Parkinson's Disease:

More Than Just the Shakes

by **Kay Ledbette**

arkinson's disease affects nerve cells in the part of the brain controlling muscle movement. While that is the most visible sign of the disease, it is not the only one, a Texas AgriLife Extension Service specialist says.

"The earliest symptom of Parkinson's disease may be an arm that does not swing when you walk; a mild tremor in the fingers of one hand; soft, mumbling speech; and/or difficulty swallowing," says Andrew Crocker, AgriLife Extension gerontology health specialist.

"You may lack energy, feel depressed, have trouble sleeping, [have] slowed motion, rigid muscles, loss of automatic movements and/or dementia," he says.

As many as half of people with Parkinson's develop depression, sometimes occurring months or even years before the disease is diagnosed, Crocker says. While physical limitations resulting from the disease can be frustrating and stressful, depression is not usually a reaction to physical disability, but more likely a result of underlying brain changes.

Parkinson's disease is progressive, meaning the signs and symptoms become worse over time; however, the disease often progresses gradually, and most people have many years of productive living after a diagnosis, Crocker says.

Parkinson's disease occurs when certain nerve cells in a particular area of the brain are damaged or destroyed, he says. Normally, these nerve cells release dopamine, which causes the muscles to make smooth, controlled movements. Everyone loses some dopamine-producing nerve cells as they grow older; but people with Parkinson's disease may lose half or more of these cells.

Risk factors

Age is one of the main risk factors for Parkinson's, Crocker says. In fact, signs and symptoms of Parkinson's disease may be dismissed as the effects of aging.

Other risk factors may include heredity, gender, exposure to pesticides and herbicides, and/or reduced estrogen levels, among others, he says.

"See your health provider if you have any of the symptoms associated with Parkinson's disease, not only to diagnose the illness but also to rule out other causes for your problem," Crocker says.

A diagnosis of Parkinson's disease is based on medical history, observations and a neurological examination, he says. The health

provider will want to know about any medications being taken and any family history of Parkinson's.

The initial response to Parkinson's treatment can be dramatic for some, but over time the benefits of drugs diminish or become less consistent, Crocker says, although symptoms can usually still be fairly well-controlled.

Living with Parkinson's

Physical therapy may be helpful in improving mobility, range of motion and muscle tone, he says. Although specific exercises cannot stop the progress of the disease, strengthening muscles may improve confidence and capability.

"When lifestyle changes are no longer enough, your health provider may recommend certain medications," Crocker says. "Medications can help manage problems with walking, movement and tremor by increasing the brain's supply of dopamine."

With the advent of drug therapies, surgical approaches have been re-evaluated, he says. A brain implant device is now widely used

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to help control many of the symptoms of Parkinson's disease. The deep brain stimulator consists of a pacemaker-like unit implanted in the chest wall that transmits electric impulses through a wire to tiny electrodes inserted deep within the brain.

"If you have received a diagnosis of Parkinson's disease, you will need to work closely with your health provider to find a

treatment plan right for you," Crocker says. "Certain lifestyle changes also may help make living with Parkinson's disease easier, such as eating a healthy diet and getting exercise."

More information can be found on the National Institute of Neurological Disorders and Stroke web site at *www.ninds.nih.gov.*

Editor's Note: Kay Ledbetter is a communications specialist for Texas A&M Agricultural Communications, which supplied this article.

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