Parkinson's disease is a neurodegenerative disease of the basal ganglia. Its main symptoms are rigidity, tremor, bradykinesia, hypokinesia and postural instability. One possible way how to infuence diseases is neurosurgical treatment - deep brain stimulation. The principle is the implantation of electrodes in the basal ganglia and modulation of activity of the basal ganglia circuits due to electrical stimulation. Stimulation affects the motor symptoms of Parkinson's disease. This thesis deals with the influence of deep brain stimulation on postural stability in patients with Parkinson's disease.