

Stem cells will now take on Parkinson's

SWAPNIL SALKARE.DNA



Bhawarlal Jain, 55, with his wife at Jaslok Hospital on Thursday. Doctors say he has been injected with his own stem cells in the brain to cure the disease

Jaslok Hospital performs world's first clinical trial for the disease

Sumitra Deb Roy

Taking the research of stem cell usage to treat Parkinson's disease a step further, doctors at Jaslok Hospital injected patient's own stem cells to his brain.

The hospital claimed it was the world's first clinical trial for Parkinson's disease (PD).

Fifty-five-year-old Bhawarlal

Jain, who had great difficulty in walking and talking, was diagnosed with this brain degenerative disease six years ago.

"My hands became stiff and my movements got restricted. It gradually started affecting my daily activities," he said. He underwent the procedure on August 8 and doctors will monitor him for the next 18 months to conclude if transplanting stem cells can cure the Parkinson's disease.

In Jain's case, bone marrow was taken from his hip bone. "The stem cells were cultivated and processed for two-three

Jain, who had great difficulty in walking and talking, was diagnosed with the degenerative disease

weeks at Reliance Life Sciences and injected in the patient's brain," said Dr Paresh Doshi, head, department of stereotactic and functional neurosurgery at Jaslok Hospital.

"Neural transplant is the only procedure that can restore the

normal functions like speech, motor activities," he said.

Doshi said that in advanced stages of PD, medicines stop having any affect after a point. Jain was injected the cells under local anaesthesia as the patient is required to be in senses.

"Also, the cells are from patient's own bone marrow so there are no chances of rejection," said Doshi. Chances of abnormal growth of cells are also ruled out as the mesenchymal cells stop growing after a point. The hospital will be performing 10 such cases and evaluate them over a period of three years.

Publication : DNA
Date : August 21, 2009
Page : 03 / 06
Title : Stem cells will now take on Parkinson's

Hope for Parkinson's cure stems from cell transplant

Pratibha Masand | TNN

Mumbai: A 55-year-old Mulund resident may be the first to be cured of Parkinson's disease if an experiment by a team of doctors from Jaslok Hospital is successful.

The doctors claim the disease can be cured by transplanting stem cells into the patient's brain. And they are waiting to see how Bhanwarlal Jain, the first human to receive such a transplant, responds to the treatment. If Jain's operation, conducted on August 8, is a success—which will be known after he spends 18 months in observation—it will be the first known cure in the world for the debilitating disease of the central nervous system.

Already, doctors claim that Jain is showing signs of improvement. Jain had been suffering from advanced symptoms of Parkinson's Disease for six years. The spondylitis and joints pain began in 2004 and as the disease progressed, his movements became slow, and he had trouble walking and talking. "I managed my business until my speech became so impaired that I had to repeat everything at least four times to be understood," said Jain.

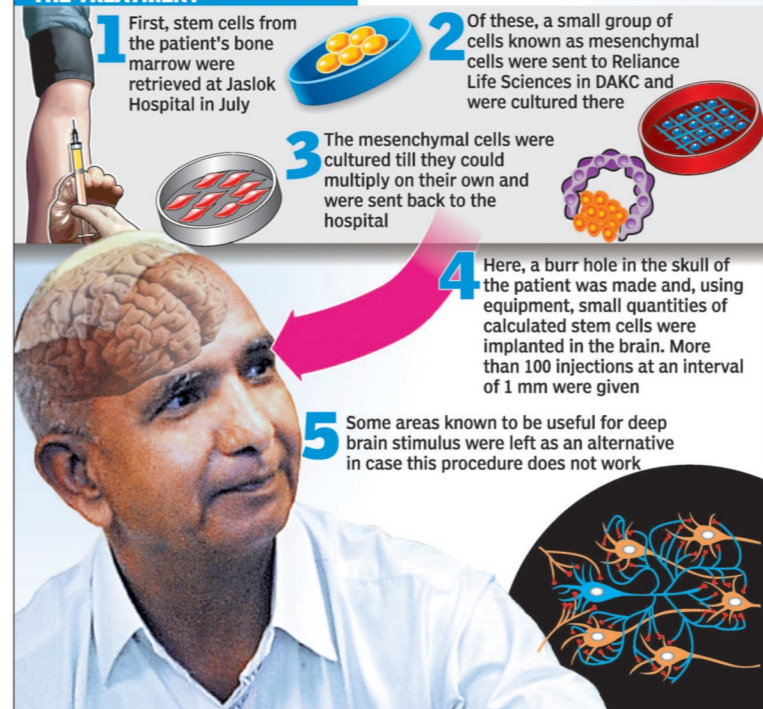
He came to Jaslok Hospital in February, when he was told about a new clinical study to evaluate the effect of stem cells on Parkinson's. Ten patients were to be enrolled and Jain chose to be the first volunteer. "When I heard I was going to be the first human to be treated using stem cell transplant, I was excited and scared. I had told my family that I may never return," said Jain.

But 10 days after the operation, both he and his family—wife, two sons, their wives and a grand-daughter—are happier. "I was scared initially but now I am happy that we opted for this operation," said his wife Sukhi (54). The doctors at Jaslok said they did not have to convince Jain for the transplant at all. "All we did was tell him about the procedure

MAKING A NEW BEGINNING

Parkinson's Disease is a degenerative disease of the brain (central nervous system) that impairs motor skills, speech as well as some other functions. It is caused by loss of dopaminergic neurons, cells in the brain that release dopamine, a chemical involved in communication of information from one neuron to another and eventually to the muscles.

THE TREATMENT



and he volunteered himself," said neurologist Pettarusp Wadia, from Jaslok Hospital.

"We chose the stem cells from the marrow of the patient's hip bone as these cells are readily isolated. They can expand in culture and the body can accept them easily. Small quantities of these cells were injected at an interval of every 1mm in his brain," said Dr Paresh Doshi, head of the

team who performed the eight-hour-long operation.

However other neurosurgeons are sceptical. Dr Milind Sankhe from Hinduja Hospital said, "There is no material or evidence, which suggests a stem cell transplant can cure Parkinson's. Moreover, it will be tough to prove it is the stem cells which are responsible for the improvement in the patient." Added Atul Goel, neu-

rosurgeon at KEM hospital, "Stem cell transplantation is a complex procedure. The cells have to be taken from the body, cultured in a lab, inserted in some other part of the body and then they can enter the normal functioning of the body. It can't be done in 10 days. Moreover, there is no scientific proof or literature explaining that Parkinson's can be cured this way."

Publication : DNA
Date : August 21, 2009
Page : 03 / 06
Title : Stem cells will now take on Parkinson's