

## MANAGEMENT OF NON-MOTOR (MAINLY PAINFUL) SYMPTOMS IN PATIENTS WITH EXTRAPIRAMIDAL DISORDERS

Vladimira Vuletić, MD, PhD

Head of the Department of the Cerebrovascular disease with ICU and Movement Disorders' Unit at University Hospital "Dubrava", Zagreb

Although we usually think on motor symptoms when treat movement disorders, the non-motor symptoms may precede the appearance of motor symptoms by several years. There are often neglected and under-recognized. Non-motor symptoms, especially in Parkinson disease, but also, in other movement disorders, include: mood and affect disorders, cognitive dysfunction and dementia, psychosis, autonomic dysfunction, sleep disorders and pain. They could significantly affect quality of life and disability. The pain could be classified in different subtypes: musculoskeletal, dystonic, radicular, neuropathic and central pain. The prevalence of pain in Parkinson's disease ranges from 40-85% and in dystonia from 67-75%. It is thought that pain is a heterogeneous condition in extrapyramidal disorders but exact mechanism of pain processing is still unclear.

We conducted investigation with NM self-completed questionnaires, Visual Analogue Scale and McGill questionnaire in our out-patients clinic and anamnesis' data.

The study involved 50 patients with Parkinson's disease. The pain prevalence was 68%. Depression was present in 45%

of patients and constipation in 40% of patients, sleep disturbances in 30% and cognitive disturbances in 20% of patients.

The pharmacological management of pain in PD patients relies on antiparkinson, antinociceptive and anti neuropathic medications. Deep brain stimulation helps and relieves different type of pain such as musculoskeletal, dystonic and central pain. Botulinum toxin injections can be effective in focal dystonia. Exercise and physical therapy could also help. Due to different mechanisms involved in arising of pain, there have to be different management approaches in treatment of pain. There are almost 50% of patients with extrapyramidal disorders that don't get any treatment for pain.

The further studies are needed for providing further insights into the cause of pain and basal ganglia networks and improving management and treatment of pain in patients with extrapyramidal disorders and their quality of life. The non-motor symptoms (especially the pain) have to be assessed regularly in our clinical practice.