42

Faltin D[1], Boulvain M[1], Floris L[1], Weil A[1], Irion O[1]
1. Dept Obstetrics and Gynaecology, University Hospitals of Geneva

A RANDOMIZED, CONTROLLED TRIAL OF THE USE OF ENDOANAL ULTRASOUND AFTER DELIVERY TO DIAGNOSE ANAL SPHINCTER TEARS AND PREVENT FECAL INCONTINENCE

Aims of Study

Anal sphincter tears are frequently not diagnosed clinically after vaginal delivery and are associated with fecal incontinence. Whether diagnosis of these tears after delivery by ultrasound followed by repair prevents fecal incontinence is unknown.

Methods

We performed a randomized trial comparing clinical and ultrasound examination of the perineum after a first childbirth with clinical examination alone. The participants were women delivering vaginally their first child in which a superficial tear of the perineum not involving the anal sphincter was diagnosed by clinical examination. In the experimental group, ultrasound was performed immediately after delivery before suture of the perineum. When an anal sphincter tear was diagnosed, the perineum was surgically explored and the tear repaired. Women received a postal questionnaire three months and one-year after delivery. The main outcome was incontinence to flatus or liquid or solid stools graded with the Jorge Wexner fecal incontinence scale (range 0–20). A score above two (any symptom weekly or any two symptoms) was defined as fecal incontinence, a score above 4 was defined as severe incontinence. Proportions were compared with the chi-squared test and scores with the Mann-Whitney test adjusted for ties.

Results

We randomized 752 women after delivery. The base-line characteristics of the groups were similar. Among the 376 women assessed by ultrasound, 21 (5.6 percent) sphincter tears were diagnosed and 16 (4.3 percent) could be surgically repaired.

Three months after delivery, 60/364 (16.5 percent) women reported fecal incontinence in the experimental group and 66/355 (18.6 percent) in the standard care group, risk difference -0.2 percentage point (95 percent confidence interval -7.7 to 3.5, P=0.46). Severe incontinence was reported by 12/364 (3.3 percent) women in the experimental group and 31/355 (8.7 percent) in the standard care group, risk difference -5.4 percentage point (95 percent confidence interval -8.9 to -2.0, P=0.0021).

One year after delivery, 27/340 (7.9 percent) women reported fecal incontinence in the experimental group and 42/340 (12.4 percent) in the standard care group, risk difference -4.4 percentage point (95 percent confidence interval –8.9 to 0.1, P=0.06). Severe incontinence was reported by 12/364 (3.3 percent) women in the experimental group and 31/355 (8.7 percent) in the standard care group, risk difference -5.4 percentage point (95 percent confidence interval -8.9 to -2.0, P=0.0021).

Among women affected by fecal incontinence, severity scores were lower in the experimental group three months (P=0.03) and one year post-partum (P=0.03).

Conclusions

Our study provide evidence that assessment of the anal sphincter after vaginal delivery is feasible, allows diagnosis and repair of sphincter tears otherwise overlooked. Taking these steps might reduce the severity and prevent fecal incontinence after childbirth. Fecal incontinence is a serious morbidity for the affected women and should be prevented as much as possible. The use of endoanal ultrasound should be considered after childbirth.