

Parkinson's disease advice



How is Parkinson's disease diagnosed?

Parkinson's disease is diagnosed by neurologists based on your symptoms over the last few years and an examination of you in clinic. There is no blood test or brain scan that makes the diagnosis, but sometimes tests can be helpful to look for rarer diseases. Many people think of tremor as a symptom of Parkinson's disease but others can be no sense of smell, depression, constipation, fainting, soft voice, violent dreams, falls, slow or stiff movements and small handwriting.

What is the cause of Parkinson's disease (PD)?

We do not know why some people develop PD but we know that the cause of PD is that there is a lack of brain cells making a chemical called dopamine in one part of the brain. We think the reason for the brain cells disappearing is due to a build-up of a toxic protein called alpha-synuclein. Dopamine is important in this part of the brain because it helps signal other brain cells that co-ordinate smooth movements.

Types of drugs used in Parkinson's disease (PD)

The main drug used is levodopa, which the brain converts to dopamine. This replaces the missing dopamine and works very well in the first few years. It is always combined with another drug to stop levodopa being broken down before it reaches the brain, and that is why the levodopa medicine is called different names – co-careldopa (brand: Sinemet) or co-beneldopa (brand: Madopar).

Other drugs work indirectly to increase dopamine too and include dopamine agonists, MAO inhibitors, COMT inhibitors, apomorphine or amantadine.

How does Parkinson's disease (PD) progress?

Unfortunately, there is no cure for PD but treatments are very helpful. Many people function better with medicine for 5 years than they were before diagnosis. PD progresses slowly over 20 years or longer and there are 5 stages. In later stages, treatment with levodopa can lead to 'on' periods when movement is better and 'off' periods when it is very difficult to move.

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| Stage 1 | Mild tremor or stiffness or slowness on one side with no loss of function.
No or low dose of medicine is used. Lasts 1-4 years.
(1.5 is with spinal involvement) |
| Stage 2 | Both sides of the body, face, gait and posture affected. Balance and postural reflexes maintained with no falls. Usually lasts 5-7 years.
(2.5 is with good postural reflexes but slight imbalance) |
| Stage 3 | Slow movements with loss of balance and postural reflexes, which may lead to falls.
Still independent with daily activities at home. Usually starts 6-11 years later. |
| Driving | More info: www.parkinsons.org.uk/information-and-support/driving-and-parkinsons |

If you drive, you must tell the DVLA about the diagnosis of PD. They will ask for more information and decide if you can drive, if you need an assessment, and if you need a shorter licence. PD can affect driving due to tremor, slow reflexes or confusion. Drive when the medicine is working and you are alert. Ask family or friends to give feedback. Most people stop driving within 5 years of diagnosis.

Work More info: www.parkinsons.org.uk/information-and-support/work-money-driving-and-legal

If you tell your employer about PD, they should not discriminate against you and should provide adjustments to help you if possible. There are also disability, carer and employment benefits too.

Exercise More info: www.parkinsons.org.uk/information-and-support/exercise

Doing 2.5 hours of exercise per week slows down the disease and improves balance and walking. Any exercise can help such as running, cycling, swimming, yoga, dance, weight training or walking.

Home safety More info: www.parkinson.org/Living-with-Parkinsons/Managing-Parkinsons/Activities-of-Daily-Living

In the early stage, few precautions are needed. Later, some things to consider may be: Stable chairs and furniture, non-slip flooring, no rugs, good lighting, a night light, handrails in bathroom and on stairs, avoiding power tools and ladders, using an electric toothbrush/razor, using liquid soap, etc.

Regular sleep More info: sleepcouncil.org.uk/sleep-hygiene/

In PD, sleep can be affected by drugs (amantadine, MAO inhibitors), mood, stiffness or tremor at night, night-time toilet needs, or acting out your dreams violently (REM sleep behaviour disorder). REM sleep behaviour disorder can be treated with other medicines. PD can make walking to the bathroom difficult and caused increased urination at night. Taking night-time levodopa, drinking less fluid in the evenings and avoiding alcohol or caffeine can help.

Food & drink More info: www.parkinsons.org.uk/information-and-support/diet

Constipation is common in PD. Drinking more fluid, eating more fibre, eating more vegetables and taking laxatives all help. Low blood pressure can be helped by eating more salt, avoiding alcohol and drinking more fluid. For difficulty swallowing, try to eat smaller meals, sitting upright, eating during 'on' periods and taking time to eat all help. A speech and language therapist can assess swallowing.

Levodopa is not well absorbed from your gut if you have protein there. If levodopa does not work well, then avoid taking it with high-protein meals. Take it 30 minutes before or 60 minutes after meals. If levodopa causes nausea on an empty stomach, then try it with low protein breakfast and lunch. Rasagiline & selegiline should not be taken with excessive alcohol and certain foods.

Travel More info: www.parkinsons.org.uk/information-and-support/holidays-and-travel

If going to a warmer destination, then keep hydrated and use sunscreen. Rotigotine patches should not be exposed to heat. Make sure you have enough medicine supply and remember to take them.

Supplements

Fava beans and 'velvet beans' contain levodopa but the amount is small and varies so I do not recommend them. Avoid taking iron supplements within 2 hours of levodopa. Vitamin D and calcium can help bone health.

Can children inherit Parkinson's disease (PD)?

Overall, the risk of a stranger developing PD is about 3% during their lifetime. The risk of someone with a parent or sibling is about 5% during their lifetime. Only 1% of people with PD have a gene that caused the disease and these people usually develop PD at a young age.