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