pregnancy because of reduced fetal movements. The cervix remained unfavourable (Bishop's score less than 5) despite the vaginal administration of three prostaglandin E2 3 mg pessaries over a 15 hour period. Painful tonic uterine contractions preceded sudden severe abdominal pain and persistent fetal bradycardia approximately 2 hours after insertion of the third pessary. Fifteen minutes later an emergency laparotomy was performed and a complete lower segment uterine scar rupture was discovered, extending posterolaterally on each side to extend through 270 degrees of the lower segment. A 3,756 g male infant was delivered through the rupture, with Apgar scores of 2 at 1 minute and 7 at 5 minutes. The tear was repaired with 600 ml total blood loss. The postoperative course was uncomplicated for mother and baby.

The perinatal mortality rate from vaginal birth after lower segment Caesarean section does not vary significantly from the general obstetric population.¹ The overall incidence of uterine scar rupture is only 1.7 per 1,000 'trial of scar' labours.² The safety of oxytocin with careful maternal and fetal monitoring in labour induction and augmentation in these patients is well established.³⁻⁶ However, few papers have assessed the safety of prostaglandins for cervical ripening and induction of labour in the presence of a lower segment uterine scar. MacKenzie *et al.*⁷ induced labour at term with vaginal prostaglandin E2 in 143 such patients without uterine rupture, and achieved vaginal delivery in the 68% of patients who initially had a very unfavourable cervix. The authors suggest the risk of rupture is small due to the low amplitude of the frequent uterine contractions promoted by prostaglandins.⁷ Sixteen of 19 'trial of scar' labours induced by Shepherd *et al.* with prostaglandin vaginal pessaries achieved vaginal delivery without augmentation, with no evidence of uterine scar rupture or dehiscence.⁸ However, Bromham and Anderson questioned the safety of vaginal prostaglandin E2 quoting one case of uterine scar rupture in the first stage of labour and two cases apparently following forceps delivery.⁹

The literature does not allow comparison of the relative safety or efficacy of vaginal prostaglandin E2 and oxytocin for the induction of labour in the presence of a lower segment uterine scar. The risk of uterine rupture with either method is low, but our case reinforces the need for appropriate precautions and close monitoring for signs of this potentially catastrophic event.

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References

1. Ophir, E., Yagoda, A., Rojansky, N. & Oettinger, M. Trial of labor following cesarean section: dilemma. *Obstet Gynecol Sur* 1988, **44**: 19–24.
2. Flamm, B., Newman, L., Thomas, S., Fallon, D. & Yoshida, M. Vaginal birth after cesarean delivery: results of a 5-year multicenter collaborative study. *Obstet Gynecol* 1990, **76**: 750–754.
3. Horenstein, J. & Phenan, J. Previous cesarean section: the risks and benefits of Oxytocin usage in a trial of labor. *Am J Obstet Gynecol* 1985, **151**: 564–569.
4. Phelan, J., Clark, S., Diaz, F. & Paul, R. Vaginal birth after cesarean. *Am J Obstet Gynecol* 1987, **157**: 1510–1515.
5. Farmer, R., Kirschbaum, T., Potter, D., Strong, T. & Medearis, A. Uterine rupture during trial of labor after previous cesarean section. *Am J Obstet Gynecol* 1991, **165**: 996–1001.
6. Silver, R. & Gibbs, R. Predictors of vaginal delivery in patients with a previous cesarean section, who require oxytocin. *Am J Obstet Gynecol* 1987, **156**: 57–60.
7. MacKenzie, I., Bradley, S. & Embrey, M. Vaginal prostaglandins and labour induction for patients previously delivered by caesarean section. *Br J Obstet Gynaecol* 1984, **91**: 7–10.
8. Shepherd, J., Bennett, M., Laurence, D. & Moore, F. Prostaglandin vaginal suppositories: a simple and safe approach to the induction of labor. *Obstet Gynecol* 1981, **58**: 596–600.
9. Bromham, D. & Anderson, R. Uterine scar rupture in labour induced with vaginal prostaglandin E2. *Lancet* 1980, **2**: 485–486.

Haemophilus influenzae meningitis in an elderly patient despite treatment with oral cefuroxime

Sir,

Haemophilus influenzae is a rare case of meningitis in the elderly.

An 87 year old woman presented with a short history of confusion, epigastric pain and vomiting but with no evidence of meningism. The epigastric pain and vomiting settled quickly. On day 2 her temperature rose to 38.9°C. She was started on oral ampicillin 250 mg four times daily for a presumed chest infection after blood cultures were taken. By day 5 her temperature came down but remained slightly elevated, and the blood culture grew a beta-lactamase producing *H. influenzae* sensitive to chloramphenicol, cefuroxime and trimethoprim. As her general condition had improved and the temperature was settling, she was started on oral cefuroxime 500 mg twice daily. Her temperature returned to normal but by day 7, having had five doses of cefuroxime, she became pyrexial again (39°C) with a marked deterioration in her condition. She developed intermittent focal motor seizures affecting her right hand side, and also marked neck stiffness. A