

## Do Prostate Drugs Harm Bones?

Study: 1 Class of Drugs for Enlarged Prostate Does Not Increase Risk of Hip Fractures

By Kelley Colihan

WebMD Health News

Reviewed by Louise Chang, MD

Oct. 7, 2008 -- Millions of men suffer from an enlarged prostate gland. There are many drugs available for treatment, but what effects do these drugs have on bone health?

Researchers estimate that more than 8 million men in the U.S. ages 50-79 will have to deal with an enlarged prostate by the year 2010.

Drugs that treat enlarged prostate, or benign prostatic hyperplasia (BPH), come in two groups: 5-alpha reductase inhibitors and alpha-blockers.

Researchers led by Steven J. Jacobsen, MD, of Kaiser Permanente Southern California, wanted to find out if there is any connection between 5-alpha reductase inhibitors and hip fractures. Examples of these drugs include Proscar and Avodart.

These drugs treat BPH in part by blocking testosterone from converting to dihydrotestosterone. The researchers write that other studies "suggest that dihydrotestosterone might have a role in bone metabolism, but no clear evidence exists to support this theory."

The researchers gathered data on 7,076 men (45 years and older) from 1997 to 2006, all who had hip fractures. They compared them with a group of 7,076 similar men who did not have a hip fracture.

A similar percentage of men in each group had benign prostatic hyperplasia.

The researchers found:

- \* 109 of the men with hip fractures had taken a 5-alpha reductase inhibitor

- \* 141 of the men without hip fractures had taken a 5-alpha reductase inhibitor

Their conclusion: 5-alpha reductase inhibitors are not linked to an increased risk of hip fracture; instead, they may decrease risk of hip fracture.

Interestingly, the researchers also found a modest increase in hip fracture risk in the men who took alpha-blockers. There was more use of alpha-blockers (32%) in men with hip fractures vs. men without hip fractures (30%). Since this was not a primary focus of the study, the researchers write that this finding warrants further investigation.

Alpha-blockers include Flomax, Uroxatral, Cardura, and Hytrin.

WebMD phoned the trade organization PhMRA for reaction, but they said their policy is not to comment on these types of studies regarding classes of drugs or individual drugmakers.

The researchers note that they only studied older men and that more research should be done on the long-term risks of these drugs in younger men.

The study appears in the Oct. 8 issue of The Journal of the American Medical Association.

<http://men.webmd.com/prostate-enlargement-bph/news/20081007/do-prostate-drugs-harm-bones>