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# 5-ALPHA-REDUCTASE INHIBITOR SUPPRESS THE PROGRESSION OF BENIGN PROSTATIC HYPERPLASIA; 10-YEAR RESULT

### Hypothesis / aims of study

We compared the effects of alpha-adrenergic receptor blocker ( $\alpha$ -blocker) monotherapy with combination therapy with  $\alpha$ -blocker and 5-alpha-reductase inhibitor (5-ARI) on benign prostatic hyperplasia (BPH) progression for over 10 years.

### Study design, materials and methods

A total of 620 patients with BPH who received an  $\alpha$ -blocker monotherapy ( $\alpha$ -blocker group, n=368) or a combination therapy (combination group, n=252) as their initial treatment were enrolled from January 1989 to June 2000. The incidences of acute urinary retention (AUR) and BPH-related surgery were compared between two groups. And stratified incidences by follow-up period, prostate-specific antigen (PSA) and prostate volume (PV) were also compared between two groups.

### **Results**

Incidences of AUR were 13.6% (50/368) in  $\alpha$ -blocker group and 2.8% (7/252) in combination group (p<0.001). 8.4% (31/368) and 3.2% (8/252) patients underwent BPH-related surgery in  $\alpha$ -blocker and combination group, respectively (p=0.008). By the follow-up period, the incidence of AUR was decreased in combination group, hence failed to show significant difference between two groups. But the incidence of BPH-related surgery was significantly reduced after 7 years of combination therapy. A cut-off levels of PSA and PV for reducing the incidences of AUR and BPH-related surgery were 2.0ng/mL and 35g, respectively (p<0.001).

### Concluding message

Long-term combination therapy with  $\alpha$ -blocker and 5-ARI can suppress the BPH progression more efficiently than  $\alpha$ -blocker monotherapy. For the patients with BPH whose PSA > 2.0 ng/mL or PV > 35mL, the combination therapy will promise better effect for reducing the risk of BPH progression.

Specify source of funding or grant	NOTHING TO DISCLOSE
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	THIS IS RETROSPECTIVE STUDY AND WE DID NOT USE NEW MEDICAL METHOD. CHECKED CLINICAL SYMPTOMS(ALIR VOIDING)
Was the Declaration of Helsinki followed?	
Was informed consent obtained from the patients?	Yes