Testosterone Use Is Tied to Higher Bone Density in Men With HIV

More research is needed to determine the potential risks and benefits of testosterone treatment in this population.

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HIV-positive men who use testosterone treatment have higher bone mineral density (BMD) than those who do not take such treatment, AJMC reports.

Publishing their findings in AIDS Research and Human Retroviruses, researchers conducted a substudy of the Multicenter AIDS Cohort Study known as the Bone Strength Substudy. The study enrolled 202 HIV-positive and 201 HIV-negative men between 50 and 69 years old. The participants received dual-energy X-ray absorptiometry (DXA) scans of the lumbar spine, total hip and femoral neck.

The results of the scans were expressed in what is known as a T-score. A T-score of -1.0 or greater indicates a normal BMD.

Twenty-two percent of the HIV-positive men and 4 percent of the HIV-negative men reported frequent testosterone use. The men with HIV had a lower median BMD T-score at the total hip compared with the men who did not have the virus—0.0 versus 0.3. The two groups had similar T-scores at the lumbar spine and femoral hip.

In the overall study population, testosterone use was associated with a greater BMD T-score at the lumbar spine. Among the HIV-positive men who had a fully suppressed viral load, testosterone use was associated with higher T-scores at the lumbar spine and total hip.

The researchers advocated further research of testosterone's effects on BMD among men with HIV, noting the need to analyze the associated risk of fracture as well as cardiovascular disease.

To read the AJMC article, click here.

To read the study abstract, click here.

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