

## EFFECT OF ALPHA-BLOCKER BEFORE TURP IN TERMS OF ITS DOSING PERIOD

### Hypothesis / aims of study

Medication is the most commonly used as the first-line treatment for benign prostatic hypertrophy (BPH) before transurethral resection of the prostate (TURP). In most such cases, alpha-blocker is administered for a fixed period of time. This study examines the effect of alpha-blocker administered before TURP on improving after-operation status in terms of its dosing period.

### Study design, materials and methods

The object of study is 77 cases of BPH, in which TURP was carried out at our hospital for five years from January, 1999 to December, 2003 after alpha-blocker was administered (tamsulosin hydrochloride was administered in 57 cases, naftipidil in 13 cases and others in 7 cases). The cases were grouped into two: concerning patients treated with medication for under one year (in 31 cases) and those for over one year (in 46 cases). The average age of the former group was 70.8 years old, while that of the latter was 68.9 years old. Each urodynamic parameter was compared between these two groups to study the effect of alpha-blocker before TURP in terms of its dosing period.

### Results

The average dosing periods of alpha-blocker before operation were 3.16 months (under-one-year group) and 38.6 months (over-one-year group) respectively. Parameters before operation were as follows: the international prostate symptom scores (IPSS) were 21.1 and 20.4, and the quality of life (QOL) was valued 5.0 and 4.7. The prostate gland weighed 31.5 g and 38.6 g respectively. The voiding volumes (VV) as a urodynamic parameter before operation were 113.4 ml and 116.5 ml with the maximum urine flow (Q<sub>max</sub>) of 6.64 ml/s and 7.19 ml/s and the average urine flow (Q<sub>ave</sub>) of 3.21 ml/s and 3.25 ml/s. The post-void residual urine volumes (PVR) before operation were 117.6 ml and 91.4 ml respectively. The bladder outlet obstruction (BOO) grades were 3.53 and 4.12 in the pressure-flow study before operation. Thus, all figures showed no significant differences between the two groups. The resected prostate glands weighed 18.8 g and 23.4 g. The urodynamic parameters after operation were as follows: VV were 156.1 ml and 164.2 ml, and Q<sub>max</sub> were 15.4 ml/s and 18.0 ml/s. The urination status after operation showed some improvement in the group medicated for over one year without significant differences from the other group.

### Interpretation of results

This study shows no significant differences in urination status after operation in terms of the length of alpha-blocker dose before TURP.

### Concluding message

Therefore, it is concluded that TURP should be positively carried out rather than blindly resorting to continuous dosing of alpha-blocker when BOO is diagnostically attributed to BPH.

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**CLINICAL TRIAL REGISTRATION: Kinki University School of Medicine**

**HUMAN SUBJECTS: This study was approved by the Kinki University School of Medicine and followed the Declaration of Helsinki informed consent was obtained from the patients.**