

## BOWEL SYMPTOM PREVALENCE IN A TERTIARY CARE UROGYNECOLOGY POPULATION

### Hypothesis / aims of study

Pelvic floor disorders are highly prevalent in women and severely impact quality of life (QOL). Previous epidemiologic studies focus on the anterior compartment, leaving knowledge of posterior compartment symptoms, such as defecation disorders and fecal incontinence, comparatively deficient. Fecal, compared with urinary, incontinence is a greater detriment to women's quality of life (1). Women with both fecal and urinary incontinence report greater QOL impact than women with either type of incontinence (1). Fecal incontinence is more commonly associated with urge incontinence than stress incontinence (1). QOL score decreases associated with both fecal and urinary incontinence are equal to QOL score decreases in stroke victims in a community setting (1). A study of women from colposcopy clinics, family planning clinics, general gynecology clinics and general district hospitals revealed 55% of women were fecally incontinent, while 25.5% were constipated (2). The objective of our study was to assess the prevalence of posterior compartment symptoms in a tertiary urogynecology population and to examine the impact on quality of life.

### Study design, materials and methods

A cross sectional prevalence study of posterior compartment symptoms was conducted in our tertiary care urogynecology clinic population. Routine demographic and medical history data were collected from patients presenting for their initial visit from May to September 2009. Patients were asked to complete validated questionnaires, including the short forms of the Pelvic Floor Impact Questionnaire (PFIQ-S7), Pelvic Floor Distress Inventory (PFDI-S20), SF-12 Health Survey and Vaizey Incontinence Score, documenting their pelvic floor symptoms, defecatory symptoms, anal incontinence and the impact of these symptoms on their quality of life.

### Results

Surveys from 402 women were analyzed. Of the women studied, 65.59% reported bowel dysfunction and 40.90% reported fecal incontinence. Women reporting constipation, digitation, and fecal incontinence had statistically significantly higher scores on all questionnaires ( $p < 0.05$ ). Higher Vaizey Incontinence Scores were noted with former smokers ( $p = 0.0137$ ), previous hysterectomy ( $p < 0.001$ ), menopause ( $p = 0.0073$ ), pad use ( $p < 0.0001$ ) and urinary incontinence ( $p < 0.0001$ ). Women unable to defer bowel movements for 15 minutes had higher PFIQ ( $p < 0.0001$ ) and CRAIQ ( $p < 0.0001$ ) scores. Women with bowel symptoms did not score significantly higher on the SF-12 (PCS,  $p = 0.5906$ , MCS,  $p = 0.8096$ ).

Symptom	Percent
Fecal Incontinence	40.90
Constipation	26.07
Uses Laxatives	22.34
Need to Digitate	33.58
Abnormal Bowel Function	65.59
Feeling of Prolapse	44.14
Previous Hysterectomy	45.77
Previous Prolapse OR	28.61
Current Smoker	13.62
Former Smoker	38.56
Vaginal Delivery	87.25
Ceasarian Section	3.50
Tear/ Episiotomy	81.11
Forceps	31.23
Vacuum	7.04
Menopausal	81.16
Currently on HRT	30.00

Atrophic	76.37
----------	-------

Interpretation of results

Bowel symptoms cause considerable distress in our tertiary urogynecology population. Higher scores on questionnaires reflecting symptoms and bother were found to correlate with smoking, previous hysterectomy, menopause, pad use and urinary incontinence, and women unable to defer a bowel movement for 15 minutes.

Concluding message

Bowel symptoms have been shown to significantly impact patient QOL, indicating the need for these issues to be studied. Additional information on the prevalence and impact of bowel symptoms in our patient population will allow creation of new programs with dedicated staff to address these issues.

References

1. Markland AD, Richter HE, Kenton KS, Wai C, Nager CW, Kraus SR, Xu Y, Tennstedt SL. Associated factors and the impact of fecal incontinence in women with urge urinary incontinence: from the Urinary Incontinence Treatment Network's Behavior Enhances Drug Reduction of Incontinence study American Journal of Obstetrics and Gynecology 2009; 4:424.e1-8.
2. Bano F, Barrington JW. Prevalence of anorectal dysfunction in women attending health care services International Urogynecology Journal 2007;18:57-60.

<i>Specify source of funding or grant</i>	Carolyn Plewes received summer student funding from the Division of Gastroenterology and the Urogynecology Clinical Research Fund. Dr. Rosychuk is an AHFMR health scholar.
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>Is this a Randomised Controlled Trial (RCT)?</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>	Health Research Ethics Board, University of Alberta
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No