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| **Skin Cancer** |

**What is Parkinson’s Disease?**

Parkinson’s Disease is a chronic and progressive brain disorder. The disease gets its name from an English apothecary named James Parkinson who described the disease in his essay “An Essay on the Shaking Palsy” which was written in 1817. It belongs to a group of conditions known as motor systems disorders, which are the result of the loss of dopamine producing cells in the brain. The chemical dopamine allows for smooth, coordinated function of the body’s muscles and movement. When 80 percent of the dopamine producing cells are damaged, the symptoms of Parkinson’s begin to appear.

Parkinson’s is a very common neurodegenerative disorder that affects more than 2 percent of the population older than 65 years of age with an average onset age between 50 and 60. Men and women are generally affected equally and there are no significant differences in occurrence between social, economic, ethnic, or geographical boundaries. It is estimated that about 60,000 new cases of Parkinson’s are diagnosed in the United States each year adding to the approximately 1 million Americans living with the disease.

**Symptoms of Parkinson’s Disease**

There are four primary symptoms associated with Parkinson’s Disease:

**Parkinson’s Disease**

* Tremor – occurring at the hands, arms, legs, jaw, and face.
* Rigidity – stiffness of the limbs and/or trunk.
* Bradykinesia – slowness of movement.
* Postural instability – impaired balance.

The combination of these four primary symptoms is known as parkinsonism.

Since Parkinson’s is progressive in nature, symptoms will be subtle at first and become more pronounced as time goes on . The symptoms will eventually begin to affect the individuals daily activities. Individuals with pronounced symptoms may experience:

* Depression
* Emotional changes
* Difficulty swallowing
* Difficulty chewing
* Difficulty speaking
* Urinary problems
* Constipation
* Sleep disruption
* Shuffled walking

**How is Parkinson’s Diagnosed?**

The process of making a Parkinson's disease diagnosis can be difficult. There is no definitive test that can confirm Parkinson’s disease. Parkinsonism can also arise from problems other than the disease itself. These problems include :

* Drugs
* Toxins
* Head trauma

A physician arrives at the diagnosis only after a thorough examination.  Blood tests and brain scans known as magnetic resonance imaging (MRI) may be performed to rule out other conditions that have similar symptoms. A diagnosis of Parkinson’s will most likely be made if the individual demonstrates:

* At least two or three of the primary symptoms associated with Parkinson’s
* Onset of symptoms on only one side of the body
* A tremor that is more pronounced while at rest
* A strong response to the Parkinson’s drugs Levodopa.

People suspected of having Parkinson's disease should consider seeking the care of a neurologist who specializes in Parkinson's disease.

**Treatment Options**

To date, there is not cure for Parkinson’s Disease but there are a variety of options that have been proven to be effective in managing the symptoms associated with the disease.

Medications of the most common form of treatment used for individuals who have been diagnosed with Parkinson’s and some of the most used medications are listed below:

* Levodopa – This is the most effective of the drugs. The drug passes into the brain and is converted into dopamine. The drug may lose effectiveness as the disease progresses and some side effects include confusion, delusions, hallucinations, and involuntary movements.
* Dopamine agonists – These drugs mimic the effect of dopamine in the brain causing neurons to react as if dopamine was present. These drugs are not very effective in treating the disease and have many of the same side effects as Levodopa.
* MAO B inhibitors – These drugs prevent the breakdown of both naturally occurring and Levodopa produced dopamine in the brain. Side effects are rare.
* COMT inhibitors – These drugs prolong the effects of Levodopa therapy by blocking the enzyme that breaks it down.
* Anticholinergics – These drugs are used to control the tremors associated with Parkinson’s.

Physical therapy is often recommended to help individuals improve their strength, mobility, range of motion, gait, and balance. Speech therapy may also be recommended to help improve speech and swallowing.

Surgery is also a treatment option . Deep brain stimulation is the most common surgery used for individuals with Parkinson’s. The surgery involves placing an electrode in the part of the brain that controls movement. The electrode is controlled by a pacemaker that is placed under the skin. This treatment option is often recommended for people who have varying medication responses. This particular treatment option is very effective in treating tremors associated with Parkinson’s.

**What is the Prognosis?**

Parkinson’s disease is not considered a fatal disease and the effects of the disease vary between individuals. It is often the complications associated with the disease , such as choking, pneumonia, and falls that lead to death. Some people may become severely disabled as time passes while others may only experience minor symptoms.

**Living with Parkinson’s**

Living with a chronic disease can be difficult and often requires a great deal of adaptation to physical changes as the disease progresses. Some simple changes in the way an individual performs everyday activities can greatly improve their safety.

As the disease progresses, walking maybe become more difficult due to impaired balance. Some tips to help make walking easier include:

* Avoid moving too quickly
* Try to ensure that the heel of your foot is the first thing to strike the floor
* If you notice yourself shuffling your feet, stop, readjust your posture, and try to begin walking as normal as possible.

Difficulty walking leads to an increased risk of falls. To help avoid falls:

* Do not pivot turn, turn your body as a whole
* Keep your center of gravity over your feet. Do not reach or lean for objects
* Don’t carry objects while walking
* Do not walk backwards

The loss of fine motor skills in individuals with Parkinson’s makes completing everyday activities very difficult. Dressing themselves is a major problem experienced by individuals with Parkinson’s. To make dressing easier:

* Allow plenty of time
* Have clothes close at hand
* Choose clothes that are easy to put on
* Avoid clothes with buttons.

Since there is no cure for Parkinson’s, living with the disease can become increasingly difficult. Individuals diagnosed with the disease require support both physically and emotionally. It is important for those people around the individual to help maintain their quality of life for as long as possible. It is also important to do this in order to try and avoid depression which commonly runs hand in hand with chronic diseases.

Sources for this article include:

1. [www.parkinsons.org](http://www.parkinsons.org)
2. [www.ninds.nih.gov/disorders/parkinsons\_disease](http://www.ninds.nih.gov/disorders/parkinsons_disease)
3. [www.mayoclinic.com](http://www.mayoclinic.com)
4. [www.pdf,org](http://www.pdf,org)

**Other News:**

* February 5th – Wear RED Day for Women’s Heart Disease Awareness

\*\*If you have any suggestions for newsletter topics, please contact Dean Susan Hanrahan at [hanrahan@astate.edu](mailto:hanrahan@astate.edu).

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