

## Drugs for Benign Prostatic Hypertrophy

By [Diane K. Newman, RNC, MSN, CRNP, FAAN](#)

Alpha (α) adrenergic antagonists (alpha blockers) are indicated in men with benign prostatic enlargement (BPH) and are used selectively in women with incomplete bladder emptying. They work by relaxing the internal sphincter muscle causing increased urethral outlet size which improves urine flow, decreases residual urine volume and decreases urine leakage secondary to overflow UI. Tamsulosin and Alfuzosin are preferred agents for nursing home residents. Onset of action is rapid. Postural hypotension and syncope can be a serious side effect, especially with first dose.

Agent	Usual Adult Dose	Side Effects	Considerations
Alfuzosin HCL	10 mg daily (Uroxatral)	Headache, dizziness, fatigue, upper respiratory tract infection	Alfuzosin is extended release and should not be crushed. Should be taken immediately after same meal each day. Avoid use with other alpha blockers. Increased levels with CYP3A4 inhibitors (e.g. ketoconazole, itraconazole, clarithromycin, ritonavir, nelfinavir, nefazadone, flecanide, thioridazine).
Tamsulosin HCL	0.4 or 0.8 mg daily usually at bedtime (Flomax)	Headache, dizziness, somnolence, diarrhea, fatigue, back pain	May have lower probability of orthostatic hypotension. Avoid use with other alpha blockers. Side effects may be milder than those seen with other alpha blockers but seen more frequently. Decreased clearance with cimetidine. Caution, if used with warfarin.
Doxazosin mesylate	4 or 8 mg (dose titration required) daily (Cardura)	Headache, dizziness, orthostatic hypotension, somnolence, edema, fatigue/malaise	Dose titration required to minimize orthostatic hypotension. Bedtime dosing may decrease orthostatic hypotension. Higher incidence of CHF in men with hypertension and cardiac risk factors. Caution in residents with hepatic dysfunction.
Terazosin HCL	5 or 10 mg (dose titration required) orally each day at bedtime (Hytrin)	Asthenia, postural hypotension and syncope initially, dizziness, dyspnea, somnolence, nausea, peripheral edema, thrombocytopenia, atrial fibrillation	Dose titration required to minimize orthostatic hypotension. Bedtime dosing may decrease orthostatic hypotension.

5-alpha reductase inhibitors - are indicated in men with benign prostatic enlargement (BPH). Their mechanism of action is through androgen suppression that results in epithelial atrophy and a decrease in total prostate size. Onset of action is slower with these medications than with alpha blockers. The combination of alpha blockers and 5alpha-reductase inhibitors may be more effective than either drug alone.

<b>Agent</b>	<b>Usual Adult Dose</b>	<b>Side Effects</b>	<b>Considerations</b>
Finasteride	5 mg daily (Proscar)	Erectile dysfunction, decreased libido, testicular pain	Caution should be taken in residents with hepatic impairment.
Dutasteride	0.5 mg daily (Avodart) Soft gelatin capsule that cannot be crushed.	Impotence, decreased libido	Care should be taken when used concomitant with CYP3A4 inhibitors (e.g. ketoconazole, itraconazole, clarithromycin, ritonavir, nelfinavir, nefazadone, flecanide, thioridazine)

*Last Updated February 2007*

This information was provided by Wellness Partners, LLC and continenceNurse.net  
© 2007 Diane K. Newman, RNC, MSN, CRNP, FAAN