Parkinson's disease in the elderly and the comprehensive geriatric assessment

Parkinson's disease (PD) is the second most common neurodegenerative disease after Alzheimer's Disease (AD) and the most frequent subcortical degenerative disease. PD affects as many as 1%–2% of persons aged 60 years and older.[1] In the latest decade, the approach to PD was dramatically changed. In fact, although for many years PD has been considered only "a disease that affects walking," with a key role of the neurotransmitter dopamine, recently the importance of the non-motors symptoms are emphasized and the neurological approach has been substantially modified.[2] Given the complexity of its clinical aspects, such as depression, dementia, delirium, psychotic symptoms, sleep disorder, pneumonia dysfagia-related and malnutrition, a multidisciplinary evaluation and not just a neurological evaluation is needed.[2]

In this Journal of *NMJ*, the study by Ojo *et al*, addresses the important "hot topic" of studying nonmotor symptoms in Parkinson's disease, such as depression and cognitive impairment, which influence quality of life and ultimately dead more than motor symptoms.[3]

Braak *et al*,[4] have elegantly described the course of the pathology in incidental and symptomatic Parkinson cases proposing a staging procedure based upon the readily recognizable topographical extent of the lesions. The pathological process targets specific induction sites, with a caudal–cranial extension: lesions initially occur in the lower brainstem and olfactory bulbs, but also in the autonomic nervous system, including the gastrointestinal tract (Stage 1–2). Thereafter, the disease process involve the brain stem pursues with an ascending course and with little interindividual variation (Stage 3–4). Finally, cortical involvement occurred, beginning with the anteromedial temporal mesocortex (Stage 5–6). From there, the neocortex succumbs, involving with high order sensory association and prefrontal areas. First order sensory association/premotor areas and primary sensory/motor fields then follow suit. This complex modification that involve different cerebral areas that occurs during the progression of the disease, could ultimately explain the jeopardized symptoms found in the PD.

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We suggested a new multidisciplinary approach for this old actor, underlying a subtle link between neurophatological stages of the disease (Braak's classification) and clinical aspects (Braak's stages 1 and 2 associated with premotor phase; Braak's stages 3–4 associated with the motor symptoms and Braak's stages 5–6 associated with cognitive impairment).[5] In addition we emphasized the usefulness of geriatric evaluation for the identification of frail *in situ*, frail, and activities of daily living (ADL)-disability (defined according to Katz's scale) status for improving care and treatment in this multifaceted disease.[6]

Recently, it has been reported the importance of comprehensive geriatric assessment (CGA) as a tool that reduces morbidity for the older frail patients presenting to any acute hospital. This is as the geriatricians "endoscopy" or "angiography" that provides an underlying aetiology of functional ill-health and overall plan of management, especially in these patients.[7]

PD appear a typical neurological disease where the CGA could be applied for targeting approach with advantages not only for improving walking ability and mobility limitation, but also for reducing complications such as pneumonia dysphagia-related, deep vein thromboembolism and delirium.[8]

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