



Muhammad Ali Parkinson Center Movement Disorders Clinic

at Barrow Neurological Institute®
A National Parkinson Foundation Center of Excellence

Background Information

Basics of Parkinson's Disease

History

Dr. James Parkinson, a London physician, is credited with the first complete description of the symptoms and progression of the disease that later was named for him. In his 1817 "Essay on the Shaking Palsy," he described six patients who had what appeared to be one condition characterized by symptoms such as rigidity, tremor (primarily at rest), an accelerated gait, and stooped posture.

What is Parkinson's disease?

Parkinson's disease is a brain disorder. It occurs when certain nerve cells (neurons) in a part of the brain called the substantia nigra die or become impaired. Normally, these cells produce a vital chemical known as dopamine. Dopamine allows smooth, coordinated function of the body's muscles and movement. When about 80 percent of the dopamine-producing cells are damaged, symptoms of Parkinson's disease appear.

What are the signs and symptoms of Parkinson's disease?

The loss of dopamine production in the brain causes the primary symptoms of Parkinson's disease. The key signs of Parkinson's disease are: Tremor (shaking), slowness of movement, rigidity (stiffness), difficulty with balance.

Who gets Parkinson's disease?

Parkinson's disease affects both men and women in almost equal numbers. It shows no social, ethnic, economic or geographic boundaries. In the United States, it is estimated that **60,000 new cases are diagnosed each year, joining the 1 million Americans** who currently have Parkinson's disease. While the condition usually develops after the age of 65, 15 percent of those diagnosed are under 50.

How is Parkinson's disease diagnosed?

The process of making a Parkinson's disease diagnosis can be difficult. There is no X-ray or blood test that can confirm Parkinson's disease. A physician arrives at the diagnosis only after a thorough examination.

What is the treatment for Parkinson's disease?

There are a number of effective medicines that help to ease the symptoms. Most symptoms are caused by lack of dopamine. The medicines most commonly used will attempt to either replace or mimic dopamine, which improves the tremor, rigidity and slowness associated with Parkinson's disease. Surgery can ease the symptoms of Parkinson's disease, but it is not a cure. Because of the risks associated with brain surgery, it is usually not considered unless all appropriate medications have been tried unsuccessfully.