Parkinson's disease

It can come as a shock to find out that you or someone close to you has Parkinson’s disease. You may be worried about what it will mean for the future. But your symptoms may not bother you for several years. When they do, there are treatments that can help.

We’ve looked at the best and most up-to-date research to produce this information. You can use it to talk to your doctor and decide which treatments are right for you.

What happens in Parkinson's disease?

Parkinson's disease affects how you move. An early sign is a slight trembling in one hand. Over time, you start doing things more and more slowly as your muscles become stiff. You may lose your balance more easily.

Parkinson's disease happens when your brain stops making enough of a chemical called dopamine. Brain cells need dopamine to send messages around the brain, and to nerves and muscles throughout your body. For example, dopamine helps to stop you tripping at the kerb as you step into a road. And it helps you move your fingers to tie your shoelaces. With less dopamine, you can't control your movements in the usual way.

Doctors don't know why some people stop making enough dopamine and others don't.

What are the symptoms?

Parkinson's disease can affect you in four main ways:

• **Shaking** (doctors call this tremor): Your hand may shake, especially when you're either relaxing or feeling stressed. Many people rub their thumb and index finger together as if rolling a pill. Shaking can also affect your neck, chin and head.

• **Stiff muscles** (rigidity): You may find it difficult to move. For example, you may find it difficult to get out of a chair. Your face may seem less expressive because the muscles there aren't moving as well as they normally would.

• **Slow movements** (bradykinesia or akinesia): You may find it hard to start moving and stay in the same position for longer than you normally would. But your ability to move may come and go, so that you can be moving easily one minute and then suddenly need help. Tasks you once did quickly and easily, such as washing and dressing, might take much longer to do. Your handwriting may look spidery and small.

• **Poor balance** (postural instability): You may lean forward or backward and fall over easily and you may have problems walking. You may freeze in mid-stride and not
be able to take the next step. (Doctors call this freezing of gait or FOG for short). You may take quick, small, shuffling steps.

Parkinson's disease affects everyone differently. You probably won't get all of these symptoms. And at first your symptoms will usually be mild. They tend to progress slowly and in no particular order.

There are no special tests for Parkinson's disease. Your doctor will usually make a diagnosis after talking to you about your symptoms and doing a physical examination. Some people may have blood tests or a brain scan, usually to rule out other conditions.

It's important to keep track of your symptoms so that you can tell your doctor how they have changed since your last visit. You might want to keep a diary of your symptoms to show your doctor.

This information will help your doctor decide when you should start treatment and when you need to change your treatment. If your symptoms are mild and don't bother you very much, it may be many years before you get any treatment for Parkinson's disease.

**What treatments work?**

There's no cure for Parkinson's disease. But there are drug treatments that are used to control symptoms.

**Levodopa**

The main drug used to treat Parkinson's disease is called **levodopa**. Levodopa is changed into dopamine in your body. This replaces the dopamine in the brain that is lost in people with Parkinson's disease.

You'll be given levodopa in combination with another drug. This may either be called **carbidopa** (brand name of this combination is Sinemet) or **benserazide** (brand name of the combination is Madopar). Carbidopa and benserazide help levodopa to work better, so that you get fewer side effects and don't need to take as much of the drug.

Most people treated for Parkinson's take levodopa at some point. The drug can work so well that your symptoms may clear up completely for a while. However you can get side effects. Nausea, vomiting and sleep problems are the main ones. After about five years levodopa can stop working so well, so that your symptoms come back between doses. Also, about half of people get more serious side effects after about five years. The main problem is abnormal movements that you can't control, such as head nodding, jerking and twitches. Your doctor might prescribe a drug called **amantadine** to help control these abnormal movements.

Because of the problems that can happen with levodopa, your doctor may try to delay when you start taking the drug. For example, you may start on a different treatment first and then switch to levodopa as your symptoms change or you get side effects. You may also take other drugs together with levodopa to make it work better.
Other drugs

You might be given selegiline or rasagiline if you have mild symptoms of Parkinson’s disease and these are getting in the way of what you do, but you’re not ready to start taking levodopa yet. Taking one of these drugs can help you move more easily and reduce stiffness and shaking. They also have side effects, which can make you feel anxious and dizzy.

Drugs called anticholinergics might also be used to help mild symptoms, before you need to move onto levodopa. They work best at controlling shaking. Possible side effects with these drugs include problems with your vision, a dry mouth, bladder problems and constipation.

Another group of drugs called dopamine agonists might be used either before you start levodopa, or at the same time as this drug, if it seems that it has stopped working so well. Dopamine agonists work in the same way as dopamine in the brain. But they don’t work as well as levodopa at helping reduce the symptoms of Parkinson’s disease. There are lots of different drugs (apomorphine, bromocriptine, cabergoline, lisuride, pergolide, pramipexole, ropinirole, rotigotine), all with different brand names. Dopamine agonists can cause nausea, vomiting and sleep problems. If you feel breathless or get a cough when you take one of these drugs, see your doctor.

If levodopa is not working as well as it used to, your doctor may give you a drug called entacapone (brand name Comtess) or tolcapone (Tasmar) to take as well. These stop levodopa being broken down by the body so the effects of levodopa should last longer. Your symptoms should not come back between your doses of levodopa so much. You might get jerking movements, nausea and vomiting with entacapone. If you get pale stools, yellow skin or yellow eye whites when you take tolcapone, see your doctor.

Other treatments

You might benefit from getting some help from various therapists who are trained to treat people with Parkinson's disease. A physiotherapist can advise you about exercises to help you move more easily. An occupational therapist can help you to carry on doing things that become harder because of Parkinson's disease. For example, you may get advice on how to cope around the house or how to continue taking part in leisure activities that you enjoy. A speech and language therapist can help you if you have problems with your voice, speaking, or swallowing.

Surgery

Surgery to the brain might be an option for some people who have had Parkinson’s for a long time and for whom drug treatments no longer help. It can ease some of your symptoms, especially stiff muscles, shaking and movements you can't control. But there’s no good research to say how long the benefits of surgery will last. It might be a year or two, or longer. There are two main types of operation. One called lesioning destroys the part of the brain that is causing symptoms. The other is called deep brain stimulation. This involves having a device fitted in your chest. Wires from the device are fixed into the part of the brain affected by Parkinson’s. Electrical pulses from the device stimulate...
this part of the brain to reduce symptoms. You can talk to your doctor about whether surgery would be a good option for you.

But it's important to remember that surgery cannot cure you of Parkinson's. And it won't stop your disease from continuing. You'll probably need to keep taking drugs for Parkinson's after surgery. We don't know how long the benefits of surgery last.

What will happen to me?

No one can say for sure what will happen to you if you have Parkinson's disease. Everyone is different, and the way the disease affects you may be different from the way it affects someone else.

Some people hardly notice their symptoms in the early stages of Parkinson's and lead a full life for many years. But symptoms usually get worse as time goes by and the brain makes less and less dopamine. For example, you might feel depressed, find it hard to get to sleep or have problems speaking. You may need speech and language therapy to help you adapt the way you talk, as well as drug treatments.

It's important to stay positive if you can. Take regular exercise and carry on doing the things you enjoy. You might also want to join a support group for people with Parkinson's disease. All these things can help you cope with your condition.

If you're caring for someone with Parkinson's disease, you may need support, too. If you feel you can't cope or you get depressed, your doctor or another health professional may be able to put you in touch with local support groups and organisations that offer help in the home.

Where to get more help

Parkinson's UK can put you in touch with a group for people affected by Parkinson's disease in your area. You can call the society's helpline (0808 800 0303) or check the website (http://www.parkinsons.org.uk). It also provides help and information on all aspects of the condition.