Rosiglitazone Tied to Fracture Risk in Men

BY CAROLINE HELWICK

Rosiglitazone use was associated with an increased prevalence of vertebral fractures among men in a small cross-sectional study.

Most previous studies on the effect of thiazolidinediones on bone have been done in postmenopausal women, who are already at risk for osteoporosis. The present study provides evidence that osteoporotic fractures may be a general complication of this treatment, said Dr. Tatiana Mancini of San Marino (Italy) Hospital, and her associates.

On the basis of their findings, the investigators advocated that health care providers use spine x-ray in combination with dual-energy x-ray absorptiometry (DXA) to assess bone status in diabetic patients treated with these agents (Bone 2009;25:784-8). Of 43 men with type 2 diabetes (mean age 69 years), 22 men used metformin alone and 21 used metformin plus rosiglitazone; 22 nondiabetic men from an outpatient bone clinic served as controls. Bone mineral density (BMD) was assessed by DXA, and quantitative morphometric analysis was used to identify radiological vertebral fractures.

Vertebral fractures were found in 46.5% of the men with diabetes with a significantly higher prevalence in patients treated with rosiglitazone plus metformin (66.7%) versus metformin alone (27.3%) or versus controls (22.7%).

Compared with diabetic men who received only metformin, those who received both drugs were significantly younger and had greater body mass index. Multivariate analysis corrected for these and other factors but still demonstrated a significant 6.5-fold increased risk associated with rosiglitazone. ■