658

Kim H W[1], Kim S H[1], Lee Y S[1], Lee J Y[1], Kim J C[1], KIm S W[1], Lee D H[1], Cho S Y[1]
1. *Department of Urology, College of Medicine, The Catholic University of Korea*

THE FACTORS AFFECTING THE COMPLIANCE OF ANTICHOLINERGIC TREATMENT IN THE PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA

Hypothesis / aims of study
Lower urinary tract symptoms (LUTS) suggestive of benign prostatic hyperplasia (BPH) tend to be treated with α-blockers, 5α-reductase inhibitors and combination therapy. Anticholinergic agents are effective in relieving overactive bladder symptoms in patients without bladder outlet obstruction. However, anticholinergic therapy has historically been contraindicated in patients with LUTS associated with BPH because of concerns for developing acute urinary retention. Recently, treatment for a man with predominant storage symptoms is combined with an antichoilnergic agents. We evaluated the efficacy, discontinuation rate, adverse events and clinical parameters of α-blockers and/or 5α-reductase inhibitors treatment combined with anticholinergic agents in patients with LUTS.

Study design, materials and methods
137 patients with BPH, who had treated with α-blockers and/or 5α-reductase inhibitors combined with anticholinergic agents at our department from January 2003 to November 2008, were retrospectively studied. In 92 patients, anticholinergic agents continued to be administered (group I) and in 45 patients, ceased to be given (group II). The efficacy and adverse event of anticholinergics treatment were estimated. The International Prostate Symptom Score (IPSS), serum prostate specific antigen (PSA) level, volume of prostate, maximum urinary flow rate and residual urine volume before administration of anticholinergics were evaluated. In group I, the change in maximum urinary flow rate and residual urine volume and the presence of acute urinary retention after giving anticholinergics were compared.

Results
There was no significant difference comparing age, IPSS, serum PSA levels, volume of prostate, maximum urinary flow rate and residual urine volume except IPSS storage subscore between the two groups. In each group, there was no significant change in maximum urinary flow rate and residual urine volume after administering anticholinergics. IPSS storage subscore were more significant in group I (9.0±3.4 vs 7.4±3.4, $p<0.05$). The duration of anticholinergics administration was longer in group I than II (325.0±316.7 vs 95.5±96.1). The discontinuation rate was 32.8%. Significant improvements were noted in group I after treatment in nocturia (n=48), frequency (n=28) and urgency (n=16). Adverse events resulting in discontinuation in group II were increased residual sensation (n=13), difficult voiding (n=12), dry mouth (n=6), hesitancy (n=6) and constipation (n=2). Acute urinary retention was not reported in any treatment group.

Interpretation of results
The overall discontinuation rate was 32.8% and adverse events were residual urine sensation, difficulty in urination, dry mouth, hesitancy and constipation in order. Acute urinary retention was not reported.

Concluding message
Anticholinergic use in men with LUTS suggestive of BPH appears to be safe and when the storage symptoms were severer, the better compliance was.

Specify source of funding or grant	**None**
Is this a clinical trial?	**Yes**
Is this study registered in a public clinical trials registry?	**No**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**Yes**
Specify Name of Ethics Committee	**St. Paul's hospital IRB**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**