

## **Deep brain stimulation (DBS) for Parkinson disease: is age a true contraindication in the elderly?**

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**Introduction:** Although Deep Brain Stimulation (DBS) of the subthalamic nucleus (STN) has proved to be an effective treatment for Parkinson disease, criteria for proper selection of patients for surgery are still under discussion. In particular, it has not been clarified whether the age of patients at surgery is a clinical predictive factor or not. In most studies, the mean age of patients at the time of surgery is between 55 and 65 years old. Aim of our study was to analyze the effect and complications of DBS in a cohort of 17 consecutive elderly patients (age  $\geq$  65 years old).

**Patients and Methods:** The UPDRS III was used pre-operatively to assess a group 17 patients older than 65 affected by PD and candidate to STN DBS. Only patients with at least 1-year follow-up after DBS were included in this study.

**Results:** Median age of the patients was 68 (range 65-73). Pre-operative mean UPDRS III during OFF state was 42.18; post-operative mean UPDRS III in MED OFF STIM ON state was 11.94 (mean improvement of 72%). None of these patients had post-operative intracerebral hematomas or infections of the hardware system. No significant difference in terms of outcome (UPDRS III improvement) and complication could be noted as compared with our cohort of patients younger than 65 years old.

**Conclusions:** Our data confirm that DBS in the elderly is safe and effective. Further studies are required to assess the cost-effectiveness of the procedure.