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# MANAGEMENT OF LOWER URINARY TRACT INFECTIONS DURING MENOPAUSE: A REVIEW STUDY

## Hypothesis / aims of study

The incidence of urinary tract infections (UTIs) is high among postmenopausal women and increases with age. Bacteriuria is observed in approximately 10%-15% of women aged between 65 and 70 years and in 20%-50% of patients over 80 years. The above mentioned incidence seems to be markedly higher than this among pre-menopausal women, in which it is estimated at 5%. The aim of this research was to study the potential aetiological factors and pathways which are responsible for the increased incidence of UTIs among postmenopausal women, but also to review recent literature data in the area of diagnosis, treatment and prevention of this condition.

## Study design, materials and methods

This is a review study of recent data in the field of UTIs during menopause period. For the purposes of this study, the Medline and Google Scholar databases were searched for specific issues concerning lower urinary tract infections during menopause and the Cochrane Library for relevant English language reviews. Large research or clinical studies were evaluated and are herein discussed, while reference to the most recent and relevant review studies has been made as well.

#### Results

The theory of strong correlation between menopause and UTIs was supported by recent studies that included postmenopausal women with recurrent UTIs. The conclusions showed significant decrease of UTIs incidence among women who received estrogens vaginally, in comparison with those who received placebo therapy. The antibiotic therapy has the main role in the treatment of UTIs. On the other hand, the majority of the researchers agree that postmenopausal women diagnosed with asymptomatic bacteriuria should not be given therapy, with the exclusion of immunocompromised patients, or before surgical procedure at the urinary tract.

### Interpretation of results

It seems that prevention strategy plays a major role in order to avoid recurrent infections of the lower urinary tract during the postmenopausal period. The lack of estrogens leads to atrophic alterations of the vaginal and urethral epithelium, increase of the vaginal pH and atrophy of the muscles and ligaments that support the pelvic floor. As a result pelvic organ prolapse appears. This condition is not only associated with urinary incontinence, but with urinary tract infections as well due to incomplete emptying of the urinary bladder. The administration of low doses of antibiotics is a common strategy for prevention against UTIs in postmenopausal women with recurrent episodes. Additionally, the use of estrogens in the field of prevention against recurrent UTIs is also increased. Finally, probiotics which contain several types of lactobacillus are recently suggested.

## Concluding message

The early diagnosis, appropriate therapeutic approach and identification of risk factors, in every postmenopausal woman, that could lead to recurrent UTIs are the basis of the suggested management.

#### Disclosures

Funding: Funding: NONE Clinical Trial: No Subjects: NONE