

TAMSULOSIN IN FEMALE PATIENTS WITH LOWER URINARY TRACT SYMPTOMS: THERAPEUTIC EFFECT AND PREDICTIVE FACTORS FOR THERAPEUTIC OUTCOME

Hypothesis / aims of study

Recently, Tamsulosin, α 1-adrenoreceptor antagonist have been used in female patients with lower urinary tract symptoms (LUTS). However, there is a few clinical evidence that tamsulosin are effective in female patients with LUTS and that is limited to the patients with low maximal flow rate (Q_{max}) who were suspected of having bladder outlet obstruction. Furthermore, there is no report concerning the predictive factors for the effect of tamsulosin. We performed a multicenter, prospective study to evaluate the effect and outcome predictors of tamsulosin in female patients with LUTS.

Study design, materials and methods

The total 267 female patients with LUTS, irrespective of Q_{max} , from 4 medical centers were included. Initial evaluations included International Prostate Symptom Score (IPSS) for subjective assessment of LUTS, measurements of Q_{max} , postvoid residual urine volume (PVR), micturition frequency in daytime and night, mean voided volume from uroflowmetry (UFR) and voiding diary for objective assessment and IPSS-quality of life (QOL), Urogenital Distress Inventory (UDI-6) for QOL assessment and measurements of blood pressure, pulse rate for assessment of adverse events. All patients were treated with tamsulosin at a dose 0.2mg/day and after 2 and 4 weeks of treatment, we reevaluated the patients and analyzed the differences of these parameters.

Results

The mean age of the patients was 58.7 ± 11.2 years old and among the 267 patients, 18 (7%) had mild LUTS, 152 (57%) had moderate LUTS, 97 (36%) had severe LUTS and 142 (53.2%) had Q_{max} of <15 ml/sec, 125 (46.8%) had Q_{max} of ≥ 15 ml/sec.

Total IPSS, voiding and storage symptom scores were significantly decreased after 2,4 weeks of treatment and voiding symptom score was more decreased than storage symptom score (38.2% vs 21.7%, $p < 0.05$). There were significant improvements in Q_{max} , PVR, frequency in daytime and night, mean voided volume, IPSS-QOL and UDI-6 scores.

When the improvement of LUTS after treatment was defined as decrease in IPSS more than 20% after 4 weeks of treatment, 182 (68.2%) were improved and in multivariate analysis to determine the predictive factors influencing the improvement, voiding symptom score of IPSS before treatment was significantly associated with the improvement of LUTS, whereas age, Q_{max} , PVR and storage symptom score were not. There was no significant decrease in systolic/diastolic blood pressure after 4 weeks of treatment.

Interpretation of results

In female patients with LUTS, tamsulosin was effective and well tolerated for improving subjective, objective voiding symptoms and QOL, especially in female patients with high voiding symptom score, irrespective of Q_{max} .

Concluding message

Tamsulosin may be an initial treatment option in female patients with LUTS, especially in patients with severe voiding symptom of LUTS.

Disclosures

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