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Disruptive Effects of Overactive Bladder and Urge Urinary Incontinence in Younger Women

Peter K. Sand, MD,[a] Rodney Appell, MD[b]

[a]Northwestern University, Feinberg School of Medicine, Evanston Continence Center, Evanston, Illinois, USA; and [b]Baylor College of Medicine, Houston, Texas, USA

ABSTRACT

Although most studies of overactive bladder (OAB) have investigated older patients, many younger women suffer from OAB syndrome with and without urge urinary incontinence. OAB in these women is associated with an increased risk of depression, sexual dysfunction, sleep disruption, and lost productivity in the workplace. Many patients adopt coping strategies rather than seeking treatment; therefore, available treatments are underused in this population. © 2006 Elsevier Inc. All rights reserved.

KEYWORDS: Overactive bladder; Pathophysiology; Urge urinary incontinence; Younger women

Overactive bladder (OAB), with or without urge urinary incontinence, is a common urinary disorder that adversely affects quality of life. Much of what is known about the impact of OAB and urge urinary incontinence in women is based on studies of older patients in community and institutional settings. However, these symptoms are also prevalent in younger women. Because their daily lives differ significantly from those of older patients, younger women are affected in distinctive ways. Younger women are in better general health and they are more likely to be working and living independently. Also, the dynamics of family and interpersonal relationships are markedly different between older women and younger women. As a result, conclusions drawn from observations of older patients are not likely to apply fully to the problems faced by younger women with OAB. Because so many women of all ages are affected, more attention is now being paid to the symptoms of OAB and urge urinary incontinence in younger women, and this is reflected in an increased number of published studies addressing this subject. Here, we review the recent literature on the effects of OAB in younger women.

Address correspondence to Peter K. Sand, MD, Evanston Continence Center, 1000 Central Street, Suite 730, Evanston, Illinois 60201.

E-mail address: p-sand@northwestern.edu.

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PATHOPHYSIOLOGY OF OVERACTIVE BLADDER AND URGE URINARY INCONTINENCE

The cardinal feature of OAB is a feeling of urinary urgency, which may occur with or without urge incontinence. Urgency is usually accompanied by urinary frequency and nocturia.[1] These symptoms are often the result of involuntary contractions of the detrusor muscle during bladder filling.[2] In normal function there is an absence of involuntary phasic contractions as the detrusor allows the bladder to fill with little or no change in pressure.[2] In cases where a neurologic condition is associated with OAB, the detrusor overactivity is said to be neurogenic. However, in the majority of cases the cause of the overactivity is not known and the condition is said to be idiopathic.[2]

Stress urinary incontinence is another form of incontinence common to young and middle-aged women. In contrast to urge incontinence, stress urinary incontinence is not the direct result of bladder dysfunction. Instead, it is usually caused by damage to the urethra or muscles, nerves, and connective tissue of the pelvic floor.[3] As a consequence of this damage, a sudden increase in intra-abdominal pressure, which can occur with exercise, coughing, or laughing, causes an increase in bladder pressure that exceeds urethral pressure.[4] There is a close

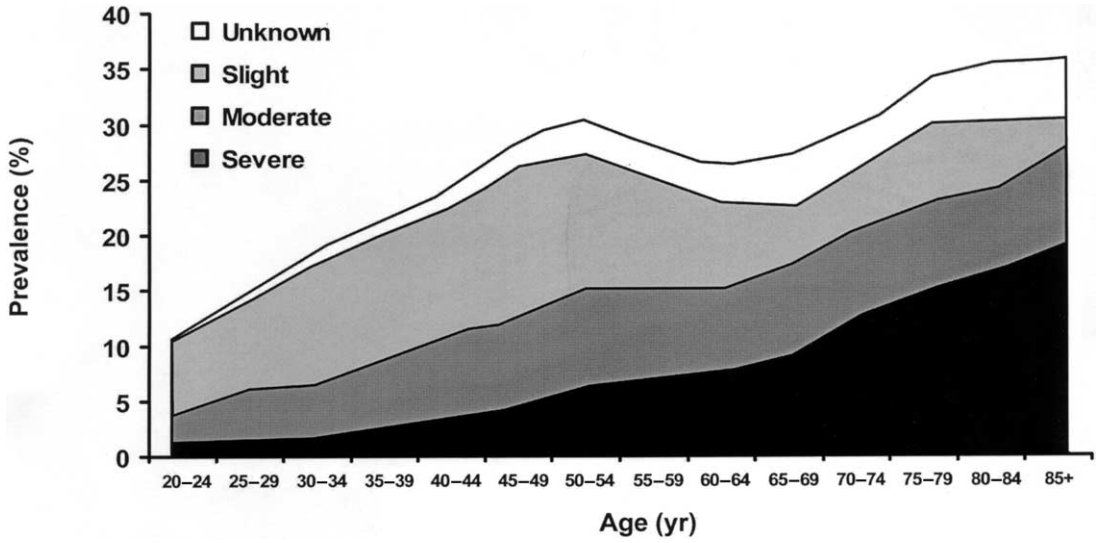

Figure 1 Prevalence of urinary incontinence by age group and severity. (Adapted with permission from *J Clin Epidemiol*.[7] © Elsevier Science.)

association between the occurrence of stress incontinence and parity. By 1 estimate, almost 66% of the prevalence of stress incontinence in women aged 30 to 44 years is attributable to parity.[5] Although they arise from different causes, urge and stress urinary incontinence frequently appear concurrently,[6] in which case the patient is said to have mixed urinary incontinence.[2] Urge and mixed urinary incontinence generally cause more leakage than stress urinary incontinence and are more troublesome to the patient.[7] Part of the bother is due to the unpredictability of urgency episodes and the impact this has on work, travel, and social activities. In active women, symptoms of urgency and frequency associated with OAB may be nearly as disruptive and restrictive as those of incontinence.[8]

EPIDEMIOLOGY

From a public health standpoint, estimating the prevalence of urinary incontinence and OAB is important for effective allocation of healthcare resources. Yet making accurate assessments poses a number of difficulties, as evidenced by the widely divergent numbers reported in the literature. Estimates of the prevalence of OAB in the general population have ranged from 16.6% to 53.1%,[8] and an analysis of 15 studies reporting on the prevalence of urinary incontinence in women across their lifespan yielded estimates ranging from 8% to 64.7%.[9]

The discrepancies among these estimates may arise from a number of factors. The definition of incontinence frequently differs from one study to the next. This confusion may exist because OAB was defined only as recently as 2003. Variations in prevalence may also reflect genuine differences among social and ethnic groups, while cultural differences might affect the tendency of women to report their symptoms.[10] Studies that rely on self-reported symptoms are prone to inaccuracy, and different questionnaire response rates among various age groups may result in selection bias.[7]

A number of recent surveys have been conducted with the specific aim of making an accurate assessment of the prevalence of urinary incontinence and OAB in women of different age groups. Among these, the Epidemiology of Incontinence in the County of Nord-Trondelag (EPINCONT) study and the National Overactive Bladder Evaluation (NOBLE) study surveyed large numbers of individuals using standardized and accepted definitions of urinary incontinence and OAB.[1]

The EPINCONT study estimated the prevalence of urinary leakage and significant incontinence in an unselected population of Norwegian women aged ≥20 years. Based on responses to a questionnaire, 25% of the almost 28,000 women surveyed said they had involuntary loss of urine. Incontinent women were somewhat older than continent women, with an average age of 53 versus 48 years.[7]

The prevalence of urinary incontinence in younger women increased steadily between the ages of 30 and 55 years, from 18% to 30%.[7] The severity of incontinence also increased with age. Among incontinent women under 45 years of age, 57% reported slight incontinence, 31% had moderate incontinence, and 12% had severe incontinence. For women between the ages of 45 and 59 years, the corresponding rates were 46%, 33%, and 21% (**Figure 1**).[7] In all, 50% of incontinent subjects had stress urinary incontinence, 11% had urge urinary incontinence, and 36% had mixed incontinence.[7]

A remarkable finding of the EPINCONT study was the relatively high rate of urinary incontinence in the youngest women. Those aged 20 to 34 years had a 10% to 18% prevalence of urinary incontinence. The proportion of these women with urge urinary incontinence ranged from 10% to