

Brain cell transplants in early 2013

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As part of the European study TRANSEURO, five patients with Parkinson's disease will undergo brain cell transplants at Skåne University Hospital in Lund, Sweden, in early 2013. These are the first operations of their kind in Europe for over 10 years.

The TRANSEURO study, which in Sweden is led by Lund University, is now taking a critical approach to the viability of cell therapy as a future treatment for Parkinson's disease. Can we replace cells that die as a result of our most common <u>neurological diseases</u>? What are the therapies of the future for <u>neurodegenerative diseases</u> like Parkinson's and Alzheimer's?

Under the leadership of Professor of Neurology Olle Lindvall, brain researchers in Lund had already developed a method of transplanting nerve cells in the 1980s. In 1987, brain surgeon Stig Rehncrona operated on the very first patient. That study was historic and marked the first repair of the human nervous system. The news was cabled out to all the world's media and the Swedish researchers soon graced the front page of the New York Times.

"Since the advances made in the 1980s and 1990s, the research field has encountered many obstacles. In the early 2000s, two American studies produced negative results, which meant that <u>cell transplants</u> for Parkinson's disease came to a dead end", says Professor Anders Björklund, who in the 1980s was responsible for the ground-breaking discoveries in the laboratory.



Despite the unsatisfactory results presented in the American trials, cell therapy has still been seen to have effects that are entirely unique in the history of research on Parkinson's. A third of the <u>transplant patients</u> have seen significant benefits of cell therapy over a very long period without medication, in some cases up to 20 years.

"For a disease with a very demanding medication regime, and for which the effects of the standard medication begin to diminish after 5 years, cell therapy represents a hope of a different life for many Parkinson's sufferers", says Professor Håkan Widner, who is in charge of patient recruitment in Lund.

"The results of TRANSEURO will play an important role in the immediate future of cell therapy as a viable treatment. We have scrutinized the failed American studies in an attempt to optimise the technique, improve patient selection and conduct more personalised follow-up. We are hopeful that the results will be different this time", says Professor Widner.

Provided by Lund University

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