

## **Comparison of the efficacy of Tadalafil, Tolterodine and placebo in treatment of women with Urgency-frequency syndrome**

Sari Motlagh R, MD. Hajebrahimi S, MD. Sadeghi-Bazargani H, MD PhD.

Urology Department, Imam Reza hospital, Faculty of Medicine, Tabriz University of Medical Sciences

### **ABSTRACT :**

**Introduction:** According to tolerance in anticholinergic drugs, attention is moved on other receptors. Bladder, urethra and prostate innervate by NO synthesis nerves and interstitial cells exist in bladder wall which create CGMP by NO. As a result, NO-CGMP pathway is a possible target to deal with contraction of smooth muscle in lower urinary tract .

**Objective:** To evaluate the efficacy of Tadalafil in premenopausal women with overactive bladder syndrome .

**Methods and materials:** Ninety premenopausal women with diagnosis of OAB were enrolled in this triple blind randomized clinical controlled trial. Patients were randomized to three arms, including: placebo, Tadalafil and Tolterodine and they were followed for one month. Symptoms severity of patients were collected before and after of treatment by ICIQ-OAB questionnaire, PISQ-12 questionnaire, drug side effect questionnaire

**Results:** ICIQ-OAB questionnaire Scores in Tolterodine, Tadalafil, placebo before treatment were, 7 (4.75-10), 7 (6.25-8) and 9 (6-12) respectively, and after treatment, reduced to 2 (1-4.25), 2 (1-3.75) and 5 (2-10) respectively. Dry mouth is most prevalent side effect in Tolterodin arm (30%) and compared to Tadalafil arm (3%) is more prevalent .There was not significant Tadalafil side effects .

**Conclusion:** Tadalafil is a safe and effective treatment with minimal side effects in the management of OAB. A multicenter phase 3 study is recommended for evaluation of effectiveness of the intervention.

**Key word:** overactive bladder, Tadalafil, women