

Non-surgery related mortality of Parkinson's disease patients after deep brain stimulation

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Aim: The aim of this study was to evaluate the non-surgery related rate of mortality in Parkinson's disease (PD) patients treated with deep brain stimulation (DBS).

Methods: 208 PD patients, 134 male and 74 female aged 23–76 (mean 55) were surgically treated with DBS in a 4-year period (2008–2013). All of them were classified for the surgery according to CAPSIT-PD criteria. At the time of the surgery, all of the patients were evaluated to be on the 3–4 stage of the Hoehn-Yahr Scale. The patients were reevaluated every 6 months.

Results: There was no perioperative mortality in the group. 3 patients suffered from intracranial bleeding after surgery that caused neurological deterioration in

one case. In 7 cases reimplantation or repositioning of the electrode was performed. In 18 cases erosion of the skin in the neighborhood of the stimulating system was found. 71 stimulators were replaced due to the low battery status. 6 patients (3%) died in the follow-up from 35 days to 16 months after surgery. None of these patients was reoperated or suffered from any complication after implantation.

Conclusions: DBS is safe and effective treatment of PD that does not have an impact on the natural course of the disease and does not increase mortality in the follow-up.

Key words: mortality, Parkinson's disease, deep brain stimulation