Orthostatic Hypotension in PD

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It is becoming increasingly recognized that Parkinson disease (PD) involves a variety of non-motor manifestations. These include cognitive dysfunction, anosmia, rapid eye movement behavior disorder, visual hallucinations, depression, apathy, fatigue, constipation, urinary abnormalities, erectile failure in men, cardiac noradrenergic deficiency, baroreflex failure, and orthostatic hypotension (OH). These non-motor aspects can dominate the clinical picture and are major sources of morbidity and decreased survival. Indeed, these aspects are so common and can be so severe that one may question the definition of PD as a movement disorder. The non-motor aspects of PD also tend to cluster together and interact to worsen the status of the patients. For instance, cerebral microbleeds and white matter abnormalities indicating small vessel ischemic changes are associated with OH and co-occurring supine hypertension (SH). Carotid artery stiffness, cerebrocortical atrophy, SH, and OH are related. Cardiac noradrenergic deficiency is associated with REM behavior disorder, anosmia, OH, and baroreflex failure. OH impairs executive functions, worsens the sense of imbalance, and increases the frequency of falls. Importantly, symptomatic OH is treatable by lifestyle modifications, education, and drugs. Elevation of the head of the bed at night, an abdominal binder, taking frequent, small, snack-like meals, drinking 2 glasses of water when the blood pressure is low, showering in the evening rather than morning, avoid immersion in a hot tub, water aerobics, and not driving in a hot car all have their place. Since PD+OH always involves sympathetic noradrenergic deficiency, drug treatment with an alpha-adrenoceptor agonist or norepinephrine precursor is preferred.