



PARKINSON'S DISEASE NEWS

<http://www.viartis.net/parkinsons.disease/news.htm>

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WIRELESS DEEP BRAIN STIMULATION FOR PARKINSON'S DISEASE

Deep brain stimulation (DBS) is the most commonly performed and most effective surgery for Parkinson's Disease but is unaffordable to a lot of people. It involves the use of electrodes implanted into the brain connected to an electrical device. For more information go to :

<https://www.ninds.nih.gov/Disorders/All-Disorders/Deep-Brain-Stimulation-Parkinsons-Disease-Information-Page>

A novel wireless method of administering brain stimulation has been introduced that requires no implants or external connections. By injecting magnetic nanoparticles into the brain, neurons can be manipulated by applying external magnetic fields. These particles are capable of deep penetration of brain tissue and can stimulate nerve cells. For more information go to :

<https://www.meddeviceonline.com/doc/mit-researchers-develop-wireless-noninvasive-deep-brain-stimulation-approach-0001>



People with Parkinson's Disease had DBS initiated at either 1 or 3 months after surgery. Safety and efficacy of the treatment were compared between on and off medication states 3 months after surgery. Outcome measures included analysis of Unified Parkinson's Disease Rating Scale (UPDRS) scores, duration of "on" periods, and equivalent doses of L-dopa. Three months after surgery, there had been a very significant decrease in the UPDRS (Parkinson's Disease) motor scores.

Bilateral wireless programming STN-DBS was found to be safe and effective for people with Parkinson's Disease in whom medical management had failed to restore motor function.

Reference : Stereotactic and Functional Neurosurgery [2017] 95 (3) : 174-182 [Epub ahead of print] (D.Li, C.Zhang, J.Gault, W.Wang, J.Liu, M.Shao, Y.Zhao, K.Zeljic, G.Gao, B.Sun)

Complete abstract : <http://www.ncbi.nlm.nih.gov/pubmed/28571034>

<http://www.viartis.net/parkinsons.disease/news/170607.pdf>

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