Nonsurgical Treatment of Urinary Incontinence in Elderly Women

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KEYWORDS

• Urinary incontinence • Geriatrics • Elderly women • Nonsurgical • Treatments

KEY POINTS

- Incontinence can be divided into broad categories: stress, urgency, mixed, overflow, and function incontinence, which are used to guide treatment.
- Review of medications, comorbid conditions, and pelvic examination is essential in the initial assessment of the incontinent patient.
- Numerous treatment options exist for urgency urinary incontinence but must be used selectively in the elder patient.
- Behavioral modification and strengthening exercises should be offered before pharmacologic intervention and can result in meaningful outcomes.
- Reassessment should be performed at 8 to 12 weeks with the use of validated questionnaires to guide follow-up.

INTRODUCTION

Urinary incontinence (UI) is a common problem in elderly women, with a prevalence of 17% to 24% in women over the age of 65,[1,2] increasing to approximately 75% in women greater than 75 years of age.[3] Notably, 6% of nursing home admissions can be attributed to UI[4] with an annual cost of $66 billion.[5] UI can be subdivided into broad categories based on symptoms that are classified according to the International Continence Society and the International Urogynecological Association. The most prevalent include stress urinary incontinence (SUI) and urgency urinary incontinence (UUI), although others exist (**Table 1**). According to these guidelines, SUI is defined as the involuntary loss of urine with activity[6] and is the dominant form of UI in the overall female population, representing 42% of patients with UI in a large meta-analysis.[7] Conversely, UUI is defined as the loss of urine accompanied by or immediately

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Table 1
Types of urinary incontinence

Type of Incontinence	Manifestation	Pathophysiology
Stress incontinence	Leakage of urine with activity	Inadequate bladder outlet resistance to counteract increases in intra-abdominal pressure
Urgency incontinence	Leakage of urine with sensation of need to void	Bladder muscle (detrusor) overactivity leading to loss of urine
Mixed UI	Leakage of urine with activity and desire to void	A combination of the above 2 pathologic conditions
Overflow incontinence	Leakage due to retained urine	Leakage as a result of retained urine volume
Functional incontinence	Incontinence as a result of barriers to voiding	Impaired cognition/alertness, mobility impairment, inadequate access to toilet, and so on

preceded by the urgency to void.[8] It is the most common form of UI seen among older adults.

Continence relies on adequate and coordinated function of the bladder muscle (detrusor) and the bladder outlet (sphincter and pelvic floor). As such, incontinence can result from perturbation of any of these mechanisms. Simplified, SUI can be thought of as an outlet failure during times of increased bladder pressure,[9] whereas UUI is related to a storage failure from detrusor overactivity.[6] Overflow incontinence results from retention of urine to the point of capacity, at which point urine leakage occurs. Often overflow incontinence is related to neurologic causes as opposed to mechanical obstruction. Finally, functional incontinence is incontinence as a result of situation, either a failure to recognize the need to void or an inability to reach the toilet, and is a problem that is of unique importance in the elderly population.[10] In the current review, the evaluation and nonsurgical management of the incontinent older adult woman are discussed.

MANAGEMENT GOALS

- Initial evaluation and recognition of type of incontinence
- Reduction in incontinent episodes
- Improvement in quality of life

CLINICAL EVALUATION

The evaluation of the incontinent patient begins with a careful history and physical examination. Up to 50% of patients with UI will not report this symptom to physicians.[11] Initial screening for incontinence in older adults can be facilitated through the use of validated questionnaires.[8] There are several available questionnaires, the simplest of which is the 3IQ, representing 3 questions[12]; however, numerous questionnaires exist with increasing complexity that address not only the type of incontinence but also the degree of bother caused by the symptoms, all of which have been validated for the use in elderly patients.[13] Although the authors do not recommend one questionnaire more than any other, they do recommend familiarity with available options and selection of an instrument that is most applicable to the individual practice and population. The duration and frequency of the incontinence should be carefully