

COMPARISON OF CLINICAL EFFICACY BETWEEN FINASTERIDE AND DUTASTERIDE AS 5-ALPHA REDUCTASE INHIBITOR.

Hypothesis / aims of study

To compare the clinical therapeutic efficacy between finasteride and dutasteride as 5-alpha reductase inhibitor (5-ARI) in medical treatment of benign prostate hyperplasia.

Study design, materials and methods

From 2007 July to 2010 July, 354 BPH patients with combination medication (alpha blocker and 5-ARI) were enrolled. These patients were classified into Finasteride medication group (F group) and Dutasteride medication group (D group). We initially checked total prostate volume (TPV), International Prostate Symptom Score (IPSS), quality of life score (QoL), PSA, max flow rate (Qmax) and post-void residual urine (PVR). After at least twelve months of medication, we rechecked these clinical parameters and during medication, side effects related to medication were also recorded.

Results

F group (n= 129) and D group (n=225) showed no differences in baseline characteristics for age, TPV, IPSS, QoL scores and PSA. After medication, decreases in TPV were relatively higher in D group than F group (28.2 % vs 20.5 %). And decreases in PSA (43.6 % vs 39.2 %), IPSS score (4.6 vs 3.5) were also higher in D group. There were no significant differences in QoL score, Qmax, PVR change and side effect between both groups.

Interpretation of results

Dutasteride showed more efficacy in reduction of TPV, PSA and in symptomatic improvement by IPSS score than Finasteride.

Concluding message

More large scale studies about the differences on clinical efficacy of finasteride and dutasteride are needed.

Table 1. Differences in initial parameters between F group and D group

Parameters	F group	D group	P-value
Patients (n)	129	225	
Age	67.6±9.6	66.7±9.4	0.46
Medication period (months)	15.4±3.1	16.1 ± 3.3	0.82
TPV (g)	55.0±21.1	55.8±20.1	0.43
PSA (ng/ml)	2.0±1.4	1.9±1.3	0.28
Initial IPSS / QOL	18.9 / 3.2	19.1 / 3.3	0.62/0.90
Qmax (ml/sec)	12.1±2.7	12.4±2.1	0.61
Residual volume (ml)	59.8±37.5	54.0±38.2	0.14
TPV change (%)	-20.5±9.2	-28.2±11.6 *	0.01
PSA change (%)	-39.2±3.3	-43.6±2.7 *	0.02

IPSS score change	-3.5± 7.9	-4.6 ± 9.1 *	0.04
Qol score change	-1.4±0.3	-1.5±0.2	0.32
Qmax change (ml/sec)	2.1±0.6	2.6±0.5	0.12
Residual volume change (%)	-29.7 ±7.5	-33.3 ±6.9	0.49
Side effect patients number (%)	12 (9.3)	22 (9.8)	0.67

<i>Specify source of funding or grant</i>	Konyang University Hospital, Daejeon, Korea
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	KYUH Ethics Committee
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes