

OSTEOSCOOP

News on current events in osteoporosis and rheumatology

Increased bone resorption is associated with increased risk of cardiovascular events in men: the MINOS study

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Better assessment of the association between cardiovascular disease and osteoporosis in older men may help identify shared etiologies for bone and heart health in this population. The authors of this study [1] assessed the association of BMD and bone turnover markers (BTMs) with risk of cardiovascular events (myocardial infarction or stroke) in 744 men > 50 yr of age.

During the 7.5-yr prospective follow-up, 43 strokes and 40 myocardial infarctions occurred in 79 men. After adjustment for confounders (age, weight, height, smoking, education, physical activity, self-reported history of diabetes, hypertension, and prevalent ischemic heart disease), men in the lowest quartile of BMD at the spine, whole body, and forearm had a 2-fold increased risk of cardiovascular events. Men in the highest quartile of bone resorption markers (deoxypyridinoline, C-telopeptide of type I collagen) had a 2-fold increased risk of cardiovascular events (e.g., multivariable-adjusted hazard ratio was 2.11, for the highest quartile of free deoxypyridinoline relative to the lowest three quartiles). The results were similar for men without prevalent ischemic heart disease and for myocardial infarction and stroke analyzed separately.

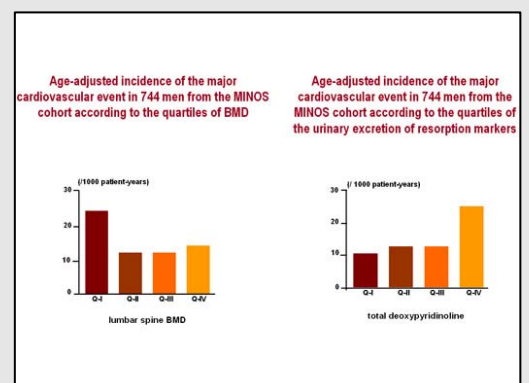
These data suggest that men with low BMD or high bone resorption may be at increased risk of myocardial infarction and stroke in addition to fracture. Thus, men with osteoporosis may benefit from screening for cardiovascular disease. Further study to elucidate the biological mechanism shared by bone and vascular disease may help efforts to identify men at risk or develop treatment.

1. Szulc P et al. *J Bone Miner Res.* 2009;24:2023–2031.

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