What's Hot in Parkinson's Disease?
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Take Care of Your Bones as They Are Affected in Parkinson's Disease (Even in Men)

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Last month, Abou-Raya and colleagues from Alexandria, Egypt offered us a sobering reminder that the bones are often involved and may be "sick" in Parkinson's disease patients. They looked at bone health in 82 patients with Parkinson's disease, and in 68 control patients free of neurological disease. What they discovered was that there were striking differences. The bone mineral densities of all the Parkinson's disease patients when compared to control subjects revealed: vitamin D levels were depressed, there were more falls, there were more fractures, and there was more osteoporosis. A careful look through the published literature on Parkinson's disease shockingly reveals that scientists have been aware of bone problems for many years. DEXA bone scans have been shown to be abnormal in both men and women with Parkinson's disease, and Fink and colleagues have shown that Parkinson's disease patients had lower bone mineral densities at the hip and spine, a greater number of falls, and a greater amount of osteoporosis. Geriatricians may, in some cases, diminish the importance of bone findings in Parkinson's disease by pointing out that a lack of movement should be associated with diminished bone mineral density. However, as the picture begins to come into focus on this critical issue we are learning that the degenerative process in Parkinson's disease involves the hypothalamus and other brain areas that are likely intimately tied to bone health. Thus, an alternative hypothesis would be that although there is a lack of movement in Parkinson's disease patients, the main cause for bone density problems is brain degeneration. More research will be needed to elucidate the factors related to bone density in Parkinson's disease (medication, disease duration, etc.).

If we know that the bones are affected in Parkinson's disease, and that both men and women are affected, why are we not more vigilant in screening for this treatable problem? In our University of Florida clinic one of our students Sara Daniel, who has a scholarship from the Howard Hughes program for medical research, has been screening the Parkinson's disease population. Many patients in her study are now aware of their bone density status—and consequently they seek treatment. It is time for us to get the word out to Parkinson's disease patients that they need regular bone mineral density screenings; furthermore, if abnormal they need to seek treatment. Having strong

bones has a lot of potential benefits, not the least of which is the potential of preventing a post-fall fracture.

Selected References:

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Association between Parkinson's disease and low bone density and falls in older men: the osteoporotic fractures in men study. J Am Geriatr Soc. 2005 Sep;53(9):1559-64.