

Parkinson's clinical trials back on track.

After nearly 20 years of being stuck on the clinical trial "bookshelf", an international team from Cambridge, UK revived a cell therapy for Parkinson's disease.

In an announcement picked up this week by the Genetic Literacy Project, the team reported they had treated their first patient. Specifically, fetal brain cells were injected into the brain of a man in his mid-50's with the disease.

In Parkinson's, nerve cells controlling movement die for poorly understood reasons. An accumulation of data through the 60's and 70's suggested transplantation of fetal brain cells into the Parkinson's brain would replace the lost nerve cells and restore movement control. After initial promising results in the 80's and 90's, larger clinical trials showed no significant benefit and even led to a worsening of symptoms in some patients.

Due to these outcomes, the research community shelved the approach. Insights gained in the interim pointed to more ideal brain injection sites in order to help avoid side effects. Also, follow up on patients beyond the two-year run of those early trials suggested that positive effects of the cell therapy may not emerge for at least three to five years. So this latest trial will run longer to capture this time window.

One remaining snag for this therapeutic strategy is the limited number of available cells for each transplant. So in the meantime, scientists including some of our grantees are working hard at getting embryonic stem cell- or iPS cell-based therapies to the clinic. Since stem cells divide indefinitely, this approach could provide an off-the-shelf, limitless supply of the nerve cells

Reference link: <http://blog.cirm.ca.gov/tag/parkinsons-disease/>