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Benign Prostatic Hypertrophy Agents

Updated: January 8, 2018.

OVERVIEW

Drugs used for the symptomatic treatment of benign prostatic hypertrophy (BPH) include the alpha-1 adrenergic receptor antagonists (alpha blockers) and the 5-alpha reductase inhibitors. The alpha-1 adrenergic blockers act by relaxation of the smooth muscle in the bladder neck and prostate, which results in improvement in urine flow in men with partial obstruction due to an enlarged prostate. The 5-alpha reductase inhibitors act by inhibition of the conversion of testosterone to dihydrotestosterone, which is an important prostatic growth factor. Decrease in dihydrotestosterone levels lead to a gradual shrinkage of the prostate, which can improve urine flow in men. Thus, the two classes of agents have different mechanisms of action and targets and have little cross reactivity in side effects.

In general, these agents are very rare causes of liver injury.

References to safety and hepatotoxicity are given in the two Overview sections and the specific agents are discussed individually:

- Alpha-1 Adrenergic Receptor Antagonists
 - Alfuzosin, Silodosin, Tamsulosin, Doxazosin, Terazosin
- 5-Alpha Reductase Inhibitors
 - Dutasteride, Finasteride