

## RESULTS FROM A QUESTIONNAIRE STUDY USING: "QUESTIONNAIRE AFTER CHILDBIRTH COMPLICATED WITH AN ANAL SPHINCTER RUPTURE"

### Hypothesis / aims of study

To reveal incontinence problems or sexual problems and desire for treatment among women with birth related anal sphincter rupture (ASR) using a newly developed diagnose specific screening questionnaire: "Questionnaire after childbirth complicated with an anal sphincter rupture" and to find possible obstetric predictors of these problems from the patient files

### Study design, materials and methods

In the period from January 2005 until august 2005, 72 consecutive women with peri-partum ASR agreed to pre-test a diagnose specific screening questionnaire for women with ASR

The questionnaire comprised questions about the women's age, obstetric interventions, anal symptoms (i.e. urgency, pain, sanitary situation, and anal sensitivity) anal incontinence (AI), urinary incontinence (UI), sexual problems and pelvic floor training (PFT). A Wexner score was also included. The women were offered a follow-up consultation and treatment if indicated. Data from patient files was available from 64 of the 72 women that had pre-tested the questionnaire. Data from the questionnaires were analyzed and compared with selected obstetric data from patient files. Data were analyzed using Pearson chi-square test, Spearman correlation, and multiple logistic regressions.

Multiple logistic regression with backward selection using likelihood ratio criterion was performed with AI, UI or sexual problems as dependent variables and length of gestation, total length of birth, length of second stage, size of baby, size of rupture (3A or 3B/4, use of vacuum and syntocinon infusion as independent variables (n=64). The age of the women was also included. A p-value of  $\leq 0.05$  was considered statistically significant.

### Results

The questionnaire was answered median 8 months post-partum (range, 6-14). The median age of the women was 31 (22 - 39). Sixty-three (88%) were nulliparous.

Fifty nine (82%) had received individual instructions on PFT by a specialist physiotherapist, 9 (12.5%) had not received individual instructions on PFT and data were missing in four women (5.5%). Thirteen women of the 72 women responded, that they had a desire for further treatment.

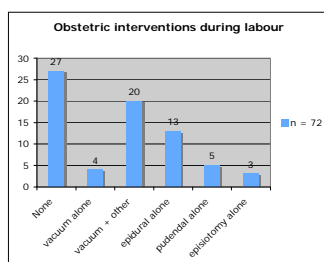


Fig. 1: Distribution of obstetric interventions among 72 women with ASR, answering a screening questionnaire median 8 months post-partum

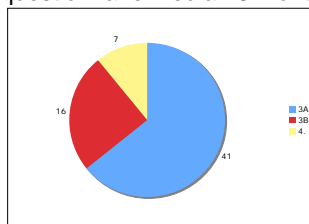


Fig.2: ASR as classified in the patient files available (n= 63, as one ASR was not classified)

### *Anal incontinence (AI)*

Twenty-two women (31%) had a Wexner score > 0, with a median score of 4 (range, 1-16). Higher Wexner scores were significantly correlated with affection on everyday life ( $r = 0.5$ ,  $p = 0.02$ ). Twenty-two women (31%) had urgency for stool. Of these, 13 reported AI (NS)

Two women (3%) had experienced passive incontinence. Only the length of the second stage of labour was significant in terms of reporting AI (Wald  $p = 0.05$ , LR  $p = 0.05$ ), with an OR of 2.0 [95%CI: 1.00 – 4.14] for every half hour prolongation of second stage. Reporting AI was significantly associated with the desire for further treatment ( $p = 0.001$ ).

### *Urinary incontinence (UI)*

Eighteen women (25%) reported UI, 12 of whom described affection on everyday life. The association between affection on everyday life and a desire for further treatment was significant ( $p = 0.04$ ), as was the association between the presence of UI and a desire for treatment ( $p = 0.05$ ). No obstetric predictors of UI could be found.

### *Sexual life*

Sixty-two women (86%) had been able to complete sexual intercourse after median 12 weeks (range, 5-25). Nine women (12.5%) had not tried to have sexual intercourse yet and one could not complete intercourse because of pain.

Thirty-three of the women who were sexually active reported having problems during intercourse. Twenty-four of these 33 women reported pain in the vaginal introitus. Other problems reported were "feeling too small", "deep pain", "low sexual desire" and "dryness". Four women reported fear of or actual UI or AI as a cause of sexual problems. No obstetric predictors for having sexual problems could be found.

### Interpretation of results

The prevalence of AI and/or UI and/or sexual problems found in this study was similar to that of another recent Norwegian study on ASR [1]. Although 31% of the women had a Wexner score > 0 (median 4), only three (4%) had experienced problems with fecal incontinence, with only one woman having a frequent problem. Still, there was a significant association between the affection on everyday life because of AI or UI and the desire for treatment. Although 33 (46%) of the women reported sexual problems, primarily due to pain during intercourse, none of them asked for further treatment exclusively because of their sexual problems.

The fact that only 18% of the women asked for further treatment is believed to be a good result, which might be due to the benefits of having received individual PFT with a specialist physiotherapist. However, as we did not have a control group, we cannot conclude anything about the effect of physiotherapy after ASR.

Our results indicate that women in our region consider their problems with AI, UI and sexual problems after ASR to be minor, but other reasons for not wanting further treatment cannot be excluded.

It was hypothesized that various obstetric factors, in particular the size of the rupture, use of vacuum, birth weight and mothers age could predict the prevalence of AI, UI or sexual problems. However, in this study only the length of the second stage of labour was found to be a significant predictor of AI.

### Concluding message

In this study only the length of the second stage of labour was found to be a predictor of AI after childbirth complicated with ASR. Further studies on larger groups of women with or without ASR, preferably performed as case control studies or RCTs, are needed.

As pain during sexual intercourse occurred in almost half of the women who had recommenced sexual activity, women with ASR should be informed and advised about this problem.

### References

1. Dis Colon Rectum 2005; 48: 1055-1061

**FUNDING:** None

**CLINICAL TRIAL REGISTRATION:** This clinical trial has not yet been registered in a public clinical trials registry.

**HUMAN SUBJECTS:** This study was approved by the The Ethical Committee in Copenhagen and followed the Declaration of Helsinki Informed consent was obtained from the patients.