

Abstract

Parkinson's disease is the second most common neurodegenerative disorder affecting more and more people. It manifests itself not only by cognitive problems but primarily by motor symptoms which influence the patient's quality of life. There are many causes of this disease. Current treatment is only symptomatic and is influenced by side effects. One of the modern approaches of therapy is stem cell transplantation in order to replace the affected neurons or at least slow down their dying. This bachelor's thesis describes different possibilities of stem cell use for therapy, the used sources of these cells and their possible modifications in model and clinical studies.