

Patient Selection for Deep Brain Stimulation for Parkinson's Disease---A Very Convenient Tool



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Abstract

Deep brain stimulation (DBS) for Parkinson Disease (PD) is performed on patients with medically intractable PD. Selection of patients requires a multidisciplinary team that includes a neurosurgeon trained in functional neurosurgery, a movement disorders neurologist, a neuropsychologist, psychiatrist and neurophysiologist. This is a very convenient criteria to identify DBS patient for PD.

Keywords: Progressive supranuclear palsy, Multiple system atrophy, Cortico basal degeneration, Lewy body dementia, Unified Parkinson's disease rating scale, Parkinson's disease, Neurologists, patients, DBS surgery

Abbreviations: PSP: Progressive Supranuclear Palsy, MSA: Multiple System Atrophy; CBD: Cortico Basal Degeneration; LBD: Lewy Body Dementia; UPDRS: Unified Parkinson's Disease Rating Scale

Introduction

Deep brain stimulation has been shown to consistently benefit patients of medically intractable idiopathic Parkinson's disease [1-8]. This is a very convenient list of 10-points criteria to identify patients who are the candidate for DBS surgery in Parkinson's disease [1-8] (Table 1).

Table 1: DBS 10-points selection criteria for Parkinson's disease patients.

1.	Age<75 years	Yes	No
2.	Idiopathic PD (No PSP/MSA/ CBD/LBD etc)	Yes	No
3.	Levodopa responsive	Yes	No
4.	Poor/adverse response to drug	yes	No
	a) Increased off period	Yes	No
	b) Disabling dyskinesia	Yes	No
	c) Disabling motor fluctuations	Yes	No
5.	Degree of disability (UPDRS part III score)>25	Yes	No
6.	Neuropsychology, MMSE>24	yes	No
7.	Levodopa Challenge Response Positive (30% improvement in UPDRS after 12-hours off medication)	yes	No
8.	Advanced co-morbidity	Yes	No
9.	long term anticoagulation	Yes	No
10.	Willing for surgery and programming	Yes	No

Discussion

The above list is very convenient for students and general neurologists to identify patients for DBS surgery for Parkinson's disease. If patients fulfil these criteria, then they can be selected for DBS.

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