

THE LONG-TERM EFFECTS OF DISCONTINUING ALPHA 1-BLOCKERS AFTER IMPROVEMENT OF LOWER URINARY TRACT SYMPTOMS IN MALES WITH BPH.

Hypothesis / aims of study

It has been widely accepted that alpha 1-adrenergic blockers (ABs) are useful in the treatment of lower urinary tract symptoms (LUTS) with benign prostatic hyperplasia (BPH). Previously published reports have advocated continued use of ABs for their effect to be maintained. Several reports suggested that complete cessation of ABs led to relapse of symptoms within 3 months. On the other hand, a few reports have shown that approximately half of patients could keep good condition at 6 months after discontinuation of ABs. Short-term discontinuation of AB medication is possible for the select patients with symptomatic improvement. ABs are now often used as a first line medical treatment for men affected by LUTS/BPH, however it is not elucidated how long medication should be continued.

No data have previously been published regarding the long-term effect of discontinuing ABs in LUTS patients who responded well to medication. The study objective was to show long-term effects of discontinuation of the ABs on LUTS in men with BPH treated effectively with ABs.

Study design, materials and methods

This study was prospectively performed between May 2003 and May 2012 in 143 men with LUTS (IPSS:10 or more / QOL:4 or more) who had improvement after treatment (IPSS<10 / QOL<4) with daily ABs. We also evaluated PSA, prostatic volume (by trans-abdominal US) and uroflowmetry. Statistical analysis was performed using unpaired t-test, Mann-Whitney U test and Kaplan-Meier method. ABs were discontinued at the improvement of symptoms, and IPSS and QOL scores were evaluated every 6 months. When the symptoms returned to baseline (IPSS:10 or more / QOL:4 or more) treatment was re-started.

Results

In 143 men mean age was 66.3 years and mean prostate volume was 37.3 ml. Mean PSA was 2.74 ng/ml. Mean IPSS/QOLS was 14.6/4.3 at baseline and mean medication duration was 7.4 months. Mean IPSS/QOLS was 6.50/1.90 when ABs were discontinued. Eighty of the 143 (56%, group 1) patients no longer needed medication. Mean duration of discontinuation was 29.9 months. Sixty-three of 143 (44%, group 2) needed to be re-treated at the mean follow up of 16.8 months after discontinuation of ABs. Differences of baseline parameters between group 1 and 2 were statistically significant in prostate volume (33.6.ml vs 44.4 ml, p<0.0001) and initial PSA (2.0 vs 5.5 ng/ml p=0.012).

Interpretation of results

Only a few previously published reports have shown that select patients could discontinue AB medication for short-term periods. Mechanism and pathophysiology of successful discontinuation in men with LUTS/BPH after improvement by ABs are unknown, however, this study suggested that approximately half of patients do not have to be re-treated with ABs even in the long-term. Successful discontinuation of ABs in approximately half of the patients with LUTS/BPH would lead to decreased economical and physical burden of the patients. On male LUTS/BPH Guidelines of EAU, AUA and JUA discontinuation of ABs in men with LUTS/BPH is not actively considered. However, this manner of treatment should be considered as one of the management options for LUTS/BPH in the future, especially in patients with relatively small prostate.

Concluding message

Present study suggested that approximately half of men with LUTS/BPH once improved symptomatically after initial treatment with ABs do not have to be maintained for a relatively long-term period. Discontinuation of ABs in men with LUTS/BPH who show symptomatic improvement after AB medication should be tried for saving treatment cost and avoiding unnecessary treatment.

Disclosures

Funding: No COI **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics not Req'd:** This study was prospectively performed in 143 men with LUTS who had improvement after treatment with daily alfa 1-blokers, and medication was discontinued at the improvement of symptoms, then IPSS and QOL scores were evaluated every 6 months. **Helsinki:** Yes **Informed Consent:** Yes