

Title: Effect of age on lower urinary tract symptoms and urodynamic parameters in post menopausal women



INTRODUCTION:

LUT dysfunction is a major cause of reduced quality of life in aging women. Lower urinary and genital tracts share embryologic origin and estrogen receptors.

Postmenopausal estrogen decline leads to histological and functional changes in the urinary tract.

Ageing is also associated with a progressive decrease in autonomic innervation and of detrusor contractility.

OBJECTIVES:

- Assess the impact of menopause on LUTS in women.
- Perform urodynamic studies to evaluate bladder function.
- Correlate LUTS with parity, hormonal therapy, BMI, and comorbidities.

MATERIALS AND METHODS:

- Analytical cross-sectional study at NSCB MCH, Jabalpur.
- 20 women with LUTS who completed quality of life questionnaires and urodynamic tests.

CONCLUSIONS:

- Incontinence and storage LUTS increase with age.
- **Overactive bladder** is the leading cause of LUTS.
- **Ageing** has a greater impact than menopause on bladder function.
- Urodynamics are crucial for evaluating bladder dysfunction and guiding treatment.
- A brisk change in LUTF of women older than 55 years underlined deterioration in bladder function with a high detrusor hyperactivity with or without impaired contractility. The quality of life was also more severely affected in older postmenopausal

RESULTS: We sampled 20 Women visiting NSCB Gynecology OPD with LUTS, maximum fell in 40-50 years age group, majority were rural locals from Jabalpur ,had normal BMI(40%) . All of them had vaginal delivery, no history of prolonged labour(90%), no h/o HRT (90%) and 40% were of parity ≥ 3 . 40% of women had hypertensive disorders, 40% had associated gynecological conditions and 20% had diabetes mellitus. The main urinary complaints were frequency (80%), nocturia (40%) and stress urinary incontinence (30%). Among voiding LUTS, the most common was a weak stream (60%). Urgency and urge UI were the most bothersome symptoms(30%).The most common diagnosis was overactive bladder (40%), pelvic organ prolapse with cystocele (30%), bladder outlet obstruction(25%), involuntary detrusor contractions with leak (10%).The results of urodynamic measurements showed that for bladder storage function, the maximal cystometric bladder capacity **decreased** significantly with age, regarding bladder voiding function, the average and maximal urine flow rates and pressure of detrusor contractility at maximal urine flow rate significantly **decreased** with age and the voiding time and post-voiding residual urine volume significantly **increased** with age. In comparison, all of the voiding symptoms progressively **increased** with age, including straining to void, hesitancy and intermittency

