



Treatment for Parkinson's disease

Although Parkinson's disease (PD) cannot be cured, effective treatments have been developed which can help manage your symptoms and improve your quality of life. These include medication, surgery, and supportive therapies.

Surgery and supportive therapies may be out of reach for you because they're either too expensive or unavailable where you live. However, lifestyle changes, including healthy eating and regular exercise, are accessible and can help your condition. In the early stages, your symptoms may be so mild that you don't require treatment anyway.

You may have heard about complementary therapies – treatments that fall outside what is considered 'conventional' medicine. These include herb and plant extracts and mind-body therapies like meditation. Some people with Parkinson's find that they help them feel better but be cautious about trying them as there is not enough solid, scientific evidence to say they're effective. More importantly, they may also be dangerous.

If you can access medical treatment, here's what might be available, as well as a breakdown of other therapies and approaches.



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Medication for Parkinson's disease

Various medications have been developed to help manage Parkinson's. Most drugs for Parkinson's disease work on improving dopamine levels in the brain. Low dopamine is what causes PD. The point at which you should start medication for Parkinson's disease and the best treatment depends on your individual circumstances, including your age and symptoms. Drugs fall into the following separate groups, or classes:

- ★ levodopa



- ★ monoamine oxidase type b (MAO-B) inhibitors
- ★ dopamine agonists
- ★ anticholinergics

Levodopa

Levodopa is the most powerful and commonly used medication for Parkinson's disease.

Initially, levodopa can work very well to improve symptoms related to movement (motor symptoms), especially stiffness and slowness of movement (bradykinesia). But over time, it gets less effective. Your drugs may begin to wear off between doses, so symptoms reappear.

Side effects include:

- ★ tiredness
- ★ low blood pressure and dizziness when standing (postural or orthostatic hypotension)
- ★ nausea
- ★ involuntary muscle movements (dyskinesia) in the long term – these are different to your usual Parkinson's tremors and can affect various parts of the body like your arms, legs, and torso. They can include twitching, jerking, fidgeting, twisting, and writhing as well as head bobbing, but will be different for everyone.

Levodopa may be branded as Sinemet, Madopar or Syndopa.

Other medication is often prescribed alongside levodopa to help make it work or to reduce side-effects, including:

- ★ Benserazide or carbidopa to help levodopa reach the brain.



- ★ Amantadine to help reduce dyskinesia. Although this may cause its own side-effects like confusion or hallucinations.
- ★ Comt inhibitors to make levodopa work better and for longer, especially if it's wearing off between doses. These can also worsen side-effects of levodopa too, though. Your Comt inhibitor could be called entacapone, opicapone or the brand name Comtess.

Monoamine oxidase type B (MAO-B) inhibitors

If you are in the early stages of Parkinson's, monoamine oxidase-B (MAO-B) inhibitors may be prescribed instead of levodopa to control motor symptoms. They are less powerful than levodopa but less likely to cause side-effects.

There are still some side-effects which include:

- ★ nausea
- ★ headaches
- ★ stomach pain
- ★ high blood pressure

Your MAO-B inhibitor treatment may be called safinamide, selegiline, rasagiline or the brand name Elpedryl.

Dopamine agonists

Dopamine agonists (DAs) are another milder alternative to levodopa used to treat motor symptoms. They are usually prescribed to younger people because their side-effects can be worse if you are older.

Side-effects of dopamine agonists may include:



- ★ nausea
- ★ drowsiness
- ★ dizziness
- ★ swelling in the legs (peripheral oedema)
- ★ hallucinations and confusion, which can be worse if you are older.

Another side-effect of DAs can be poor impulse control. This can lead to excessive interest in sex and behaviours, such as gambling. Changing the dosage can often help, so do not be put off trying DAs. And if you or a loved one is experiencing compulsive behaviour as a side-effect, talk to your doctor about adjusting the medication.

Dopamine agonists may go under the names pramipexole, ropinirole or Miraprexin.

Anticholinergics

Anticholinergics do not act on dopamine levels like the other types of drugs listed. Instead, they help with tremors by reducing nerve impulses.

They are usually only given if you are younger as older people who take anticholinergics are more likely to experience side effects such as confusion and hallucinations.

They can also cause withdrawal symptoms if you stop taking them.

Anticholinergic may be called biperiden, procyclidine, trihexyphenidyl or the brand name Kemadrin.



Parkinson's disease surgery

Medication is the main treatment for Parkinson's disease but a type of surgery for Parkinson's has been developed to ease motor symptoms called deep brain stimulation (DBS).

Access to DBS is limited and it is not suitable for everyone. If it is available, your healthcare team will take into consideration several factors such as your age, how long you've had Parkinson's for and your symptoms before recommending it to you. It can benefit people whose motor symptoms are impacting their quality of life and are not being helped by medication.

What is deep brain stimulation (DBS)?

Deep brain stimulation (DBS) is a brain surgery that involves placing a medical device called a neurostimulator, which sends electrical impulses, through implanted electrodes, to specific targets in the brain. DBS directly targets signals in the brain that are causing motor symptoms like tremor and bradykinesia. Using electrical stimulation, it changes these signals to make them work properly again.

You'll have a device implanted in your chest with one or two fine wires leading out under the skin to target the parts of your brain that need to be stimulated.

Supportive therapies for Parkinson's disease

Depending on what access you have to health services, therapies may be available alongside medication and surgery to help you manage your



Parkinson's symptoms. Ask at your clinic about what specialist support might be available.

Support therapies which can help symptoms of Parkinson's include:

- ★ Physiotherapy to help with posture and movement problems.
- ★ Speech and language therapy to help with swallowing problems and improve the way you speak.
- ★ Occupational therapy for Parkinson's disease to help you do everyday tasks.

Do not forget the benefits of diet and exercise for your symptoms.

Complementary therapies for Parkinson's

There is not much scientific evidence that complementary therapies can help with the management of Parkinson's disease. However, many people have found them useful so you may want to try one of them. Depending on what complementary therapies are available to you, it is important to get advice from a medical professional before starting any.

Besides exercise like yoga, Pilates and Tai chi, complementary therapies include:

- ★ acupuncture
- ★ Alexander technique. This is a way of improving your posture and movement. If you can find a qualified teacher, there is some evidence that Alexander technique lessons could help you carry out everyday tasks and improve your overall well-being.
- ★ aromatherapy
- ★ art therapy



- ★ ayurveda
- ★ meditation and relaxation techniques
- ★ music therapy
- ★ reflexology
- ★ reiki
- ★ shiatsu

Herbal medicine

Herbal medicines are a form of complementary therapy. Many people with Parkinson's say they have helped them manage their symptoms. However, the research is mixed. Some herbs may give you unwanted side-effects and are potentially very dangerous. So again, always talk to a healthcare professional before taking any herbal medicine and don't take anything they haven't recommended, as it could do you more harm than good.

The herbal medicines velvet bean (*mucuna pruriens*) and crossyne flava and cannabis are sometimes used by people with Parkinson's.

Velvet bean (*mucuna pruriens*)

Mucuna pruriens, velvet bean or cowitch is a natural plant source of levodopa. The seeds contain the highest levels of levodopa. It is not prescribed by medical professionals but can be bought as a supplement.

It's really important that you talk to your healthcare provider before trying it. Some research shows that velvet bean may be effective on its own or with other medication to treat symptoms of PD. However, the dose is unregulated and may impact any other treatment you're getting.



More research is needed on how velvet bean might be effectively and safely used.

Crossyne flava

Some studies have found that Crossyne flava bulbs contain active ingredients that could help people with Parkinson's disease. But again, it's not prescribed by medical professionals and more research is needed into how to use the plant effectively.

Cannabis or cannabidiol (CBD) oil

There is growing interest in cannabis, usually taken as cannabidiol (CBD) oil as it doesn't have as many of the side-effects of smoking or eating cannabis because it doesn't contain the active ingredient. Research findings are mixed. It has been found in some studies to help with anxiety, pain, sleep and nausea. But it can also impact thinking and cause dizziness, blurred vision, loss of balance, hallucinations, and mood disorders.

Sources (all accessed May/June 2022):

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