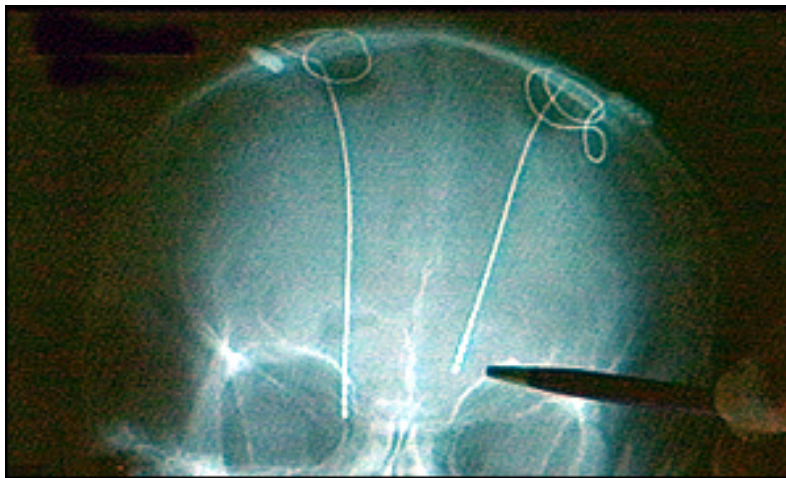


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## Health: Latest News

### 'Pacemaker' for Parkinson's disease



The electrodes go deep into the brain

People suffering from Parkinson's disease in the UK can now get a new device - similar to the heart pacemaker - that helps them control their tremors and muscle stiffness.

Parkinson's is a progressive degenerative disorder of the central nervous system. The new treatment works by stimulating the brain with small electrical impulses.

A wire carrying four tiny electrodes is inserted deep inside the brain in the subthalamic nucleus, which is responsible for controlling movement. A battery operated pulse generator is implanted beneath the

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The device is controlled with a magnet

collarbone - rather like a pacemaker. The patient then controls the device by switching it on or off with a handheld magnet.

Depending on where the brain implant is located, the pulses will block the signals that cause symptoms of the disease.

Activa Parkinson's Control Therapy originated in the United States, but has now been given a licence for use in Britain after successful trials lasting two years.

The therapy has been described as the biggest advance in the management of the disease in 30 years.

### **Quality of life**

Professor Adrian Williams, Chairman of the Medical Advisory Panel for The Parkinson's Disease Society (PDS) in the UK, welcomed the new treatment: "This exciting development offers the potential for people with Parkinson's to control many of their symptoms, and to significantly improve their quality of life.

"The PDS looks forward to the evaluation of subthalamic stimulation therapy over the next few years, including studies to assess its cost-effectiveness compared with existing drug therapies and surgical techniques," he said.

The device, manufactured by Medtronic, has already been used on thousands of patients in the United States.

The UK trials showed the treatment to be very effective. Patients had

[ image: Satch Sandercock took part in the trials]

Satch Sandercock took part in the trials

Sufferer Satch Sandercock says the device made a huge difference to his life: "I couldn't do anything. I couldn't sleep. I couldn't drink a cup of tea. Now I can go to a café or to a restaurant, catch a bus or catch a train. It's amazing."

### Side effects

The trials did pick up some side effects; the most common being slurred speech, abnormal muscle contractions, abnormal involuntary movements and visual disturbances. However, these were shown in tests to disappear or reduce when the therapy was decreased or stopped.



The pulse generator sits under the collarbone  
Europe alone, with at least

greater control over their bodies and became more independent as a result.

Some who had previously found it difficult or impossible to walk and dress themselves saw a significant improvement in their condition. Many were even able to decrease their dosage of medication against the disease.

Parkinson's disease is a movement disorder, which arises when the region of the brain known as the substantia nigra or "black substance" degenerates. This prevents production of the chemicals needed to enable communication among brain cells.

There are currently around one million people suffering symptoms of the disease in

100,000 new cases diagnosed every year.

Although there is no cure for Parkinson's, there are a number of drugs to treat the symptoms.

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