LONG-TERM ANAL CONTINENCE AND QUALITY OF LIFE FOLLOWING ANAL SPHINCTER INJURY

Hypothesis / aims of study
This study was undertaken to compare ano-rectal incontinence symptoms after obstetric anal sphincter tear with patients without perineal laceration.

Study design, materials and methods
We studied a cohort of 13'036 women who gave birth vaginally to a singleton in cephalic presentation in pregnancies >37 weeks' gestation between January 1996 and December 2006. From this cohort, we identified 196 women with anal sphincter laceration, defined as 3rd- and 4th-degree perineal tears and 588 matched controls. The Wexner questionnaire was mailed to each woman, allowing to score incontinence to flatus, liquid or solid stools, need to wear a pad and lifestyle alterations.

Results
Respectively 66 (33.7%) and 192 (32.7%) women with and without anal sphincter lacerations returned the questionnaires (p=0.8). Both groups were similar in term of parity, age, race, body mass index, years of delivery, marital and social status (insurance, university studies, employment). Moreover, the obstetrical characteristics (labor induction, epidural analgesia, operative vaginal and caesarean delivery, episiotomy, birth weight) were also similar between the two groups.

After anal sphincter laceration, women were more likely to pass involuntary flatus (19 vs 9%, p<0.05), liquid stools (22 vs 9%, p<0.01), to have both lifestyle alterations (16% vs 5%, p<0.01) and altered sexual life (9% vs 2%, p<0.05) due to ano-rectal symptoms than women without anal sphincter laceration. The need to wear a pad (12 vs 7%), fecal urgency (16 vs 10%) and incontinence to solid stools (6 vs 3%) were also greater after anal sphincter tear, although statistical significance was not reached. When the Wexner score is considered, 38% of women reported at least 2 severe symptoms (Wexner score above 2) after anal sphincter laceration, compared to 24% in the control group (OR 2.0, 95%CI 1.1-3.6).

Interpretation of results & Concluding message
Women who sustained an obstetric anal sphincter laceration have more ano-rectal incontinence symptoms and lifestyle alterations than controls.

Specify source of funding or grant
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| Is this a clinical trial? | Yes |
| Is this study registered in a public clinical trials registry? | No |
| What were the subjects in the study? | HUMAN |
| Was this study approved by an ethics committee? | Yes |
| Specify Name of Ethics Committee | Ethical committee of the University of Lausanne, Switzerland |
| Was the Declaration of Helsinki followed? | Yes |
| Was informed consent obtained from the patients? | Yes |