

Objectives: The aim of our study was to investigate the safety and efficacy of DBS through a systematic review.

Methods: A systematic review was conducted. PubMed via Medline, Google Scholar and Semantic Scholar were used as search engines. The keywords used were ("Obsessive compulsive disorder" or "OCD") and ("Deep brain stimulation" or "DBS"). Clinical trials and observational studies assessing the efficacy of DBS for OCD, published from inception to December 2023 and written in English or French were analysed. The inclusion criteria were a main diagnosis of OCD, DBS conducted for therapeutic purposes and a response to DBS assessed by the Yale-Brown Obsessive-Compulsive scale (Y-BOCS).

Results: Thirty four studies were included in the final analysis with a reported total of 316 cases. In 58.2% of cases, patients were female. The average age at the time of surgery of implanting the stimulation device was 40.9 ± 7.8 years. The mean time from onset of symptoms to surgery was 22.4 ± 4.6 years. The mean initial Y-BOCS score was 33 ± 3.7 . The mean response rate, defined as a reduction in Y-BOCS score of more than 35 % was $70.7\% \pm 24.8$. The maximum symptom reduction was reached between 12 to 14 months after implantation in most studies. Hypomania was the most frequent side effect reaching 45% in some studies. Intracranial hemorrhage secondary to surgery was the most serious complication and did not exceed 5 % in any study. No clear predictive factors for response to DBS were identified.

Conclusions: DBS appears to be a promising therapy for patients with resistant OCD. This innovative approach, combined with ongoing advancements in neurotechnology, offers hope for the future of OCD treatment. However, no predictors of response have yet been established.

Disclosure of Interest: None Declared

EPV1644

Safety and efficacy of electroconvulsive therapy during pregnancy: A systematic review

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Introduction: Pregnancy and the immediate postpartum period are at high risk of decompensating or developing psychiatric disorders. Electroconvulsive therapy (ECT) is an effective treatment for severe and resistant mental disorders and could be a therapeutic option for psychiatric disorders during pregnancy.

Objectives: The aim of our study was to investigate the safety and the efficacy of ECT in pregnant women through a systematic review.

Methods: A systematic review was conducted. PubMed via Medline, Google Scholar and Semantic Scholar were used as search engines. The keywords used were ("Electroconvulsive therapy" or "ECT") and ("pregnancy" or "pregnant"). Clinical trials, case reports and case series assessing the efficacy and safety of ECT during pregnancy, published

from inception to December 2023 and written in English or French were included.

Results: A total of 30 articles were included for the final analysis with a total of 96 cases. The mean age of patients was 30.1 years. ECT was mostly performed during the first trimester of pregnancy with 45.3% of patients. The main psychiatric diagnoses were major depressive disorder with 47.6% of patients, followed by bipolar disorder with 19.3%. The average number of sessions performed was 10.4 with a maximum of 22. A partial improvement or a total resolution of symptoms were noted in 78.6% of cases. Transient fetal arrhythmia (not requiring drug intervention) was the most common complication, occurring in 6.25% of cases (n=6). Fetal death or abortion were observed in 4.1% of cases (n=4).

Conclusions: ECT appears to be an effective treatment for severe psychiatric disorders in pregnant women. However, it needs to be performed as part of a multidisciplinary care team to reduce the risk of serious consequences for both the mother and the fetus.

Disclosure of Interest: None Declared

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Comparison of the clinical efficacy of rhythmic transcranial magnetic stimulation protocols in patients with depression

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Introduction: Transcranial magnetic stimulation (TMS) is a method of non-invasive stimulation of the cerebral cortex with an alternating magnetic field, used in the therapy of patients with depression, including cases where drug therapy is ineffective. The currently widely used high-frequency stimulation protocols with the application of an inductor to the projection of the left dorsolateral prefrontal cortex (LDLPC) have confirmed their effectiveness, while protocols with a significantly shorter procedure time are appearing in clinical practice. In this study, a clinical comparison of two protocols was conducted.

Objectives: To conduct a comparative assessment of the clinical effect of TMS using theta-burst stimulation and high-frequency (10 Hz) stimulation.

Methods: The study included 34 patients (mean age 27.2 ± 2.1 years) with a diagnosis F31-F34 and clinical depression confirmed by psychometric assessment data (HDRS= 21.7 ± 5.6). Patients received stimulation in the projection of the left dorsolateral prefrontal cortex for 3 weeks: 17 patients (group 1) received high-frequency stimulation (10 Hz) and 17 patients (group 2) intermittent theta burst stimulation. Symptom reduction, according to psychometric assessment, corresponding to 50% or more, was chosen as the criterion for response to treatment.

Results: By the end of the study, the number of patients in the total sample who responded to treatment corresponded to 55.9% (n=19).