

INTRODUCTION

Urinary incontinence is a very common symptom that adversely affect the quality of life of many women Worldwide. The reported prevalence rates range from 4.5% to 53%, with an early prevalence peak in midlife (prevalence of 30% to 40%). Approximately 50% of all incontinent women are classified as having stress urinary incontinence (SUI) (*David et al., 2005*).

Urinary incontinence has asinificant psychosocial impact on individuals and families. It can result in a loss of self-esteem and decreased ability to maintain an independent life style. As a consequence, excursions outside home, social events and sexual activity may be restricted or avoided entirely (*Pierre et al., 2001*).

A major cause of urinary incontinence is genuine stress urinary incontinence, defined as the involuntary loss of urine when intravesical pressure exceeds the maximum urethral closure pressure in the absence of detrusor overactivity (*Abrams et al., 1990*).

More than 150 different surgical procedures for treatment of female stress urinary incontinence have been described in the literatures. The Burch retropubic colposuspension is considered the primary technique for the management of patients complaining of stress urinary incontinence (*AlCalay et al., 1995*).

Traditional access to the retropubic space however, requires an abdominal incision and extensive dissection maneuvers that can be associated with significant intra-operative and post-operative morbidity and prolonged hospitalization. So, there is an increased request for less invasive simpler and cheaper methods for surgical treatment of stress incontinence. Despite the fact that some procedures fulfil the criteria of minimal invasiveness, the cure rates however, not reached acceptable levels. This is true for periurethral injection and for most needle suspension procedures such as, the Stamey and Peryera procedures (*Meshia et al., 2001*).

The pubovaginal fascial slings are increasingly recognized as a great form of treatment for stress urinary incontinence especially when it is due to intrinsic sphincter deficiency. Several series of women treated with pubovaginal rectus fascial slings present evidence of durable efficacy for a prolonged follow up period (*Swierzewski et al., 1994*).

Compared to other sling procedures tension free vaginal tape (TVT) is fairly simple technique and could be done under local anaesthesia. Minimal dissection is needed with short hospital stay and minimal post-operative complications (*Rezopour et al., 2001*).

The tension free vaginal tape (TVT) procedure for surgical treatment of female stress urinary incontinence is based on a new theory of urethral closure mechanisms in females, the integrity theory, according to which the female urethra is closed off in its

mid-position and not at the bladder neck (*Nilson et al., 2001*). Lack of support of the mid-urethra from the pubo-urethral ligaments and from the suburethral anterior vaginal wall predispose to stress urinary incontinence (*Nilson et al., 2001*).

The (TVT) procedure, which is aiming at reinforcing the pubourethral ligaments and the sub-urethral anterior vaginal wall at the mid-urethra utilizing a polypropylene mesh tape (Prolene, Ethicon, Somerville, NJ, USA) that is inserted vaginally around the mid-urethra using a special needle instrument (*Ulmsten et al., 1996*).