

OBSTETRIC ANAL SPHINCTER INJURY – FEASIBILITY AND ACCEPTABILITY OF ENDOANAL ULTRASOUND IMMEDIATELY POST-PARTUM

Aims of Study

Ultrasonographic sphincter defects have been reported in 35% of primiparous women and 45% of multiparous women delivering vaginally. Reported anal sphincter rupture occurs in up to 3% of vaginal deliveries, yet data from Birmingham, has shown faecal incontinence affects 6% of women following delivery and is a considerable source of physical and psychological morbidity. This suggests that many sphincter defects are not diagnosed immediately. Other studies suggest that new faecal incontinence immediately post partum is most common in women who have sustained a second degree tear adding further weight to these arguments. It has been thought that endoanal ultrasound immediately post partum is not feasible with regional anaesthesia due to poor transducer contact nor acceptable to mothers without any analgesia. The aims of this study are to demonstrate that endoanal ultrasound is both feasible and well tolerated immediately post-partum.

Methods

Women delivering at a large teaching hospital were offered endoanal ultrasound immediately post partum using a B&K scanner with 10 MHz probe. Real time ultrasound scans were recorded on SVHS video and reviewed by a consultant colorectal surgeon and a consultant radiologist.

Results

60 women were offered endoanal ultrasound immediately post-partum whilst on delivery suite. 80% accepted the investigations and 50 endoanal scans have been performed to date. The procedure was well tolerated by patients. 34 women had regional anaesthesia (7 caesarean, 27 vaginal deliveries) and 10 did not have any analgesia. Sphincter integrity could be assessed in all cases. 7 women underwent scanning after caesarean delivery, 6 elective (1 woman had previously delivered vaginally) and 1 emergency. 44 women were scanned following vaginal delivery, 15 women had an intact perineum, 1 had a 1st degree tear, 20 2nd degree tears, 7 3rd degree tears and 1 woman sustained a 4th degree tear dividing also the rectal mucosa. 17 women had instrumental deliveries (10 ventouse extractions and 7 Simpson's forceps deliveries, there were no deliveries by Kielland's forceps in the study group). No sphincter injuries were detected by ultrasound, which were not clinically apparent.

Conclusions

Failure to recognise anal sphincter injuries may lead to inadequate primary repair and may impact patient morbidity. In the future, this technique may be able to predict those women most at risk of developing post partum faecal incontinence. Endoanal ultrasound immediately post partum is feasible and well tolerated by women with or without regional anaesthesia. Internal and external anal sphincters are identifiable and obstetric sphincter trauma is visible.