Depression in Parkinson's Disease: overlap of features

Janneke Koerts, Nico Leenders, Marthe Koning, Anke Bouma, Axel Portman, Marije van Beilen Dept. Neurology, Universitair Medisch Centrum Groningen

Motor symptoms form the hallmark of Parkinson's Disease (PD), however features like epression are often present. Depression rating scales used in PD measure affective and somatic symptoms. This could mean that symptoms of depression and PD overlap. At a neurochemical level, dopaminergic dysfunction is found in both depression and PD. This study investigates to what extent symptoms of depression and PD overlap and if these disorders share a common striatal dopaminergic dysfunction. Depression was assessed in 46 PD patients, who had a MADRS score < 18, and in 18 age-matched healthy controls. Motor severity of all PD patients was rated and 24 PD patients were studied with FDOPA-PET. PD patients had higher depression scores than healthy controls, particularly on somatic items. Physical disability was related to depression, particularly to insomnia and fatigue. Striatal dopaminergic functioning was also associated with depression, specifically with concentration. In conclusion, PD patients scored higher on somatic items of the depression scale than healthy controls. These somatic symptoms of depression can also be symptoms of PD. This overlap may be a reflection of a common striatal dopaminergic dysfunction shared by depression and PD. Thus, when assessing depression in PD one should be aware of confounding factors and focus on affective symptoms.