

Natureza do trabalho: Resumo

TÍTULO

ELECTROCONVULSIVE THERAPY IN PARKINSON'S DISEASE

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RESUMO

Introduction: Parkinson's disease (PD) is characterized by motor symptoms (bradykinesia, resting tremor, rigidity, gait disturbances) and non-motor symptoms¹. In this group, depression and psychosis are the main neuropsychiatric disorders, with an important role in reduced quality of life and disability of patients^{4,5}. The Electroconvulsive Therapy (ECT) is a therapeutic approach adopted in Psychiatry, with increasing advances in treatment option for this group of patients. **Objective:** Present the ECT as a treatment option for depression and / or psychosis associated with PD. **Materials and Methods:** This research consists of a literature review on theoretical frameworks, including books and articles published in English and Portuguese. The databases were "Medline" and "PubMed". **Results:** Studies show improvement in both depression and psychosis, for example in the study of Calderón-Fajardo et al pointing 27 patients (14 with depression, 12 with depression and psychosis and a patient with psychosis) treated with electroconvulsive therapy showed improvements in Brief Psychiatric Rating Scale and Hamilton Depression Rating Scale. The Unified Parkinson's scale Disease Rating Scale part III (UPDRS-III) there is 30% improvement in UPDRS-IV and there are down 39% proving the safety and effectiveness of treatment². There is a report reduction by about 20 points on UPDRS-III one week after the procedure. **Discussion and Conclusion:** Antidepressants and antipsychotic drugs are regarded as first-line treatment of depression and psychosis associated with SD^{7,8}. However, ECT was developed in 1938, has gained notoriety for effective results in the treatment of depression and / or psychosis associated with PD refractory to drug treatment, promoting decrease of motor and non-motor manifestations safely^{5,6,8}. There are also positive reports of ECT in the treatment of anxiety, catatonia, apathy, hallucinations and obsessive-compulsive disorder associated with Parkinson's⁴. The mechanism of action is still unknown, but the most accepted hypothesis is to increase in response to the post-synaptic dopamine regulation of dopamine receptors in the striatum of the hypothalamus and increased levels of levodopa by disorder of blood-brain barrier, increases serotonin neurotransmission and promotes the activation of mesocorticolimbic pathways, leading an increase of the anterior cingulate cortex and hippocampal metabolism, these effects may explain the mechanisms antidepressants and antipsychotics^{2,7,8}. In animal models it was observed hyperplasia of cells in the dentate gyrus suggesting that the ECT encourages regeneration of neurons in the hippocampus⁴. The ECT procedure requires that the patient is sedated with general anesthesia, electrodes are placed in particular to the head and by means of electrical current

controlled regions causes a seizure in the brain, with a remarkable safety procedure. Are usually needed six to twelve sessions to symptoms improve and stabilize^{4,6}. Side effects are well tolerated and the most common are headache, epigastric pain, myalgia and recent memory disorders⁶. Thus, ECT is an effective procedure in the treatment of depression and psychosis refractory to drug treatment and should be used as a therapeutic option in order to improve the patient's quality of life.

References

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