



# Selectivity of Alpha-Adreno Receptor Blockers, Is it Effective in Patients with BPH?

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## Editorial

Benign Prostatic Hyperplasia (BPH) is a primary disease of elderly men [1,2]. Alpha-1-adrenoreceptor blockers play a major role in symptomatic management of BPH, and several alpha-1 adrenoreceptor blockers, such as, terazosin, doxazosin, tamsulosin, alfuzosin, and silodosin are currently available, and all have been reported to improve voiding and storage symptoms significantly [3,4]. Naftopidil is a novel alpha-blocker which exerts its effects by selectively blocking alpha-1D adrenoreceptor, and has recently been adopted for the treatment of lower urinary tract symptoms (LUTS) secondary to BPH (LUTS/BPH) in Japan [5,6]. Naftopidil exhibits high affinity for alpha-1D adrenoreceptors [6,7]. It was reported naftopidil was more effective than tamsulosin in improvements of storage symptoms [8]. We performed this prospective randomized controlled study to compare the abilities of naftopidil and tamsulosin to reduce LUTS-related storage symptoms in patients with BPH.

In the present study, mean IPSS storage symptom scores were significantly improved in the naftopidil group. Similarly, Perumal et al. [9] reported that 15 and 30 days of naftopidil treatment improved the storage components of IPSS better than tamsulosin. We conjecture that the observed differences between naftopidil and tamsulosin might have been caused by the different distributions of receptor subtypes in the prostate, bladder, and nervous system. Neuromuscular receptors are present in detrusor muscle and bladder epithelium, and might be a cause of overactive bladder [10,11]. Yokoyama et al. [11] Sugaya et al. [12] reported Inhibition of rhythmic bladder contraction and increased bladder capacity due to C fiber inhibition in rats with cerebrovascular disease. Early improvements in storage symptoms induced by naftopidil might be related to its strong effects on nerves possessing alpha-1D receptors, and thus, to the inhibition of afferent stimulation of detrusor muscles. Our study showed that the naftopidil had significant improvement on total IPSS, storage symptom, OABSS and nocturia. If patient had storage symptom prominently, we recommend naftopidil, alpha-1D-adrenoreceptor blocker preferentially.

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