

Deep brain stimulation for Parkinson's disease Indications

Deep brain stimulation is an established and evidence-based therapeutic option for the treatment of advanced Parkinson's disease. Main indication and inclusion criteria are the presence of idiopathic Parkinsonism with motor fluctuations and/or dyskinesias and/or with medication refractory tremor, a significant improvement of akinesia/rigidity in response to dopaminergic medication, the absence of relevant cognitive deficits and other significant comorbidities. DBS neurosurgery has a low risk of complications. The clinical programming should follow an established monopolar review algorithm. Regular follow-up visits are required for stimulation monitoring ¹⁾.

The results indicate that the patients' age, rather than disease duration (DD), has a negative effect on the levodopa response (LR). Therefore, patients with an advanced age and with a poor LR are not good candidates ²⁾.

It is only beneficial to some elderly PD patients aged 70 years or older. Tremor, axial dysfunctions and drug-induced dyskinesia are the main indications for the elderly; however, their clinical benefits are inferior to those of younger patients ³⁾.

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Chiou SM. Benefits of subthalamic stimulation for elderly parkinsonian patients aged 70 years or older. Clin Neurol Neurosurg. 2016 Jul 29;149:81-86. doi: 10.1016/j.clineuro.2016.07.028. [Epub ahead of print] PubMed PMID: 27494146.

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