



Neurocirugía

<https://www.revistaneurocirugia.com>



C0058 - MALIGNANT LIFE-THREATENING DEEP BRAIN STIMULATION WITHDRAWAL SYNDROME. THE HARIZ-JOHANSSON INITIAL DESCRIPTION

P. Roldan Badia, A. Salvador, L. Real, J.M. Lainez Andrés and J. González Darder

Department of Neurosurgery, University Clinic Hospital, Valencia, Spain.

Resumen

Objectives: After its initial description by Hariz and Johansson in January 2001 in the Journal of Movement Disorders, drawing attention to the consequences of the abrupt cessation of chronic STN DBS (Subthalamic Nucleus Deep Brain Stimulation) in PD (Parkinson's Disease) patients, describing how this therapy can change patients' symptomatology into an acute condition with severe rebound of PD symptoms requiring emergency care if chronic stimulation fails, this condition had remain hidden in some way. After that communication just very few papers from 2013 and 2015 are relevant and further define this malignant condition.

Methods: We describe 2 PD cases, 67 and 45 yrs old at first operation, and its clinical state. In both cases initial DBS induced a significant improvement of symptoms without adverse effects. They were operated as usual with a Frameless System. Awake microrrecordings and stimulation were always obtained to assess the stimulation effects and absence of adverse side-effects.

Results: In both cases after a short delay before replacing the stimulator, patients deteriorated neurologically quickly and unadvertidly with severe rigidity and urinary or lung infections, that required their emergency admission to the ICU. Dopaminergic medication was not an effective treatment. Just the stimulator replacement changed the clinical course. Some deterioration in their neurological state remained even after replacement.

Conclusions: Some patients are dependent on social services, so its number and diagnosis may increase in the next future. Other reports including the Parkinsonian hyperpyrexia syndrome or psychiatric conditions related to DBS are not included or relevant to the syndrome. Quick early deterioration was due to battery depletion shortly before replacement. Emergency stimulator replacement is mandatory in these cases.