

OSTEOSCOOP

News on current events in osteoporosis and rheumatology

Parkinson's disease: Accelerated bone loss, fractures and mortality in older men

N°94 – August 2009

Data from case-control studies as well as from a cross-sectional study suggest an independent association between Parkinson's disease (PD) and prevalent lower bone mineral density. Among older PD patients in randomized trials, control group participants experienced bone mineral density (BMD) loss exceeding 4% per year, suggesting that PD is associated with rapid incident bone loss. Retrospective and case-control studies have suggested that PD increases risk for fractures. However, prospective data are limited. The objective of this study [1] was to examine the association of PD with bone loss and fractures in older men. This prospective cohort study analyzed data from 5937 community dwelling men aged >65 years at six clinical centers of the Osteoporotic Fractures in Men (MrOS) study. At baseline and visit two (mean interval 4.6 years), community-diagnosed PD was ascertained by self-report and hip BMD was measured using dual energy x-ray absorptiometry (DXA). Incident fractures were self-reported. Fractures and deaths were centrally adjudicated.

At baseline, 46 (0.8%) men had PD. Age-adjusted mean annualized total hip bone loss was greater in men with vs. those without PD (-1.08% vs. -0.36%, $P < 0.001$). 15.2% of men with PD and 7.2% of men without PD experienced an incident non-spine fracture (age-adjusted HR 2.4). 34.8% of men with PD and 9.5% of men without PD died during follow-up (age-adjusted HR 3.5). Associations of PD with bone loss, fractures and mortality were modestly altered by additional individual adjustment for possible confounders.

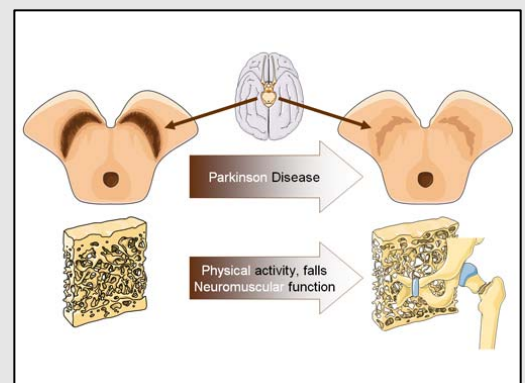
The authors conclude that, in community-dwelling older men, PD was associated with increased bone loss, fractures and mortality. In addition to implementing fall prevention measures, clinicians should consider osteoporosis screening in older men with PD.

1. Fink HA et al. *Osteoporos Int.* 2008;19:1277-1282.

Parkinson's disease: accelerated bone loss, fractures and mortality in older men

Parkinson disease is related to a degenerative loss of dopamine production by the substantia nigra neurons. A recent prospective study of older men evidenced that Parkinson disease is associated with bone loss and fractures, as well as with increased mortality.

Numerous factors including decreased physical activity, falls, and deterioration of neuromuscular function may participate in this bone loss.



PROTELOS®

Treatment of postmenopausal osteoporosis to reduce the risk of hip and vertebral fractures

