

Brief Communication

Characteristics of women attending a urogynecology clinic in Riyadh

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Epidemiological population based trials from the Western world identified many factors associated with urinary incontinence (UI) in women.¹ These include increasing age, parity, obesity, and chronic cough. The median UI prevalence in women is 27.6% (range: 4.8-58.4%). Stress urinary incontinence (SUI) comprises 50% of all UI cases, followed by mixed urinary incontinence (MUI, 32%) and urge urinary incontinence (UUI, 14%).¹ According to a regional survey, the mean number of children for a Saudi woman is 7, compared with reports that the mean number of children per woman in the Western world ranges from 0.98-2.1.² The prevalence of obesity in Saudi women was reported as 20.3%, while 25.2% are overweight.³ Therefore, common characteristics in Saudi women include grand multiparity and obesity that put them at risk for developing UI.

The objective of this study was to determine the distribution of lower urinary tract symptoms (LUTS) and associated factors in women presenting at our urogynecology clinic during the specified study period.

A retrospective chart review was performed for all patients attending the urogynecology clinic at Security Forces Hospital, Riyadh, KSA (a tertiary care hospital) from August 2003 to January 2005. Institutional Review Board approval was sought before data collection and

analysis. All patients underwent standard evaluation, medical, surgical, and obstetrical history, as well as general physical and urogynecological examination. Observations included age, body mass index (BMI), and parity. The BMI was calculated using the formula as weight (kg)/height² (meter²). Further evaluations, including laboratory tests and imaging, were carried out as required. Lower urinary tract symptoms were defined according to revised International Continence Society (ICS) recommendations.⁴ Assessments at first visit included pelvic organ prolapse (POP), SUI, over active bladder (OAB-wet; OAB with UUI), MUI, urinary tract infection (UTI), and OAB-dry (OAB without UUI). Enquiries made by a specialized urogynecologist with the assistance of residents and interns. Assessments were based on patient symptoms. Pelvic organ prolapse stage was documented using the POP-Q system.⁴ Data were evaluated using the appropriate tests for significance. Proportions of categorical variables were compared using Chi square, Fisher's exact test, or McNemar's test as appropriate. A *p*-value ≤0.05 was considered significant.

Characteristics of 153 women were included. The mean age was 45 years (SD ± 8.3). Of 102 patients for whom BMI data were available, 97.1% (n=99) were at least overweight, 3 were underweight, and no patients had normal BMI. The majority of patients were premenopausal (71.8%) and grand multiparous (79.1%, parity ≥5). Table 1 shows clinical and demographic characteristics of continent and incontinent women. Urinary incontinence, affecting 128 women (83.6%), was the predominant LUTS, primarily presenting as SUI (n=118; 77.1%). Almost half (n=73; 47.7%) of women complained of POP. Almost three-fourths

Table 1- Clinical and demographic characteristics.

Characteristics	Continent (n=25)	Incontinent (n=128)	Total (N=153)	<i>P</i> -value
Age (years), mean±SD	39.1±7.4	46.1±9.1	45.0±8.3	0.370
BMI kg/m ² , mean±SD	29.4±5.6	33.8±7.2	33.0±6.8 (102 total)*	0.163
<i>Parity, mean±SD</i>	5.6±3.6	7.1±2.9	6.8±3.0	0.002
0-4, n (%)	11 (44)	21 (16.4)	32 (20.9)	
>4, n (%)	14 (56)	107 (83.6)	121 (79.1)	
POP, n (%)	5 (20)	68 (53.1)	73 (47.7)	0.002
Nocturia, n (%)	11 (44)	77 (60.2)	88 (57.0)	0.325
Anal incontinence, n (%)	2 (8)	11 (8.69)	13 (8.5)	0.812
DM, n (%)	0 (0)	21 (16.4)	21 (13.7)	0.029
Asthma, n (%)	2 (8)	38 (29.7)	40 (26.1)	0.024

*missing data on BMI - body mass index, POP - pelvic organ prolapse, DM - diabetes mellitus, SD - standard deviation

(30/42; 71.4%) of women who complained of POP symptoms were found to have POP on physical examination; while fewer than 50% (30/73; 41.1%) of women diagnosed with POP had it as a presenting complaint ($p < 0.0001$). Nocturia affected more than half of the women, 44% of those without and 60.2% of those with UI ($p = 0.325$). Women with UI were more likely to be grand multiparous compared with continent women. Over half of the women with UI had POP, compared with 20% ($n = 5$; $p = 0.002$) of continent women. Pelvic organ prolapse was more common in grand multiparous women ($n = 64$; 52.9%) compared with women who had fewer than 5 children ($n = 9$; 28.1%, $p = 0.013$). Patients with UI were significantly more likely to have asthma or diabetes mellitus (DM).

Almost all published material on female UI is from prevalence surveys and cross-sectional analyses.¹ Our study, on the contrary, focused on patients presenting to a specialized urogynecology clinic. Urinary incontinence was the most prevalent LUTS among these women. Similar to other studies, our patients with UI had significant associations with grand multiparity, POP, obesity, asthma, and DM compared with continent women.

Population prevalence studies from different parts of the world showed a broad peak in UI around middle age (40-50 years), similar to the ages of most of our patients, and then another peak in the elderly (≥ 70 /years).¹ Considered with the fact that almost three-fourths of our patients were also premenopausal, these observations contradict the common perception that a urogynecology cohort should consist of elderly postmenopausal women. Grand multiparity and POP in the present study were significantly associated with UI. Similar observations were noted in the Norwegian EPINCONT⁵ cross sectional study, demonstrating a strong and significant association between increasing parity and UI. A limitation of our study is that assessments were based on clinical variables and patient symptoms rather than urodynamic evaluations. In addition, our results were clinic-based; therefore, they cannot be applied to the population as a whole. However, the similarities between our results and data

from countries with prevalence data available suggest that pelvic floor disorders are not being adequately identified and diagnosed in Saudi Arabia, precluding provision of appropriate care, and indicate that large scale prevalence surveys are warranted.

In conclusion, the majority of women presenting at our urogynecology clinic were premenopausal and suffered from UI. Significant associations with UI, similar to those reported in population-based studies, include grand multiparity, POP, asthma, obesity, and DM.

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