Chapter 3
Pessaries for the Management of Urinary Incontinence: The Evidence

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3.1 OUTLINE
Stress urinary incontinence is a very prevalent condition. It is caused by a failure of the urethral sphincter mechanism. Continence pessaries are designed to correct the problem with the sphincter mechanism by restoring proper support to the urethra. This chapter discusses the following issues:

1. The prevalence of urinary incontinence
2. The causes of stress incontinence
3. The evidence for the effectiveness of continence pessaries
4. Factors that predict successful use of a continence pessary
5. Factors affecting patient satisfaction and continuation of pessary use

3.2 PREVALENCE OF URINARY INCONTINENCE
Urinary incontinence is a common chronic medical condition in women. The prevalence of urinary incontinence among elderly, institutionalized patients has been estimated to be between 40% and 60%. Stress urinary incontinence affects 27% of noninstitutionalized elderly women. Among 45-year-old women, its prevalence is approximately 22%. In a recent large European survey, 35% of respondents reported experiencing incontinence in the previous 30 days. The majority complained of stress incontinence. Stress urinary incontinence is a widespread, expensive problem that generates substantial costs annually.

It is not uncommon for patients to wait a significant length of time before seeking help for their urinary incontinence problem. Reluctance to seek treatment may often be due to social isolation and embarrassment, fear of painful investigations or
surgical treatment, and a lack of familiarity with conservative measures that could alleviate symptoms. Many patients ignore mild or occasional symptoms until they worsen to the point when they significantly affect quality of life. With such a high prevalence and cost associated with genuine stress urinary incontinence and an aging population, there is a need for an inexpensive, yet effective alternative to surgical treatment.

3.3 PATHOPHYSIOLOGY OF STRESS INCONTINENCE

One of the primary pathophysiologic mechanisms of stress urinary incontinence is the incomplete transmission of intraabdominal pressure to the proximal urethra due to the displacement of the proximal urethra from its normal intraabdominal location (Figure 3.1). Damage to the normal urethral support is caused by vaginal delivery, chronically increased intraabdominal

![Figure 3.1](image)

**FIGURE 3.1.** The intraabdominal pressure (1) caused by a cough, applies pressure to the bladder (2). The urethral (3) must counteract this pressure to prevent leaking.