

THE PREVALENCE OF ANAL INCONTINENCE IN POSTPARTUM WOMEN FOLLOWING OBSTETRICAL ANAL SPHINCTER INJURY AND IMPACT ON QUALITY OF LIFE.

Hypothesis / aims of study

Anal incontinence (AI) or anal urge incontinence is defined as the involuntary loss of feces or flatus, which adversely affects a woman's quality of life. The prevalence of anal incontinence post delivery is not fully understood, therefore, further study is much needed.

The primary objective of this study was to determine the prevalence of anal incontinence in postpartum women following obstetrical anal sphincter injury (OASI). The secondary objectives were to determine the impact of anal incontinence on the quality of life, the severity of anal incontinence, and the prevalence of other pelvic floor symptoms.

Study design, materials and methods

Patients were included who delivered vaginally from 2000 – 2005 and sustained 3rd or 4th degree OASI at delivery, as documented on delivery records. The selected patients were mailed a letter explaining the study, a copy of two validated questionnaires, and were asked to mail back the questionnaires once completed. The questionnaires consisted of: the Pelvic Floor Distress Inventory (PFDI-20), which included questions about pelvic organ prolapse symptoms (POPDI), colorectal-anal symptoms (CRADI), and urinary symptoms (UDI); and the Pelvic Floor Impact Questionnaire (PFIQ-7), which asked about the impact of bowel (CRAIQ), bladder (UIQ), and prolapse (POPIQ) symptoms on quality of life. Patient demographic and delivery data was collected from the hospital records. A second mailing was completed for patients who did not respond to the initial survey.

Results

The overall survey response rate was 25.0% (325/1383). Within this study population, 89.9% (292/325) of the patients had sustained 3rd degree tears, and 10.2% (33/325) had sustained 4th degree tears. The prevalence of anal incontinence of formed or loose stool were 7.7% (25/325) and 19.7% (64/325) respectively and prevalence of incontinence of flatus was 38.2% (124/325). Using the Mann-Whitney U Test, the overall PFDI scores and the PFIQ scores were both statistically significantly worse in the 4th degree tear group. Prevalence of : other pelvic organ prolapse symptoms was 3.4-38.2%, urinary symptoms 18.2-60.9%, and colorectal/anal symptoms 7.7-43.4%.

PFDI results

	3 rd	4 th	P value
POPDI score	12.6	16.3	0.03
CRADI score	16.6	24.3	0.03
UDI score	24.4	32.7	0.06
Total PFDI score	53.6	73.3	0.01

PFIQ results

	3 rd	4 th	P value
UIQ score	11.4	19.3	0.003
CRAIQ score	5.7	11.4	0.01
POPIQ score	6.4	6.2	0.09
Total PFIQ score	23.5	36.9	0.001

Interpretation of results

Prolapse and colorectal/anal symptoms are more prevalent in women that have sustained 4th degree OASI compared to those who sustained 3rd degree OASI. Urinary and colorectal symptoms have a greater impact on quality of life in women who have sustained 4th degree OASI compared to those who sustained 3rd degree OASI.

Concluding message

The prevalence of anal incontinence in women after OASI is high and is in keeping with previous published data. Prolapse and urinary symptoms are also highly prevalent in this population. POPDI scores were significantly worse in women having had 4th degree OASI and the impact on quality of life was also significantly worse in this population. Formal perineal clinics would help to address pelvic floor symptoms in this postpartum population.

<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	University of Alberta Health Research Ethics Board
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No