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Cholecalciferol may help reduce BMD loss after bariatric surgery

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(HealthDay)—An intervention including cholecalciferol, protein supplementation, and physical exercise reduces bone mineral density loss after bariatric surgery, according to a study published online Sept. 9 in the *Journal of Bone and Mineral Research*.

Christian Muschitz, M.D., from the Medical University of Vienna, and colleagues conducted a prospective study involving 220 women and men after Roux-en-Y gastric bypass and sleeve gastrectomy procedures. Participants were randomized to an intervention group (cholecalciferol before and after surgery, protein supplementation, and physical exercise) or a nonintervention group.

The researchers found that there were differences in the intervention and

nonintervention groups with respect to the relative percentage changes of serum levels of sclerostin (12.1 versus 63.8 percent), cross-linked C-telopeptide (82.6 versus 158.3 percent), 25-hydroxyvitamin D (13.4 versus 18.2 percent), phosphate (23.7 versus 32 percent; all P intervention group had less pronounced, but significant, decline in lumbar spine, total hip, and total body areal bone mineral density (aBMD) as well as changes in body mass index (BMI), lean body mass (LBM), and Trabecular Bone Score (P

"Vitamin D loading and ongoing vitamin D, calcium, and BMI-adjusted protein supplementation in combination with physical exercise decelerates the loss of aBMD and LBM after bariatric surgery," the authors write.

Several authors disclosed financial ties to the pharmaceutical industry.

More information: Abstract
Full Text (subscription or payment may be required)