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Xu T<sup>1</sup>, Xie L<sup>2</sup>, Huang X<sup>2</sup>

1. Zhejiang Chinese Medicine University, School of Nursing, 2. Urology department, The first affiliated hospital of Zhejiang University

## DISEASE CORRELATION AND EFFECTS OF PELVIC FLOOR MUSCLE TRAINING ON TOLTERODINE BASED TREATMENT FOR FEMALE PRIMARY OVERACTIVE BLADDER SYNDROME

### Hypothesis / aims of study :

To identify the relative factors of female patients with primary overactive bladder. To determine whether medical interfered-pelvic floor muscle training and behavioral therapy can enhance the treatment effects of tolterodine on female patients with primary overactive bladder (OAB).

### Study design, materials and methods :

107 women from one center with primary overactive bladder under the treatment with tolterodine extended release tablets ( 5 mg once daily) were randomly divided to an experiment (E) group (interfered with pelvic floor muscle training, PFMT, three sessions per day, 15-20 times /session, n=54 ), and a control (C) group (interfered with general health education, n=53). The total intervention were 3 months. Followed up after 6 months. Treatment efficacy was measured by micturition diary, Oxford pelvic floor muscle force scores, OABSS scores and patients' subjective KHQ quality of life scores respectively at baseline , 2 weeks ,1 month and 3 months.

### Results

Female OAB were related to age, marriage , delivery mode and times, body mass index and chronic disease ( $P<0.05$ ) . There were no significant correlation with education level, place of residence, abortion and food habits ( $P>0.05$ ) . At 1 and 3 months, Both of the groups had a decreased OABSS and KHQ scores than before. At 3 months, the E group showed a enhanced pelvic muscle force than C group ( $P<0.05$ ) , but no significant difference on OABSS scores ( $P>0.05$ ) . In quality of life, E group showed significant decrease on micturition severity, role limitations, physical/social limitations and emotions domains ( $P<0.05$ ) . At 6 months Followed up, there was a statistically significant difference of OABSS scores and KHQ scores in all 10 domains between two groups ( $P<0.05$ ) .

### Interpretation of results:

The risk factors of female primary OAB were related to age, marriage , delivery mode and times , body mass index and chronic disease .OAB seriously affect the quality of life of patients. PFMT can significantly improve pelvic floor muscle strength, and enhance the tolterodine treatment effect. 3 months short term treatment is not enough to relieve the OAB symptoms and improve the quality of life completely. Long-term (6 months ) treatment can be effectively.

### Concluding message :

OAB is multiple factors related disease. Pelvic muscle training can enhance the medication treatment. Although 3 months is a recommended treatment period by many OAB treatment guidelines, it may not enough for a complete symptom relief and quality of life improvement.

### Disclosures

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**Subjects:** HUMAN **Ethics Committee:** Ethics Committee of Zhejiang University, 1st Hospital **Helsinki:** Yes **Informed Consent:** Yes