## Long-Term Compliance and Treatment Failure of α1-Blocker for Patients with Male Lower Urinary Tract Symptoms Suggestive of Benign Prostatic Hyperplasia

Introduction and Objective: We investigated long-term compliance and treatment failure during 10-year follow up period after administration of α1-blocker for patients with male lower urinary tract symptoms (LUTS) suggestive of benign prostatic hyperplasia (BPH) in real-time clinical practice. Materials and Methods: A total of 127 patients (45-86 years, mean 67.9) were prescribed with α1-blocker monotherapy (81 tamsulosin, 46 naftopidil) during January 2001 to December 2002 at Kawasaki Medical School. They did not receive BPH related treatment before. Chart review was retrospectively conducted about long-term compliance and treatment failure.

Results: Mean International Prostate Symptom Score (IPSS), QOL index, maximum urinary flow rate (Qmax), prostatic volume (PV), PSA, and post-void residual urine volume (PVR) at first visit were 13.8, 4.3, 11.2 ml/s, 35.0 ml, 3.81 ng/ml, and 62.5 ml, respectively. Mean medication period was 3.9 years. Twenty eight (22.0%) patients keep on taking medication until now. Only 15 (11.8%) out of 127 were successful by α1-blocker monotherapy. Other 13 patients were added on anti-androgen, antimusucarinic agents, or phytotherapy. Seven patients (5.5 %) suffered from urinary retention and 10 patients (7.9%) received TURP or HoLEP during this follow-up period. Thirty one patients referred to other hospitals for their convenience. Fifty eight patients (45.7 %) had stopped taking medication because of symptomatic improvement (9), lack of efficacy (5), adverse events (3), death of other diseases (2) and lost to follow-up with unknown reasons (39). There were no significant differences as to age, IPSS, QOL, Qmax, PVR, PV, and PSA at first visit between continuous treatment group (15) and surgery group (10).

**Conclusions:** Only 11.8 % of patients have continued with  $\alpha$ 1-blocker monothereapy during 10 years in real-life clinical practice. We should take into consideration that the majority of the population who are treated by  $\alpha$ 1-blockers can't expect their efficacy to be durable in the long term.