

IMPAIRED RECTAL EVACUATION AND OVERACTIVE BLADDER SYMPTOMS IN WOMEN

Hypothesis / aims of study

Studies in women support a high prevalence of defecatory disorders among patients suffering from lower urinary tract symptoms (LUTS). It has been demonstrated that when the rectum is full, sensation of bladder filling occur at lower volumes, and also a lower maximum bladder capacity volume is observed, in both normal women and in women with low urinary tract symptoms(1,2). The aim of this study was to analyse the association between symptoms of impaired rectal evacuation and low urinary tract symptoms, in women seeking care for pelvic floor problems.

Study design, materials and methods

Multicentre cross-sectional study of 715 women seeking care for pelvic floor problems in 35 specialized urogynecological clinics. Patients answered a validated version of the Epidemiology of Prolapse and Incontinence Questionnaire² (EPIQ), a questionnaire developed to detect female pelvic floor disorders (PFD). Prevalence of constipation and obstructed defecation was determined using the EPIQ's 3 specific questions: A.) "Do you ever have difficulty having a bowel movement?", B) "Do you ever have to push on your vagina or around your rectum to have or complete a bowel movement?" and C) "How often do you use laxatives or stool softeners" (not including high fiber supplements), recoded into two categories: weakly-daily vs rarely monthly-never.

Patients with LUTS were also identified through the EPIQ's specific questions for urgency, frequency, nocturia, urgency urinary incontinence and stress urinary incontinence (questions 21-24 and 26). The severity of the UI and OAB symptoms were measured by a validated version of ICIQ-IU-SF and the Bladder Control Self Assessment Questionnaire (BSAQ).

The type of the vaginal anatomic defect and the stage of the pelvic organ prolapse (POP) were determined in pelvic examination. All pelvic examinations were performed in dorsal lithotomy position, using a maximum straining effort. Based on the pelvic organ prolapse quantification examination values, stages 0 to IV were assigned to each vaginal compartment (anterior, posterior and cervix or the apex of the vagina) in each patient.

Absolute and relative frequencies were used to describe studied variables. Associations between categorical variables were studied using chi square test, and between categorical and continuous variables by means of the Student T test (normal distribution) or Mann-Whitney test (not normal distribution). The significance level was fixed at $p < 0.05$. Logistic regression model was built for each OAB symptom (urgency, frequency, nocturia and urgency urinary incontinence).

Results

A total of 715 women were included. Description of studied sample is shown in the *table 1*. According to their answers to the EPIQ questionnaire: 318 (44.5%) of the 715 patients had "difficulty having a bowel movement"; 107 (14.97%) were using laxatives or stool softeners and 149 (20.8%), they had to push on your vagina or around your rectum to have or complete a bowel movement.

Table 1. Sample description (N=715)

mean age (S.D)	57.63 (12.47)
Mean IMC (S.D)	27.64 (4.93)
mean number vaginal deliveries (S.D)	2.48 (1.25)
menopause: n (%)	487 (68.1)
previous hysterectomy: n (%)	101 (14.1)
previous POP surgery: n (%)	59 (8.3)
previous SUI surgery: n (%)	69 (9.7)
POP on physical examination: n (%)	280 (39.16)
anterior (stage 2 or higher)	227 (31.75)
stage 2	107 (47.14)
stage >2	120 (52.86)
posterior (stage 2 or higher)	88 (12.30)
stage 2	68 (77.27)
stage >2	20 (22.72)
uterus-cervix (stage 2 or higher)	122 (17.06)
stage 2	66 (54,10)
stage >2	56 (45,90)
Mean BSAQ symptoms score (S.D)	6.35 (3.42)
Mean BSAQ bother score (S.D)	5.95 (3.13)
Mean ICIQ-UI SF score (S.D)	12.09 (5.71)

Presence of the symptom: “have difficulty having a bowel movement” and the “use of laxatives or stool softeners at least once per week” were associated to “nocturia” (p=0.049 and 0.018 respectively) but not to the other OAB symptoms. Presence of “have to push on your vagina or around your rectum to have or complete a bowel movement” was associated to urgency, frequency, nocturia and urge urinary incontinence as it is shown in the table 2.

Table2-Association between symptom of impaired rectal evacuation* and overactive bladder symptoms.

Table 2		Urgency		Frequency		Nocturia		UUI	
		no	yes	no	yes	no	yes	no	yes
* “Have to push on your vagina or around your rectum to have or complete a bowel movement” (%)	no	20.5%	79.5%	37.3%	62.7%	26.9%	73.1%	36.2%	63.8%
	yes	14.2%	85.8%	26.2%	73.8%	18.9%	81.8%	25.7%	74.3%
p		0.050		0.007		0.029		0.010	

Interpretation of results

Symptoms of defecatory disorders are prevalent in women seeking care for pelvic floor problems. When patients complain about LUTS , specially with OAB symptoms, we have to investigate if an impaired rectal evacuation may be associated. If an impaired rectal evacuation is suspected, it may be beneficial to treat it , in conjunction with the specific OAB treatment. Future studies must evaluate the exact impact of the treatment of impaired rectal evacuation on OAB symptoms.

Concluding message

An association between symptoms of impaired rectal evacuation and overactive bladder symptoms is confirmed in this multicenter cross-sectional study. The symptom expressed as: “Have to push on your vagina or around your rectum to have or complete a bowel movement” could be a good symptom to detect this bowel dysfunction in women with LUTS.

References

1. De Wachter S et al. Neurourol Urodyn. 2007;26:481-5.
2. Panayi DC et al. Neurourol Urodyn. 2011;30:344-7.

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What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
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Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes