

عنوان مقاله:

Metabolic syndrome is negatively associated with trabecular bone score and bone mineral density in normal weight adults with central obesity

محل انتشار:

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خلاصه مقاله:

Introduction: Metabolic syndrome (MetS) is comprised of a clustering of various cardiovascular risk factors that can also affect bone health. We aimed the associations between MetS and bone mineral density (BMD) and trabecular bone score (TBS) in subjects with abdominal adiposity. **Methods:** Individuals with body mass index less than 25 kg/m² were enrolled from the SUVINA study and allocated into two groups according criteria of IDF for metabolic syndrome. TBS T-score and Z/T score of fore skeletal region were measured using dual-energy X-ray absorptiometry (DXA). SPSS software was used for statistical analysis and p value <0.05 was considered significant. **Results:** DXA measurements were made in 201 participants, of whom 75 had MetS and 126 did not. Scores related to the neck of femur and total femur, radius Z-score and TBST-score were lower in subjects with MetS (all P<0.05). Subjects with FBG≥100 had lower TBST-score (p < 0.05). SBP≥130 and DBP≥85 in subjects, led to the lower TBST-score, and lumbar T-score (both P < 0.05). Subjects with (LDL-C≥160 mg/dl) had lower TBST-score, neck of femur Z score, and total femur T/Z scores (all P < 0.05). TBST-score and scores related to neck of femur, and total femur were lower in participants with serum cholesterol≥200 mg/dl (P < 0.05). **Conclusion:** MetS is negatively associated with TBS and BMD scores. Higher levels of LDL-C and cholesterol were the most associated factors related to TBST-score decrease. The neck of femur was the most vulnerable skeletal against the MetS components increment.

کلمات کلیدی:

Trabecular bone score, Bone mineral density, metabolic syndrome, Serum lipids

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