Wearing off: a symptom broad and complex, often poorly recognized.
A study with the WOQ-19 Questionnaire

Michele Pistacchi1, Manuela Gioulis2, Sanson Flavio1, Sandro Zambito Marsala2
1) Neurology Deptment, ULSS 4, High Vicentino, Santorso (VI), Italy 2) Neurology Department, San Martino Hospital, Belluno, Italy

Background
Wearing off represents a phenomenology of movement disorders early and much more common than believed. It may be inherent in either motor and non-motor symptoms.

Objective
To investigate the utility of wearing-off questionnaire (WOQ-19 Italian version) in outpatient clinical practice: understanding which symptoms are difficult to emphasize from routine clinical examination, to assess the more suitable treatment, in various stages of Parkinson’s disease (PD).

Materials and Methods
A total of consecutive 73 PD patients (58% male and 42% female) were recruited in the Santorso and San Martino Hospital from September 2012 to March 2014. Patients were asked to indicate whether they experienced any of the 19 symptoms during the day and indicated if one or more referred symptoms of PD listed in the questionnaire improved after taking a new dose of levodopa and if these variations were present routinely. Furthermore we also evaluated the possible correlation between the presence of motor and non motor symptoms resulted from WOQ 19, and motor impairment estimated with Hoehn & Yahr stage (HY) and Unified Parkinson’s Disease Rating Scale (UPDRS) part III motor section, in the whole sample and in the different subgroups of therapy.

Results
Of all patients 22% were receiving levodopa (daily dose 300±121.3 mg), 38.3% levodopa and dopamine agonists, 12.3% levodopa/rasagline, 8.2% levodopa/selegiline and 19.2% mix with levodopa/dopamine agonists/MAO inhibitors. The most prevalent symptoms were: slowness of movement, reduced dexterity, tremor, sweating, anxiety, abnormal sensation of hot and cold, abdominal discomfort, pain and aching. Estimating the correlation between the UPDRS motor section and HY score, we found a significant correlation with different motor and non motor items. The therapy benefit was proved especially on motor symptoms.

Conclusion
Patients experienced wearing-off were younger with longer disease duration compared to patients without wearing-off symptoms. Non motor symptoms were more frequent than motor ones, as anxiety, weakness, pain, aching and abdominal discomfort. The presence of a wide variety of non-motor symptoms in patients with mild score at HY and UPDRS motor section, makes reason of the systemic involvement of PD. The little antiparkinsonian response of non-motor disturbances, represents the further evidence, that such symptoms are poor sensitive to dopaminergic drugs. This simple and easily administered questionnaire may be useful in the early detection of fluctuations in clinical practice to improve the quality global care of parkinsonian patients at different stages of disease.

References