Fifth Meeting of the UK PD Non Motor Group: Non Motor Symptoms of PD: Treatment & Quality of Life


The fifth meeting of the Parkinson disease Non-Motor Group (PDNMG) was held at the Royal Society of Medicine, London. This year the international faculty sought to look deeper into issues surrounding treatment and quality of life in Parkinson’s disease (PD).

Professor K Ray Chaudhuri (UK), the PDNMG chairman and meeting organiser, welcomed the delegates by presenting an overview regarding the recognition and prevalence of non motor symptoms (NMS) of PD. Professor AHV Schapira (UK), formally began the meeting by shedding light on neuroprotection approaches for PD. He discussed recent evidence which encourages early initiation of treatment, highlighting the results from ADA-GOTOP and DATATOP trials which suggest that PD patients who started on early treatment had better outcomes with more symptomatic relief. He postulated that drugs such as selegiline, rasagiline and levodopa are able to promote brain plasticity and compensation. Prof Schapira emphasised preclinical non-motor markers of PD including olfaction and constipation. He concluded that the decision of starting treatment should be based upon weighing treatment side effects and effects on quality of life with symptom control and disease progression. However, with questions surrounding the conclusiveness of the data and the power of the studies, further robust trials are required to further understand the possible disease-modifying properties of PD drugs.

Next, Prof DJ Brooks (UK) discussed the role of neuroinflammation in PD. He explored the evidence suggesting a pathogenic role of microglia in PD. Microglia are most highly concentrated in the substantia nigra, and most highly active and clustered around dystrophic dopaminergic neurones. Cytokine release leads to microglial and macrophage activation and subsequent dopaminergic and cholinergic cell death and brain remodelling. Prof Brooks outlined the uses of FDG-PET, FP-SPECT, F-Dopa PET, acetylcholinesterase imaging and PET amyloid plaque imaging in PD. These neuroimaging strategies provide biomarkers of the ongoing disease activity. Finally, he examined the correlation between Braak staging of PD with clinical manifestations, imaging the substantia nigra and the non motor symptoms including olfactory disturbances, autonomic symptoms and disorders in the cognitive domain.

Prof Chaudhuri provided a succinct review of pain in PD. As well as outlining a classification of pain in PD (symptomatically grouped into musculoskeletal, radicular/neuropathic, dystonic, central or primary pain, and akathisia) he highlighted that depression may contribute to the intractability of a chronic pain syndrome. Orofacial pain is a poorly understood NMS but highly detrimental to quality of life. It encompasses headaches, burning mouth syndrome, temporomandibular joint pain and compromised trigeminal reflexes. He emphasised that most painful symptoms could occur during ‘off periods’, particularly early in the morning. Prof Chaudhuri discussed the generic pain evaluation tool - McGill Pain Questionnaire (MPQ). The MPQ, used judiciously, is useful for defining the prevalence and characteristics of pain according to its location, intensity and temporal pattern, thus enabling a pain specialist to tailor management plans and monitor treatment response.

Professors P Martinez-Martin (Spain) and P Odin (Germany) discussed the impact of NMS on quality of life, and non-declaration of NMS in PD, respectively. Particular NMS including depression and autonomic, sexual and gastrointestinal dysfunction are underreported by patients and as a result undertreated by health care professionals. This could be attributed to patients’ lack of awareness between their NMS and PD or perhaps a reluctance to reveal embarrassing problems to a stranger. The recently published study recommends the use of the patient-completed ‘Non-Motor Symptom Questionnaire’ (NMSQuest) to provide an early screen of NMS.

Professor A Antonini (Italy) offered an appraisal of drug therapy for motor and non-motor symptoms. He began with reviewing results from the recent PRIAMO study – a large Italian cross-sectional observational study which described epidemiology and evolution of NMS. NMS in the psychiatric domain were most frequent, with apathy being most associated with reduced quality of life scores. NMS are closely associated with cognitive impairment, with the number of NMS per patient increasing with age and disease severity. Finally, the PRIAMO study highlighted the high prevalence of NMS in the PD population (38.6%). For the treatment of NMS, Prof Antonini went on to discuss pramipexole, which has negative effects on daytime sleepiness but may significantly alleviate depression. The clinical benefit of DBS in NMS is relatively much higher than that of apomorphine. However while DBS may improve dyskinesias in late PD, it does not seem to have any effects on sexual aspects of NMS in PD. Lastly, intrajejunal infusion of levodopa is a more invasive treatment than apomorphine. Levodopa infusion not only replaces oral medication but also helps in avoiding swallowing problems that may be commonly experienced in PD.

In recent years, dementia has been recognized as a common albeit highly variable feature of PD. Professor D Aarsland (Norway) outlined the clinical and neuropathological differences between PD dementia (PDD) and Alzheimer’s disease (AD) pathology with or
without dementia. Old age, visual hallucinations, and more marked motor symptoms are established risk factors for PDD with at least 75% of PD patients developing dementia within 10 years. Differentiating PDD with Alzheimer’s disease (AD) pathology remains difficult, since half of dementia patients have enough pathology to be diagnosed with AD while PDD can develop without any AD pathology at all. However, a shorter duration of PDD symptoms before onset of dementia in an older patient may suggest PDD+AD pathology. Sufferers are prone to experience cognitive impairment, psychiatric fluctuations and sleep disturbances. There are a wide range of treatment approaches for dementia in PD. Parkinson’s Disease and related disorders (PD) have become an area of growing research interest in recent years. Reviews by Michael P Barnes. Michael P Barnes, then introduced the first Michael P Barnes Lecturer in Neurorehabilitation, given by the eminent Alberto Juan Aguayo. This Lecture will now be the highlight of each WFNR World Congress, in recognition of the visionary leadership of the WFNR’s founder, Michael P Barnes. Alberto Aguayo gave an historical overview of axon regeneration in the central nervous sys-

### Conference Reports

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