

NEURAL TRANSPLANTATION IN THE TREATMENT OF PATIENTS WITH PARKINSON'S DISEASE

<https://neurodegenerationresearch.eu/survey/neural-transplantation-in-the-treatment-of-patients-with-parkinson%20s-disease/>

Principal Investigators

Institution

Contact information of lead PI

Country

European Commission

Title of project or programme

NEURAL TRANSPLANTATION IN THE TREATMENT OF PATIENTS WITH PARKINSON'S DISEASE

Source of funding information

European Commission FP7-Seventh Framework Programme

Total sum awarded (Euro)

€ 11,994,095

Start date of award

01/01/2010

Total duration of award in years

6.5

The project/programme is most relevant to:

Parkinson's disease & PD-related disorders

Keywords

Research Abstract

There are currently no cures for Parkinson's disease (PD) but one of the most effective reparative therapies in patients to date has been with allotransplants of dopamine (DA) neuroblasts obtained from fetal ventral mesencephalic (VM) tissue. However, this cell transplantation approach has given inconsistent results, with some patients doing extremely well and coming off anti-PD medication for years, whilst others have shown no or only modest clinical improvements, and in some cases also developed severe, off-state graft-induced dyskinesias (GIDs). The reasons behind this heterogeneity of outcomes, and the emergence of

GIDs in particular, need to be better understood, not least in the perspective of the rapid advances that are now being made in the development of stem-cell based therapies. There is therefore an urgent need to revisit the trials that have already been done with fetal VM tissue in PD patients, with the expectation that a critical reassessment can form the basis for an optimised and more standardised procedure that will translate into more consistently efficacious transplants with minimal side-effects. Over the last two years a group of international experts, including the key investigators of the previous European and North American trials, has been re-examining the outcome of these trials as well as reviewing the results obtained from recent and ongoing animal experimental studies, and identified a number of weaknesses that may explain the inconsistent outcome in previous trials. As a result of these discussions, the group has agreed to join forces in a new round of experimental work and cell therapy trials in PD, based on a new jointly developed protocol where all these factors are taken into account. In the first instance fetal VM tissue containing mesencephalic DA neuroblasts will be used, with the expectation that this will pave the way for bigger trials using dopaminergic neurons derived from stem cells.

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

European Commission

Diseases:

Parkinson's disease & PD-related disorders

Years:

2016

Database Categories:

N/A

Database Tags:

N/A