Capsule Commentary on Shahinian et al.: Patterns of Bone Mineral Density Testing in Men Receiving Androgen Deprivation for Prostate Cancer

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This analysis of SEER-Medicare data by Shahinian and Kuo compared bone mineral density (BMD) testing in prostate cancer survivors on androgen deprivation therapy (ADT) to prostate cancer survivors who were not receiving ADT.[1] BMD testing in the men on ADT increased from less than 1% in 1996 to 11.5% in 2008. While BMD testing increased in the prostate cancer survivors not on ADT, it occurred at a much lower rate, increasing from less than 1% to 4.4%. This increase in BMD testing is not surprising and is clinically appropriate given that ADT use is associated with an increased risk of osteoporosis and fractures. The authors also show that patients who were cared for by a urologist alone were significantly less likely to undergo BMD testing than those cared for by both a urologist and a primary care physician (PCP). Given what we know about the bony side effects of ADT, why isn't BMD testing more common?

I believe that the answer lies not in the specialty of the treating physician but in the clinical uncertainty of what to do with the results of BMD testing when ordered. Obviously, if the test finds that the patient is osteoporotic, some type of treatment should be initiated, but should this be an oral alendronate, intravenous zoledronic acid or subcutaneous denosumab, all of which have been shown to be effective in preventing further bone loss?[2–4] Furthermore, if BMD testing shows osteopenia or is normal, should one of these agents be used for prevention? The National Comprehensive Cancer Network (NCCN) guidelines on the treatment of prostate cancer suggest initiating treatment in patients at certain increased levels of fracture risk, based upon the FRAX nomogram from the World Health Organization.[5] The guidelines, however, do not provide guidance on the frequency of BMD testing and are based primarily on expert opinion. Acknowledging these limitations, these guidelines still provide useful information for clinicians, and, as such, urologists and PCPs need to be more aware of bone health in prostate cancer survivors on ADT and perform BMD testing more often.

Conflict of Interest: *The author declares he does not have a conflicts of interest.*

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