

MENOPAUSE, HORMONAL REPLACEMENT THERAPY AND THE IMPACT ON BLADDER FUNCTION

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Introduction

The loss of endogenous sex steroids that occurs at the time of and after the menopause is associated with changes in the physiology and function of all vital organs. The prevalence of lower urinary tract symptoms increases around the menopause (Hillard, 2010). The role of systemic hormone replacement therapy (HRT) on bladder function is less clear. The aim of this study is to evaluate the impact of the menopause and HRT on bladder function.

Method

This is a retrospective review of urodynamic studies of women attending a urogynaecology clinic. Urodynamic evaluation included uroflowmetry, cystometry and pressure-flow studies. Statistical analysis was conducted using SPSS.

Results

560 urodynamic studies were viewed. 158 women were pre-menopausal and 401 were post-menopausal, of these 197 women were using systemic HRT. Maximum urinary flow (Q_{max}) was higher in the pre-menopausal group 28.8 +/-14.4 vs 24.18 +/-13.5; $p < 0.001$, a greater proportion of post-menopausal women are likely to have voiding dysfunction $p < 0.001$. There was no significant difference in bladder function based on HRT use.

Conclusion

Changes in lower urinary tract function after the menopause can be attributed to progressive atrophy of oestrogen-sensitive tissues resulting in thinning of urogenital tissue (Mitchell and Waetjen, 2018). The lower Q_{max} values and the predisposition to voiding dysfunction may be secondary to these changes. The impact of systemic HRT is still unclear, this study demonstrated no effect on bladder function however the sample size is relatively small; a type II statistical error cannot be excluded.

Reference

Hillard, T., 2010. The postmenopausal bladder. *Menopause Int* 16, 74–80. <https://doi.org/10.1258/mi.2010.010020> Mitchell, C.M., Waetjen, L.E., 2018. Genitourinary Changes with Aging. *Obstet. Gynecol. Clin. North Am.* 45, 737–750. <https://doi.org/10.1016/j.ogc.2018.07.010>