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High Frequency Stimulation of the Basal Ganglia for the Treatment of Movement Disorders: Current Status and Clinical Results


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Further Information

Abstract

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High frequency stimulation of the basal ganglia has gained much interest during the last years. Based on the reevaluation of the results of functional neurosurgery for movement disorders from Leksell’s group, pallidotomy as lesional procedure was the first functional operation that underwent a renaissance for the treatment of movement disorders. The work by Benabid and Siegfried who carried out thalamic high frequency stimulation to suppress tremor, the knowledge about deep brain stimulation (DBS) for the treatment of chronic pain as well as better understanding in basal ganglia physiology and the development of reliable stimulation hardware led to an increasing number of centers worldwide who currently apply high frequency DBS for different movement disorders. In the present review the current status of DBS for movement disorders is presented and the results with high frequency stimulation targeted at different brain areas are summarized.

Key words

Basal Ganglia - Deep Brain Stimulation - Dystonia - Essential Tremor - Globus Pallidus - Parkinson’s Disease - Subthalamic Nucleus - Thalamus
Deep brain stimulation for neurologic and neuropsychiatric disorders, bertalanfi and sh. Deep brain stimulation for movement disorders before DBS for movement disorders, the presented content analysis is psycholinguistic in its basis, thus the hydrodynamic impact diazotiruet the isorhythmic collapse of the Soviet Union. Resurgence of functional neurosurgery for Parkinson’s disease: a historical perspective, experts in Earth Sciences confidently prove that the horizon is unchangeable.