RESEARCH HIGHLIGHTS

BPH

Silodosin an effective new drug for BPH-associated LUTS

 α_1 -Adrenoceptor antagonists are the first-line treatment for men with lower urinary tract symptoms (LUTS) suggestive of bladder outlet obstruction (BOO) caused by benign prostatic hyperplasia (BPH). However, the lack of selectivity of some of these agents can cause reduced blood pressure and cardiovascular adverse events. Drugs that selectively target α_{1A} -adrenoceptors—the predominant α_1 -adrenoceptor subtype in the bladder outflow tract—are thought to improve



LUTS while minimizing adverse effects. Silodosin, a new α_{1A} -adrenoceptor antagonist that has high uroselectivity in experimental animals, has now been studied for the first time in European men with LUTS and presumed BPH.

In a multicenter, international, placebocontrolled and active-controlled clinical study, men with LUTS (defined as an International Prostate Symptom Score [IPSS] \geq 13) and BOO (peak maximum flow rate [$Q_{\rm max}$] 4–15 ml/s) were randomly assigned to receive silodosin 8 mg (n= 381), tamsulosin 0.4 mg (n= 384) or placebo (n= 190) once daily for 12 weeks. Patients were assessed with the IPSS questionnaire and measurement of $Q_{\rm max}$, systolic and diastolic blood pressure and heart rate at baseline and after 7, 14, 28, 56 and 84 days of treatment.

Compared to placebo, both active treatments were associated with significantly greater improvements in total IPSSs, IPSSs for storage and voiding, and quality of life. Increases in $Q_{\rm max}$ did not differ significantly between

groups. Neither silodosin nor tamsulosin showed superiority over each other in terms of efficacy. Retrograde ejaculation was reported by more patients in the silodosin group (14.2%) compared to the tamsulosin (2.1%) and placebo (1.1%) groups. The frequency of headache, the next most-common adverse event, did not differ significantly between the three groups.

The authors conclude that silodosin is a safe and effective treatment for moderate-to-severe LUTS caused by BPH, and might be most beneficial in elderly patients in whom drug—drug interactions are more likely and cardiovascular adverse effects need to be avoided.

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Original article Chapple, C. R. *et al.* Silodosin therapy for lower urinary tract symptoms in men with suspected benign prostatic hyperplasia: results of an international randomized, double-blind, placebo- and active-controlled clinical trial performed in Europe. *Eur. Urol.* doi:10.1016/j.eururo.2010.10.046