PROSTATE CANCER

Could the use of 5 α -reductase inhibitors during active surveillance reduce the risk of disease progression?

5 α -reductase inhibitors (5-ARIs) such as finasteride and dutasteride prevent the conversion of testosterone to dihydrotestosterone, a promoter of both benign and malignant growth of prostate tissue. Studies have indicated that this antiandrogenic effect might make this class of drug useful for preventing the occurrence—and, potentially, the progression—of prostate cancer. As active surveillance is becoming an increasingly popular management strategy for men with low-risk prostate cancer, Finelli *et al.* performed a retrospective, single-center study to examine whether concurrent 5-ARI use delayed pathologic progression in patients managed with this approach.

Overall, 288 men met the inclusion criteria for the analysis (serum PSA level <10 ng/ml, clinical stage T1c–T2a, Gleason score <6, $\leq$ 3 positive cores and no cores with >50% cancer involvement at the time of initial diagnostic biopsy). Patients were not included if they had

used 5-ARIs before the diagnosis of prostate cancer. A confirmatory biopsy was performed 12 months after the initial biopsy, and every 2–3 years thereafter. Active surveillance included PSA measurement every 3–6 months and digital rectal examination every 6 months. Of the 288 men included, 70 were started on a 5-ARI before the diagnostic biopsy. The median follow-up duration was 38.5 months.

Pathologic progression (defined as increased tumor grade, >3 positive cores or >50% cancer involvement in any core) occurred in a much smaller proportion of

men in the 5-ARI group compared with the non-5-ARI group (18.6% versus 36.7%, $P=0.004$), and the time to progression was significantly longer in men receiving a 5-ARI (41.3 months versus 35.1 months, $P=0.013$). Multivariate analysis showed that lack of 5-ARI use was strongly associated with disease progression (hazard ratio 2.91, 95% CI 1.5–5.6).

Despite the retrospective nature of the study, the authors conclude that the use of 5-ARIs during active surveillance seems to reduce the likelihood of progression. The forthcoming results of the large randomized, placebo-controlled REDEEM trial should shed more light on the effectiveness of 5-ARIs in this setting.

Nick Warde

© Yuri Arcurs | Dreamstime.com

Original article Finelli, A. *et al.* Impact of 5 α -reductase inhibitors on men followed by active surveillance for prostate cancer. *Eur. Urol.* doi:10.1016/j.eururo.2010.12.018