

SISTEMATIC REVIEW OF STEREOTACTIC POSTEROVENTRAL PALLIDOTOMY IN THE TREATMENT OF PARKINSON'S DISEASE (ABSTRACT)*. **THESIS. SÃO PAULO, 2001.**

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Parkinson's disease is a chronic and irreversible disorder. It is the most frequent neurologic disease in the population over 65 years old. It is manifested by "cardinal signs" of bradykinesia, cogwheel rigidity, resting tremor and postural reflex impairment. The most important pathophysiologic alteration in Parkinson's disease is the loss of dopaminergic neurons from substantia nigra pars compacta. Levodopa is the most effective drug to treat Parkinson's disease but its chronic use may complicate with dyskinesia and fluctuations. Owing to limitations and complications in the chronic use of Levodopa the surgery is a therapeutic option.

The bibliographic search was performed in five electronic databases with five key words in the search strategy: "stereotaxis or stereotactic and pallidotomy and parkinson's disease". It was set up inclusion and exclusion criteria to select articles to be analysed considering the methodologic quality and scientific evidence.

There were 55 articles considered as clinical trials. Six articles were classified as controlled trials. But only one was more approximate to the ideal methodology to study treatment efficacy.

The articles' quality was poor and informations about methods sometimes were omitted.

The total number of patients was 1827. The age varied from 17 to 82 and 59% of the operated ones were men.

There was found a great variation of scales to measure the surgery efficacy, but the most used was the UPDRS (Unified Parkinson's Disease Rating Scale).

Contralateral dyskinesias was the symptom that showed the best answer to surgery.

Postural instability did not improve with pallidotomy.

Among the sixteen articles that studied neuropsychological effects of posteroventral pallidotomy only three detected alterations statistically significant.

The complications rate didn't seem to be correlated to the use of microeletrode. The most frequent permanent complications were visual scotomas, dysarthria and hemiparesis.

The main mortality cause was intracerebral hemorrhage during surgery.

Controlled, randomized and double-blind clinical trials will help to answer objectively and unbiased some unanswered questions.

KEY WORDS: Parkinson disease, postero-ventral stereotactic pallidotomy

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