Information for patients from JNNP

Walking, posture and balance may signal Parkinson's progression

A new study sheds light on how Parkinson's disease progresses, showing that problems with walking, posture and balance worsen most quickly and provide the best indicators that the disease has advanced.

What do we know already?

Parkinson's disease affects how you move. An early sign for many people is trembling in one hand. Over time, you start doing things more and more slowly as your muscles become stiff. You may take shuffling steps. Or you may freeze in mid-stride (doctors call this gait freezing). You may also lean forwards or backwards and fall over easily (this is called postural instability). Later in the disease, some people also develop dementia.

There is no cure for Parkinson's. Treatments can improve symptoms, but the disease continues to get worse over time. However, not much is known about how best to monitor the progression of Parkinson's, now that people take medicines to control their symptoms. This is important to explore, as it may influence a patient's treatment and care. It's also important from a research perspective, as scientists attempt to develop treatments to slow the disease (called disease modifying agents). If scientists know which symptoms typically signal a worsening of Parkinson's, this can help them determine whether a treatment is helping to control the disease or not.

In the new study, researchers followed 132 people with Parkinson's disease for an average of 5.2 years after their diagnosis. Each person's symptoms and disease progression were evaluated every 18 to 24 months. The participants' average age at diagnosis was 70.

What does the new study say?

Problems with walking, posture and balance got worse more rapidly than other symptoms. They also provided the best indicators of how quickly the disease was progressing and how soon people would reach 'disease milestones'. These are problems that have a big impact on people's quality of life.
life, such as gait freezing, postural instability, jerking movements (dyskinesias) caused by treatments, and dementia. The researchers also found that problems with walking, posture and balance provided a better indication of advancing Parkinson’s than the usual scales used to monitor the disease.

**How reliable are the findings?**

A key strength of this study is its frequent and detailed follow-up of participants over several years. This provides an in-depth picture of how people's symptoms worsen and their disease progresses over time. The researchers also took into account several factors that might have influenced people's disease progression, including their sex, age at diagnosis, average medication dose and what symptoms they got early on. This strengthens the findings. However, it's worth noting that the study included only 132 people. We need larger studies to confirm these results.

**Where does the study come from?**

The study was done by researchers at the University of Cambridge and University College London.

**What does this mean for me?**

You may be interested in these findings if you, or someone close to you, has recently been diagnosed with Parkinson’s. Having a sense of which symptoms may be tied to faster progression of the disease might help you and your doctor look to the future. However, bear in mind that this study was designed mainly to provide benchmarks for scientists to gauge whether new treatments are slowing the normal course of the disease. The researchers didn’t specifically explore what their findings might mean for patients and the doctors treating them.


This summary was prepared by the staff of Best Health, BMJ Group’s patient information service. This information does not replace medical advice. If you have a medical problem please see your doctor.