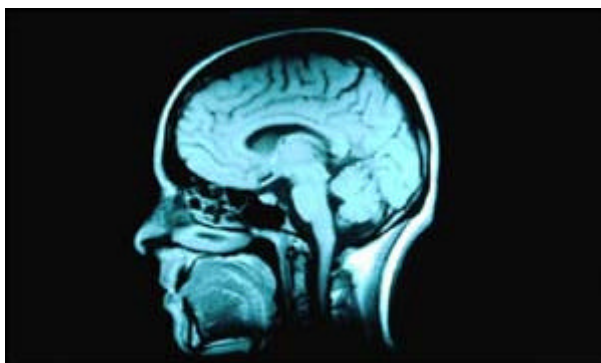


You are in: [Health](#)

Front Page Thursday, 20 June, 2002, 18:07 GMT 19:07 UK

## Transplant hope for Parkinson's patients

World  
UK  
UK Politics  
Business  
Sci/Tech  
Health  
Background  
Briefings  
Medical notes  
Education  
Entertainment  
Talking Point  
In Depth  
AudioVideo



WORLD CUP &gt;&gt;

The technique boosts dopamine levels in the brain

BBC SPORT

BBC Weather

Scientists have developed a surgical technique which they say could offer future hope to patients with Parkinson's disease.

**SERVICES**

Daily E-mail  
News Ticker  
Mobiles/PDAs

Feedback  
Help

Low Graphics

Researchers in the US have found that transplanting new cells into the brains of rats helps to reduce symptoms of the disease.

Researchers at the US National Institute of Neurological Disorders believe the technique could ultimately play a role in treating humans with Parkinson's and other brain diseases.

In laboratory tests, they transformed embryonic mouse stem cells into neurons (nerve cells) which were then transplanted into rats with Parkinson's disease.

“  
**If we are to try this in humans we will need to know much more**

”  
**Dr Roger Barker,  
Cambridge Centre  
for Brain Repair**

The neurons are able to produce the chemical dopamine. It is the reduction of dopamine in the brain that is responsible for many of the symptoms of Parkinson's, such as problems with movement.

### Further research

However, they warned that their findings were still preliminary and said further study is needed before the technique could be used on humans.

Dr Ronald McKay, of the institute and one of those involved in the study, said the research was among the first to show that embryonic stem cells could develop into neurons that

**See also:**

08 Jan 02 | Health  
Parkinson's stem cell advance  
13 Mar 01 | Health  
Parkinson's trial 'worsens symptoms'  
26 Nov 98 | Medical notes  
Parkinson's Disease

**Internet links:**

Nature  
Parkinson's Disease Society  
Cambridge Centre for Brain Repair

The BBC is not responsible for the content of external internet sites

**Top Health stories now:**

Immune gland made from stem cells  
Transplant hope for Parkinson's patients  
Kidney error surgeon 'careless'  
'We need a new NHS contract'  
Alternative cell source investigated  
Clues to mystery chest pain  
'No hesitation' on asbestos ruling  
Pupils to help each other quit smoking

**Links to more Health stories are at the foot of the page.**

function in the brain.

He said: "We now know that we can start with embryonic stem cells and end with dopamine neurons. We do not know if we can make dopamine neurons by starting with any other cell type."

Dr Audrey Penn, acting director of the institute, said the study was important.

"Dr McKay's experiments further our understanding of the potential of stem cells to develop into differentiated neurons," she said.

"They provide proof of principle that we can start with embryonic stem cells and end up with dopamine neurons that are useful in a model for Parkinson's disease."

Dr Roger Barker, from the Cambridge Centre for Brain Repair, said: "I think it is possible that embryonic stem cells could be used to treat neurodegenerative conditions but we are still a long way off.

"We have to better understand the long-term profile of these cells when they are grafted. This is a significant step forward but it is only with mice and if we are to try this in humans we will need to know much more."

The study is published in the journal Nature.

---

 [E-mail this story to a friend](#)

---

**Links to more Health stories**





[^^ Back to top](#)

[News Front Page](#) | [World](#) | [UK](#) | [UK Politics](#) | [Business](#) | [Sci/Tech](#) | [Health](#) | [Education](#) | [Entertainment](#) | [Talking Point](#) | [In Depth](#) | [AudioVideo](#)

-----  
[To BBC Sport>>](#) | [To BBC Weather>>](#)  
-----

© [MMI](#) | [News Sources](#) | [Privacy](#)