

LONG-TERM COMBINED A-BLOCKERS AND 5A-REDUCTASE INHIBITOR IN BPH THERAPEUTIC EFFECTS, ADHERENCE, AND PREDICTORS FOR WITHDRAWAL OF MEDICATION

Hypothesis / aims of study

To investigate the long-term therapeutic effects, patient adherence of combination therapy of 5- α -reductase inhibitor (5ARI) and alpha-blocker, and the predictors for withdrawal of combined medication in patients with clinical benign prostatic hyperplasia (BPH).

Study design, materials and methods

BPH patients with lower urinary tract symptoms (LUTS) under combination therapy were retrospectively analyzed from 1 to 12 years span. The therapeutics effects were assessed by International Prostatic Symptoms Score (IPSS) and quality of life index (QoL-I), total prostatic volume (TPV), maximum flow rate (Qmax), voided volume (VoL), prostatic specific antigen (PSA) at baseline and annually. The reason and predictors of discontinued combination therapy were also investigated.

Results

A total of 625 patients aged 38 to 97 (mean 73) years were enrolled retrospectively with at least 1 year and the longest period of 12 years follow-up. The mean year follow up was 3 years. All measured parameters showed significant improvement after combination therapy (Fig. 1). The mean year of discontinuation of combined therapy was 2 years. The most common reason for discontinuation of combination therapy was converting to single medication (19.8%) (Table 1). Age did not influence the adherence rate ($p = 0.484$), but the improved QoL-I was a predictor to adherence of combined therapy ($p=0.000$).

Interpretation of results

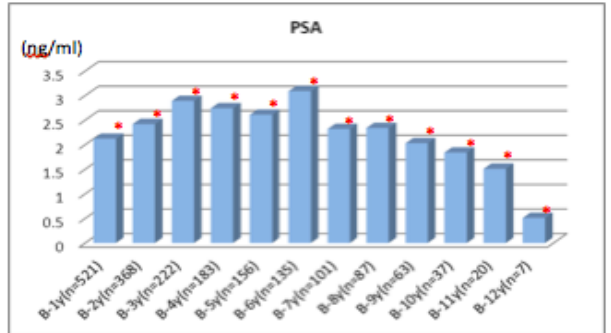
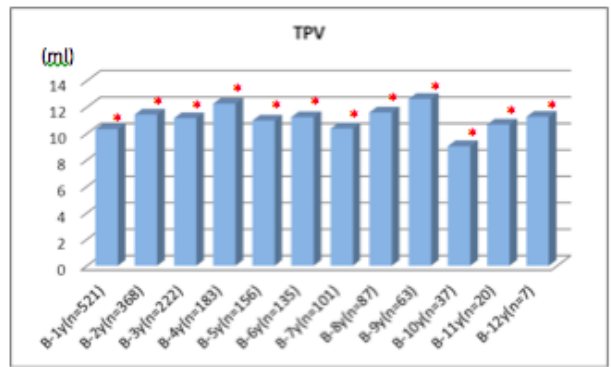
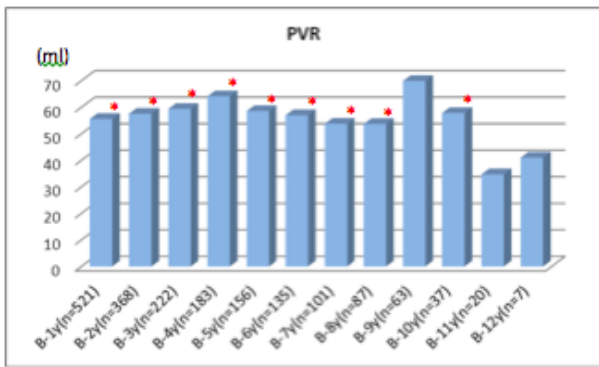
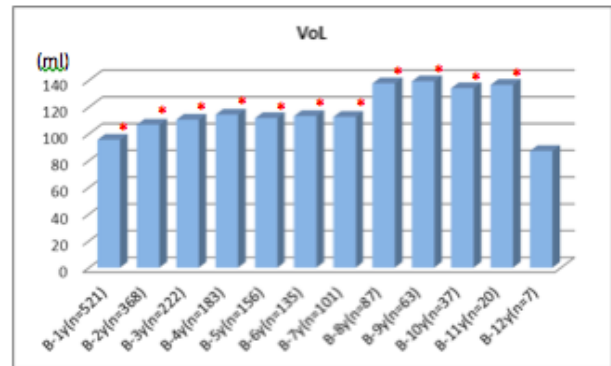
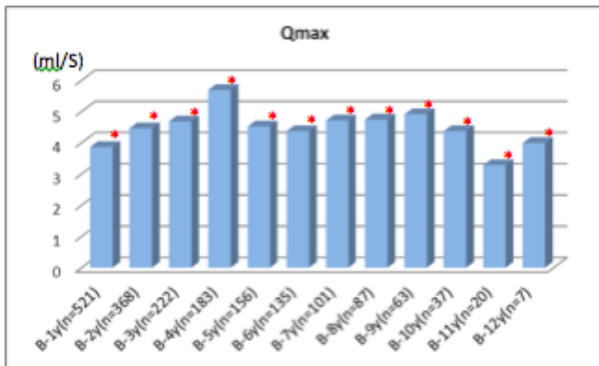
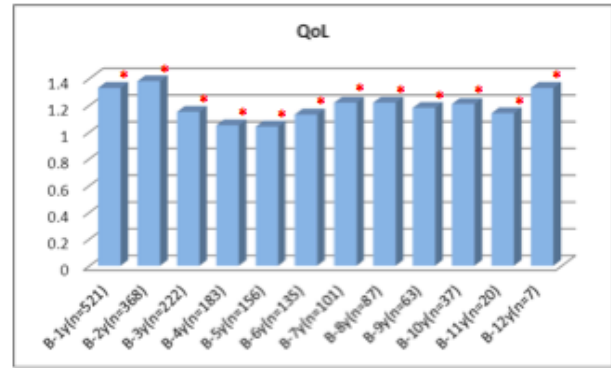
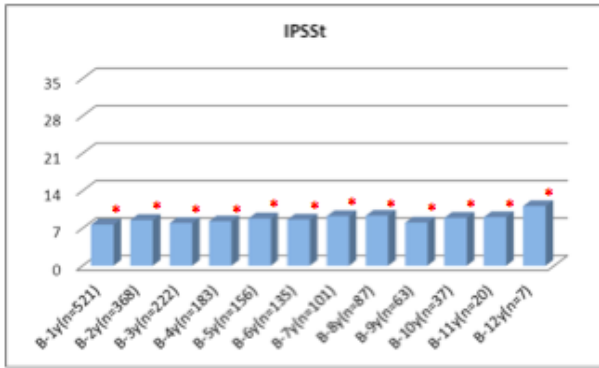
All measured parameters: IPSS-t, IPSS-s, IPSS-e, QoL, Qmax, VoL., PVR, TPV, TZI and PSA showed significant improvement after combination therapy in this study even to the longest period of 12 years compared with the baseline, $p<0.005$. The main reason of discontinuation of combination therapy was converting to single medication, mainly due to adverse effect of 5ARI. QoL improvement had closely correlation to medical adherence.

Concluding message

The patient resumed combination therapy showed significant improvement in all the parameter measurement. The most common factor of discontinuation of combination therapy were converting to single medication. QoL-I after treatment lead patient adhere to combination therapy.

Table 1. The reasons of discontinuation of combination treatment for BPH

	Continued 256 (41%)	Discontinued 369 (59%)
Reason of discontinuation	N=	Percentage (%)
Convert to single medication	124	19.8
Lost to follow-up	64	10.2
Improvement of LUTS	53	8.5
Deceased	52	8.3
Convert to surgical intervention	39	6.2
LUTS symptoms persistent	15	2.4
Comorbidity with high pill burden	8	1.3
Intermittency of medical consumption	8	1.3
Complication: AUR, recurrent UTI, stone impaction	6	1.0



* significant difference compare to Baseline

Fig. 1. Changes of variables form baseline to time-point in men with BPH treated with combination medication.

Disclosures

Funding: NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Research Ethics Committee **Helsinki:** Yes **Informed Consent:** Yes