



Preface

The idiopathic Parkinson's syndrome is still mostly considered as a movement disorder due to its key features of bradykinesia, rigidity, tremor and postural instability. On the other hand, evaluations of the quality of life of Parkinson's disease (PD) patients demonstrate that they frequently feel even more threatened by depression and imminent cognitive dysfunction. Many patients will tolerate a slight tremor much better than e.g. urinary incontinence. These observations and many new areas of research have led to a series of international meetings on mental dysfunction and other non-motor disturbances in PD and other movement disorders. The exciting results of the most recent congress which took place, on December 9–12, 2010 in Barcelona, Spain, are summarized in this special issue of the Journal of Neurological Sciences.

There were several articles on basic questions such as the sequence and distribution of α -synuclein in the brain and other organs of PD patients and in animal models. A case is made that typical abnormalities such as Lewy bodies and Lewy neurites spread according to the Braak hypothesis along the enteric nervous system of the gut and via the vagal nerves all the way up to the brain. This was supported by a new animal model using rotenone administration via a tubing system into the gut of mice. New findings are α -synuclein deposits in the submandibular glands of PD patients which in combination with the known abnormalities in the olfactory bulb may suggest that a toxin, bacterium or virus may be swallowed and reach the gut indicating that non-genetic PD may be a prion-like disorder coming from the environment.

Many reports deal with the question of early non-motor features such as hyposmia, REM sleep behaviour disorder, depression and constipation. These features precede motor symptoms and may help in the future for early detection. Besides hyposmia, visual disturbances show impairment of another sensory system in PD patients.

There are also several articles which deal with depression and cognitive impairment and discuss whether there are any specific features in PD which may discriminate them from "regular" depression or dementia.

More recently, it became more obvious that dopamine replacement therapy may result in impulse control disorders and addiction. There are several papers on this issue which imply that up to 8% of all PD patients may suffer from sexual abnormalities, gambling, binge eating or excessive shopping. Another therapeutic procedure which may result in abnormalities is deep brain stimulation which may positively influence not only motor fluctuations, but also pre-existing pain and may also lead to body weight gain and euphoria or depression.

A series of articles discusses abnormalities of the autonomic nervous system, including the gastrointestinal tract, sexual malfunction, profuse sweating, orthostatic hypotension, urinary incontinence and others. There are several therapeutic suggestions presented on how to deal with these disturbances.

In conclusion, we trust that this issue of the Journal of Neurological Sciences will provide readers the most valuable approach to non-motor functions in PD.

We also look forward to welcome you at the Seventh Congress of Mental and other Non-motor Dysfunctions in PD (and other movement disorders) which will take place in Berlin in 03–06.05.2012.

Amos D. Korczyn*
Heinz Reichmann
Eduardo Tolosa

*Corresponding author at: Department of Neurology,
Tel-Aviv University Medical School, Ramat Aviv 69978, Israel.
Tel.: +972 3 6974229; fax: +972 3 6409113.

E-mail addresses: amoskor@post.tau.ac.il (A.D. Korczyn), Heinz.Reichmann@uniklinikum-dresden.de (H. Reichmann),
etolosa@clinic.ub.es (E. Tolosa).