ABOUT PARKINSON’S DISEASE

• PD causes a variety of “motor” symptoms (symptoms related to movement of the muscles), including rigidity, delayed movement, poor balance, and tremors. Non-motor symptoms of PD include sleep disturbances, urinary dysfunction, constipation, swallowing problems, mood disorders, and cognitive deficits.

• The exact cause of PD is unknown. Most researchers agree that the disease is caused by both genetic and environmental factors, and by interactions among these factors.

• NIH estimates that the disease affects at least 500,000 Americans, mostly people over age 50. The average age of onset is about 60. There is no cure for PD; however, many effective medications and treatment options are available.

• In 2010, VA recognized PD as associated with exposure to Agent Orange or other herbicides during military service. Veterans with PD who were exposed to herbicides during their service may be eligible for disability compensation and health care.

VA RESEARCH ON PARKINSON’S DISEASE: OVERVIEW

• In 2001, VA created six specialized centers to provide Veterans with PD with state-of-the-art clinical care, education, research, and national outreach and advocacy. Known as the Parkinson’s Disease Research, Education, and Clinical Centers (PADRECCs), they are located in Philadelphia; Richmond, Va.; Houston; Los Angeles; San Francisco; and the Seattle/Portland area.

• The centers also provide comprehensive diagnosis and treatment services for other movement disorders, including essential tremor, restless leg syndrome, dystonia, Lewy body disease, progressive supranuclear palsy, multiple system atrophy and corticobasal degeneration.

• Researchers at these sites are studying the biochemical pathways involving dopamine, and testing a variety of treatment approaches, including medication, surgery and electrical stimulation. Biomedical and clinical studies on PD are ongoing at many other VA sites as well.

SELECTED MILESTONES AND MAJOR EVENTS

2001 – Created Parkinson’s Disease Research, Education, and Clinical Centers (PADRECCs), at six sites throughout the nation

2003 – Initiated a landmark clinical trial to assess the effectiveness of deep brain stimulators (DBS) for PD

2009 – Determined that DBS may hold significant benefits for those with PD who no longer respond well to medication alone

2014 – Found that walking is a safe and easily accessible way to improve PD symptoms

2015 – Developed a procedure to convert skin cells into dopamine neurons

RECENT STUDIES: SELECTED HIGHLIGHTS

• Deep brain stimulation (DBS) is a surgical procedure used to treat a variety of disabling neurological symptoms, especially those related to PD. Researchers from two VA Chicago-area hospitals and three schools of medicine in the area found that 6 to 12 months after DBS surgery, patients whose neurostimulator (a surgically implanted, battery operated device that delivers electrical stimulation to targeted areas in the brain that control movement) was implanted in their brains’ subthalamic nucleus had a significantly greater increase in their use of medication for mental health issues than those whose neurostimulator was implanted in their brains’ globus pallidus internus. The study found no significant differences in the two groups’ use of outpatient or inpatient health care. (Journal of Parkinson’s Disease, 2015)
Most researchers agree that Parkinson’s disease is caused by a combination of genetic and environmental factors.