Section Editors

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Do neurologists make a difference in Parkinson disease care?

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HOW WAS THE STUDY PERFORMED? Willis et al.¹ reviewed Medicare data to explore 2 questions. First, what characteristics determine whether a patient with Parkinson disease (PD) sees a neurologist? Second, are patients who see a neurologist likely to live longer than patients who do not see a neurologist? The Medicare data for this study data came from insurance claims. When a doctor sees a patient, he or she provides some basic information on forms sent to Medicare as reasons for payment, such as the diagnosis being treated. This type of data is powerful due to the large number of patients with these data. However, insurance claim-based data sources lack detailed information, so reaching definite conclusions is difficult. For example, an insurance claim just records that a patient has a diagnosis of PD, but does not record symptoms, how long he or she has had the disease, or how severe the symptoms are.

WHAT DID THE STUDY FIND? Almost one-third of patients with PD in the study never visited a neurologist. The authors found that certain groups of patients were less likely to see a neurologist. For example, African Americans and women were less likely to see a neurologist than white men. This effect could not be explained by differences in other factors such as income or education. This difference might be important because the authors also found that

patients who saw a neurologist lived longer. Patients who saw a neurologist were also less likely to end up in a nursing home than those who did not.

WHAT DO THE STUDY FINDINGS MEAN FOR PATIENTS WITH PD? These findings suggest the importance of neurologist care for patients with PD. However, it is too early to make decisions on the impact of neurologist care on PD outcomes from this study alone. Observational studies based on insurance claims have drawbacks and conclusions should be made with care. Many factors that the authors were not able to measure could explain the relationship between neurologist care and apparently better outcomes in PD. The authors, for example, were unable to measure the severity of PD in this population. If patients seen by neurologists had less severe PD than patients not seen by neurologists, the apparently better outcomes in neurologist-treated patients could be a reflection of disease severity instead of better care.

While these findings are new and point to new ways to improve the care of patients with PD, further research to confirm and explain these findings is needed.

REFERENCE

1. Willis AW, Schootman M, Evanoff BA, Perlmutter JS, Racette BA. Neurologist care in Parkinson disease: a utilization, outcomes, and survival study. *Neurology* 2011;77: 851–857.

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About Parkinson disease

WHAT IS PARKINSON DISEASE? Parkinson disease (PD) is a common disease in older adults. In PD, specific brain cells slowly die. Brain cells that communicate with each other using a specific chemical, dopamine, are particularly susceptible to death in patients with PD. Loss of these brain cells leads to the most common symptoms of PD, including slowness of movements and tremor. Most treatments available for PD increase levels of brain dopamine to help dopamine-containing cells communicate better.

HOW IS PD TREATED? Several medications are available to increase dopamine-based brain cell communication in PD. The oldest and best studied of the medications, L-dopa or levodopa, is a chemical that is changed into dopamine in the brain. Newer medications help dopamine-containing cells communicate better either by directly activating them (for example, ropinirole and pramipexole) or by reducing the breakdown of dopamine (selegiline, rasagiline, entacapone). Medications are effective at reducing the symptoms of

PD, but do not slow down the process of brain cell death.

Most patients with PD are treated by primary care physicians or neurologists. Primary care physicians are broadly trained to diagnose and treat a wide variety of diseases. Neurologists are more specifically trained in the diagnosis and treatment of diseases of the nervous system, such as PD. Neurologists typically receive more training in managing PD, including in the use of PD medications, than primary care physicians. There is little prior evidence, however, that seeing a specific type of doctor affects patients' outcomes in PD.

FOR MORE INFORMATION

AAN Patients and Caregivers site: American Academy of Neurology

<http://patients.aan.com>

American Parkinson Disease Association

<http://www.apdaparkinson.org>

National Parkinson Foundation

<http://www.parkinson.org>

WE MOVE (Worldwide Education & Awareness for Movement Disorders)

<http://www.wemove.org>

Neurology Now – Another AAN Resource for Patients and Caregivers

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Neurology 2011;77:e52-e523

DOI 10.1212/WNL.0b013e31822f48fb

This information is current as of August 29, 2011

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