

EFFECTS OF TAMSULOSIN ON ADULT METABOLIC SYNDROME WITH LOWER URINARY TRACT SYMPTOMS PATIENTS

Hypothesis / aims of study

The metabolic syndrome(MS) is highly prevalent in adult population. There has been some reports association between MS and lower urinary tract symptoms(LUTS) in male. In this study, we aimed to investigate the effects and correlation between the MS and selective alpha 1 blocker, tamsulosin in patients having both diseases.

Study design, materials and methods

This study is prospective, multi-institutional clinical trial. Subject patients were adult (aged 20-75 years old) male and female LUTS patients with or without MS. Patients were grouped according to their presence of MS; with MS (MS+) and without MS(MS-) and all of them were administered tamsulosin 0.2mg once daily for 24 weeks. Patients were assessed based on IPSS score, King's health questionnaire(KHQ), OAB-Q questionnaire, Uroflowmetry with post-void residuals and consisting factors of the MS(blood pressure(BP), waist-hip ratio(WHR), fasting blood glucose(FBG), serum triglyceride(TG) and HDL-cholesterol) at baseline, 4th, 12th, and 24th week of treatment.

Results

92 patients were enrolled to this study (MS- 53patients, 57.6%; MS+ 39 patients, 42.4%). After 24 weeks of tamsulosin treatment, serum changes of FBG(p=0.02), and TG(p<0.001) showed significant difference between two groups. Meanwhile, total score of IPSS, OAB-Q and scores to each questions of KHQ showed significant improvement after treatment without intergroup difference. However, improvement of emotional status, sleep quality, fatigue, and personal distress were much better in MS+ group with borderline significance (p=0.05).

Interpretation of results

Tamsulosin was effective in both LUTS patients with or without MS. In patients with MS, some factors of MS and health related life quality showed better improvement compared with non-MS(MS-) patients.

Concluding message

The metabolic syndrome has known to be associated with development of benign prostatic hyperplasia (BPH) and LUTS. Although this study can't show the direct effect of selective alpha-blocker (tamsulosin) on each parameters of metabolic syndrome, we can conclude that tamsulosin has beneficial effect on both LUTS and metabolic syndrome related health concerns.

<i>Specify source of funding or grant</i>	Astellas
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>Is this a Randomised Controlled Trial (RCT)?</i>	Yes
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Ewha Clinical Trial Center Ethics Committee
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes