

HEAD TO HEAD COMPARISON OF α 1-ADRENORECEPTOR ANTAGONIST ACCORDING TO SELECTIVITY IN PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA IN KOREAN

Hypothesis / aims of study

: To compare the efficacy of α 1-adrenoreceptor antagonist according to selectivity with lower urinary tract symptom (LUTS) associated with benign prostatic hyperplasia (BPH) in Korean.

Study design, materials and methods

Three hundred seventy-five patients (doxazosin 58 patients, alfuzosin 115 patients, silodosin 62 patients, naptopidil 45 patients, tamsulosin 95 patients) were included in our study. All patients were enrolled with BPH clinical study guideline over than 45 years of age, IPSS \geq 8, prostate size \geq 20mL, maximal flow rate <15 mL/s. Five agents were utilized in this studies: doxazosin 4 to 8mg once daily, alfuzosin 10mg once daily, silodosin 4mg twice daily, naptopidil 75mg once daily, and tamsulosin 2 to 4mg once daily. Baseline international prostate symptom score(IPSS) total, voiding and storage symptom score and quality of life (QoL) score were checked. Efficacy was evaluated with the IPSS after the patient had been receiving medication after 1 month and 12 month later. We compared with IPSS total, voiding and storage symptom score include nocturia and QoL score according to 5 α 1-adrenoreceptor antagonist selectivity.

Results

Mean age is 68.5 \pm 7.1 in doxazosin group, 65.1 \pm 7.5 in alfuzosin group, 69.3 \pm 8.3 in silodosin group, 68.3 \pm 7.6 in naptopidil group, and 68.3 \pm 7.6 in group T (p=0.216). Total baseline IPSS was 18.0 \pm 7.4, mean PSA was 1.7 \pm 1.9, mean prostate volume was 26.3 \pm 12.2, mean Qmax was 11.8 \pm 6.8 and mean QoL was 3.9 \pm 1.1, respectively. Five α 1-adrenoreceptor antagonists significantly improved in IPSS total score after 1 and 12 months later similarly (p=0.321, p=0.707). Voiding symptom improvement ranking in 1 month later after medication was doxazosin, silodosin, and alfuzosin. But storage symptom improvement ranking in 1 month later after medication was silodosin, and naptopidil in order. Voiding symptom improvement ranking in 12 month later after medication was silodosin, doxazosin and naptopidil. Storage symptom improvement ranking in 12 month later after medication was naptopidil, silodosin and tamsulosin. But total IPSS, voiding and storage symptom improvement was not statistically significant. QoL, and nocturia is also similarly improved in 5 α 1-adrenoreceptor antagonists. But naptopidil significantly improved nocturia in 12 months later after medication but it is not statistically significant.

Interpretation of results

We suggested that efficacy of 5 kinds of α 1-adrenoreceptor antagonist exhibits excellent efficacy in improving symptoms in total IPSS, voiding and storage symptom score and QoL in 1 and 12 months later after medication. But naptopidil was useful drug in storage symptom improvement especially nocturia after 12 months.

Concluding message

Efficacy of 5 α 1-adrenoreceptor antagonist similar in total IPSS, voiding symptom and storage symptom score. But naptopidil, α 1d-selective drug, improved in storage symptom especially nocturia after 12 months later.

Disclosures

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