Revisiting an Old Drug

One of the most interesting and important trials in cancer prevention ever completed is one that most of us outside of urology have never heard of. The Prostate Cancer Prevention Trial (PCPT) was a prospective, randomized, placebo-controlled study that followed nearly 19,000 men over the age of 55 for 7 years. The research was jointly sponsored by the National Cancer Institute and Merck & Co., Inc., the manufacturer of finasteride, which was patented as Proscar when the trial began. Finasteride is a 5-alpha reductase inhibitor that shrinks an enlarged prostate by blocking the production of dihydrotestosterone, and it is FDA approved for the treatment of benign prostatic hyperplasia (BPH). Reported in 2003, the PCPT's initial results showed that finasteride reduced the overall incidence of prostate cancer by 25% but paradoxically seemed to increase the risk of more aggressive malignancies.[1] As a result, finasteride was not widely advocated for the prevention of prostate cancer in healthy men.

Several new studies reported in May of this year at the American Urological Association Annual Meeting have now resolved these concerns.[2-4] A comprehensive re-evaluation of data from the PCPT using advanced statistical modeling techniques and a complete assessment of biopsied prostate tissue from the study showed that finasteride actually reduced the risk of prostate cancer by 30% and was not associated with more aggressive cancers (artifacts caused by prostatic shrinkage had led to the erroneous impression of more aggressive malignancies with finasteride).

Coincidentally, at the same time that these newsworthy findings were being presented at the American Urological Association's meeting, the ASCRS Cataract Clinical Committee and the AAO were formulating an educational initiative about intraoperative floppy iris syndrome (IFIS) and alpha blockers directed at prescribing physicians treating BPH. Part of the message was to consider involving the ophthalmologist prior to initiating alpha blockers in patients with cataracts. The implicit goal was that the risk of cataract surgical complications from taking alpha blockers could be discussed with patients as well as the options for treating BPH pharmacologically and for the timing of cataract surgery.

There now appear to be new and compelling arguments for considering finasteride as a treatment for BPH, especially in patients with cataracts. This FDA-approved generic medication costs about $2 per day, decreases hair loss (a lower dose of finasteride is FDA approved for the reduction of hair loss and marketed as Propecia [Merck & Co., Inc.]), decreases the rate of prostate cancer by 30%, and does not cause IFIS. Finasteride can be associated with adverse sexual side effects such as decreased libido. A re-analysis of the PCPT population, however, reassuringly showed that the incidence of these side effects was low compared with the control population and that they diminished over time.[5] Patients who need faster relief of urinary symptoms can temporarily take an alpha blocker until the finasteride has had time to work. In this situation, I would consider the uroselective alpha blocker, alfuzosin, which appears to have a lower risk of causing IFIS than tamsulosin.[6,7]

Merck's patent on finasteride expired in 2006. Without a manufacturer to promote this generic drug, and with the strong direct-to-consumer advertising of Flomax (tamsulosin; Boehringer Ingelheim Pharmaceuticals, Inc.), it will be interesting to see how current prescribing patterns are affected by this new analysis of the PCPT. From what I have read, I personally would at least try finasteride as a first-line treatment for BPH symptoms whether I had cataracts or not. We ophthalmologists continually champion the clinical and medical expertise of Eye MDs versus optometrists. I would challenge us all to validate this axiom by becoming familiar with the pharmacologic treatment of BPH and by working with prescribing physicians to help educate patients with cataracts and BPH about their options. ■

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