Depression occurs in approximately 45% of patients with Parkinson's disease (PD) and is a major contributor to poor quality of life and disability. The difficulty in characterizing depression in PD patients has resulted in reports of prevalence rates that vary from 7% to 76% depending on study population and diagnostic criteria used. Since there are no specific diagnostic criteria of depression in PD, the approach of the Diagnostic and Statistical Manual for Mental Disorders (DSM) may influence both diagnosis and treatment of PD patients by using either an “inclusive” or an “etiological” approach to consider specific symptoms as features of PD or as features of a depressive disorder. Thus, the presence of specific motor and non-motor symptoms related to the underlying pathogenesis of PD may lead to a diagnosis of depression in the absence of a true depressive syndrome.

Depression in PD may be different from that of the general population. The first multicenter observational study aimed at exploring the Profile of Depressive Symptoms in Parkinson's Disease (PRODEST-PD) evaluated non-cognitively impaired patients (n=1023) with PD using a variety of standard rating instruments. A medical history of depression was reported by 27.8% of patients, and although 9.2% had major depressive disorder according to DSM-IV criteria, substantially higher proportions of patients reported depression or clinically relevant depressive symptoms based on other criteria. While 66% of patients with depression defined by medical history were receiving antidepressant therapy, 54% still reported depressive symptoms, suggesting that patients with PD-related depression are potentially not receiving appropriate treatment.

There are few randomized, controlled, double-blind studies on antidepressant treatment in PD. Tricyclic antidepressants (TCAs) are effective in treating depression in PD and may even reduce motor symptoms; however, their use is limited by adverse effects. Selective serotonin reuptake inhibitors (SSRIs) appear to have similar efficacy compared to TCAs, but can worsen motor symptoms.

Antidepressant effects of dopamine agonists have been explored in PD, although no placebo-controlled study is currently available. A prospective randomized study demonstrated the antidepressant effect of pramipexole as shown by a significant decrease in the average value of the Montgomery and Asberg Depression Rating Scale score. Similarly, in a prospective observational study, pramipexole significantly reduced anhedonia in PD patients who had associated depression. A 14-week randomized trial showed the specific effect of pramipexole on depression in PD patients without motor complications compared with sertraline.

The amelioration of depression in PD with slight differences in efficacy in favor of pramipexole suggests that dopamine agonists might represent an alternative to antidepressant drugs to treat depressive symptoms in PD without adding the risk of antidepressant medication side effects.

References