INTerventions to Decrease New Episodes of Recurrent Lower Urinary Tract Infections in Postmenopausal Women. A Systematic Review.

Hypothesis / Aims of Study
The purpose of this systematic review was to evaluate and summarize randomized clinical trials designed to prevent recurrent episodes of urinary tract infections in postmenopausal women (RUTIPMW).

Study Design, Materials and Methods
The EMBASE, Pubmed, Medline and Cochrane Library were accessed to search for randomized clinical trials published in peer reviewed journals from January 1, 1970 to October 30, 2014 (using non-experimental drugs), in community-dwelling postmenopausal women with a history of recurrent urinary tract infections according to the International Continence Society (ICS) criteria, looking for (pharmacologic?, how did you decide not to include acupuncture for example) interventions to reduce recurrent episodes of urinary tract infections in postmenopausal women.

Results
A systematic search yielded 9 articles that met eligibility criteria. Five manuscripts involved the use of systemic or local hormonal therapy and the remainder used antibiotics, lactobacilli or a combination of interventions. Antibiotics were the most efficacious therapy but with a higher incidence of systemic side effects. Oral lactobacillus showed to be non-inferior to Sulfamethoxazole with trimethoprim with a safer profile. Vaginal oestrogen in different formulations decreased the number of RUTIPMW but appeared to be inferior to oral antibiotics. Multiple formulations are available and this leads to difficulties when comparing them to other studies and interventions (still doesn’t sound right). The use of oral oestrogens does not decrease the number of infections and its use should be discouraged for this purpose. Local and systemic side effects were found in up to nearly 30% of the patients.

Interpretation of Results
This review provides enough evidence to recommend against the use of oral estrogen to prevent RUTIPMW. The overall dearth of data suggests this is an under-studied problem. Because the efficacy and safety of available treatments are not well understood, they should be used with caution in older populations, pending further study.

Concluding Message
The postmenopausal population is a heterogeneous group of patients that has been under-represented in studies investigating the prevention of recurrent UTIs. The actual level of evidence of the randomized clinical trials available assessing the use of the current standard of care strategies to prevent recurrent UTIs is low and should be taken with caution. Further studies assessing the effectiveness and safety of current and emerging therapies are required in postmenopausal patients.

Disclosures
Funding: No disclosures Clinical Trial: No Subjects: NONE