
FUNCTIONAL OUTCOME AND QUALITY OF LIFE IN TOURETTE' S SYNDROME AFTER DEEP BRAIN STIMULATION OF THE POSTEROVENTROLATERAL GLOBUS PALLIDUS INTERNUS: LONG-TERM FOLLOW-UP

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Introduction: Deep brain stimulation (DBS) for Tourette' s syndrome (TS) in various targets has been in the focus for some years. However, there are hardly any data on ' psychosocial ' outcome after DBS for TS.

Objectives: The aim of the present study therefore was to focus on the functional outcome and ' psychosocial changes ' in TS patients after DBS.

Methods: Six patients with treatment-refractory TS underwent GPi-DBS. The Yale Global Tic Severity Scale (YGTSS) was used to evaluate symptomatic outcome. Psychosocial changes were assessed applying the Global Assessment of Functioning Scale (GAF) and the Gilles-de-la-Tourette-Syndrome Quality-of-Life scale (GTS-QOL) with additionally documenting psychosocial changes. Follow-up ranged between 12 and 72 months.

Results: In all symptomatic responders (4 of 6) we found a significant functional improvement (mean GAF increasing from 53.75 (\pm 7.5) pre-operatively to 83.75 (\pm 7.5) at last follow-up) along with a positive correlation with the course of GTS-QOL ($R^2 = 0.62$).

Conclusions: Treatment success should not only be assessed with the classic ' tic-scales ' , but also with the GAF and GTS-QOL. Although improvement of tics seems to be positively correlated with improved functional outcome, symptomatic improvement may lead to unexpected major psychosocial changes – which both the patient and the clinicians in charge – should be prepared for.