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**Abstract Reproduction Form B-1**

Author(s):

J.G. Blaivas, D.C. Chaikin, A. Groutz

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Institution  
City  
CountryWeill Medical College, Cornell University,  
New York, NY

Double Spacing

Title (type in  
CAPITAL  
LETTERS)PREVALENCE AND CHARACTERISTICS OF BLADDER OUTLET  
OBSTRUCTION IN WOMEN.Aims of study:

The prevalence of bladder outlet obstruction in women is unknown and most probably has been underestimated. Moreover, there are no standard definitions for the diagnosis of voiding disorders in female patients. At present, the best method of studying voiding function quantitatively is by analyzing pressure flow parameters of the micturition cycle(1). Our study was conducted to examine the prevalence, clinical and urodynamic characteristics of bladder outlet obstruction among female patients attending a urogynecologic clinic.

Methods:

A urodynamic data base of 570 women evaluated from 1997 to date identified 42 women with bladder outlet obstruction. Bladder outlet obstruction was defined urodynamically as a low flow rate ( $Q_{max} < 12 \text{ ml/s}$ ) in the presence of high detrusor pressure ( $P_{det} @ Q_{max} > 20 \text{ cm H}_2\text{O}$ ). The site of the obstruction was defined as the narrowest point in the urethra at  $Q_{max}$ . All patients had history, physical examination, voiding diary, videourodynamics and cystoscopy. Methods, definitions and units conformed to the standards proposed by the International Continence Society (ICS) except where noted. Data are presented as means  $\pm$  SD, or percentage according to the variables.

Results:

Bladder outlet obstruction was diagnosed in 42 women, representing 7.4% of the study population. The mean age of the patients was  $65.6 \pm 15.3$  years. Thirty four (81%) patients, 12 (35%) of whom were using hormone replacement therapy, were postmenopausal. Irritative symptoms were present in 86% of the patients and 62% had urinary incontinence. Obstructive symptoms and urinary retention were present in 26% and 5% of the patients, respectively. The mean  $Q_{max}$  was  $8.5 \pm 3.4 \text{ ml/s}$ , while  $P_{det} @ Q_{max}$  was  $32.9 \pm 16.3 \text{ cm H}_2\text{O}$ .

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The mean bladder capacity and post void residual volume were  $336.9 \pm 124.1$ ml and  $97.1 \pm 92.3$ ml, respectively.

The etiologies of bladder outlet obstruction were previous anti-incontinence surgery in 9 (21%), genital prolapse in 8 (19%), previous radiotherapy in 2 (5%), detrusor-sphincter dyssynergia in 2 (5%), urethral diverticulum in 1 (2%) and idiopathic bladder neck obstruction in 20 (48%) patients.

Bladder trabeculations were seen in 24 (57%) patients. Five (12%) patients had bladder diverticulum and one had urethral diverticulum. Management and therapeutic outcomes will be reported separately.

**Conclusions:**

Bladder outlet obstruction in women appears to be more common than previously recognized, occurring in 7.4% of our patients. Micturition symptoms relevant to bladder outlet obstruction are nonspecific, and a full urodynamic evaluation, including lower urinary tract imaging, are essential in making the correct diagnosis and formulating a treatment plan.

**Reference:**

I.Griffiths D, Hofner K, van Mastrigt R, et al: Standardization of terminology of lower urinary tract function: pressure-flow studies of voiding, urethral resistance, and urethral obstruction. *Neurol Urodynam* 16:1-18, 1997.