EPV1640

Transcranial Magnetic Stimulation in Bipolar Depression: retrospective analysis and literature review

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Introduction: Bipolar affective disorder (BD) affects approximately 2% of the population. It's an incapacitating condition that significantly impairs quality of life and functional capacity; depressive episodes in BD are highly debilitating and carry major suicide risk and treatment-resistant bipolar depression has been reported in about one-quarter of patients with bipolar disorders. Non-invasive neuromodulation procedures, such as repetitive transcranial magnetic stimulation (TMS), being an approved treatment for treatment-resistant unipolar depression, can also be an option for bipolar depression.
Objectives: with this work we intend to assess the efficacy and outcomes of the intermittent theta burst TMS (iTBS) protocol in patients with bipolar depression, who underwent this treatment at Hospital de Magalhães Lemos, Porto, since July 2022. We also conducted a literature review on the subject.
Methods: analysis of clinical and sociodemographic characteristics of the 4 patients who underwent treatment and of the treatment outcomes using Beck's Depression Inventory (BDI) score difference between first and last sessions and Montgomery-Asberg Depression Rating Scale (MADRS) as the secondary outcome, the last applied to only 2 of the patients. A computerized search was performed on PubMed, for articles published in the last 10 years, using the key-words "bipolar depression", "bipolar depressive episode" and "tms".
Results: since July 2022, 4 patients with bipolar depression were submitted to iTBS treatment, 3 women and 1 man. Of these, 3 had a diagnosis of bipolar type 1 disorder and 1 of bipolar type 2. One of the women had a comorbid diagnosis of dementia and was not able to answer BDI. All 4 of these patients were referred to this treatment after failure to reach sustained symptomatic remission with at least two different treatment trials, at adequate therapeutic doses. We found positive changes in BDI in all 3 patients that completed this questionnaire and in MADRS in the 2 that answered. One of the patients had an elevated mood and an increase in energy levels following treatment but did not meet criteria for hypomanic/manic episode. No major side effects were reported.
Conclusions: Our results and literature review suggest that TMS, in our study iTBS protocol, may well be an effective treatment for bipolar depression, with some studies showing even higher response rates for bipolar depression when compared with unipolar depression, suggesting that bipolar disorder is more likely a better biological target. Furthermore, the low side effect profile of TMS and the fact that it is a minimally invasive procedure, makes it even more appealing as a treatment option. Risk of psychomotor agitation and hypomania/mania must be closely monitored in these cases.

Disclosure of Interest: None Declared

EPV1642

Effectiveness of Electroconvulsive Therapy in Postpartum Psychosis: A Systematic Review

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Introduction: Postpartum psychosis (PPP) is a psychiatric condition that arises shortly after childbirth. Electroconvulsive therapy (ECT) offers rapid symptom relief, particularly in severe cases. Despite reports of ECT effectiveness in PPP, its use remains limited and unstandardized.
Objectives: This systematic review aims to evaluate the clinical effectiveness of ECT in treating PPP.
Methods: The electronic databases PubMed/MEDLINE, Cochrane, SciELO, SCOPUS, and WOS were screened for studies reporting ECT outcomes in PPP following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Studies published between 2004 and 2024, written in English, and focused on subjects up to 12 months postpartum were included. All studies were vetted by ≥ 2 reviewers. Bias was assessed with the JBI Critical Appraisal Tool.
Results: A total of 255 studies were identified and 7 met the inclusion criteria. ECT was exclusively used in severe PPP refractory to pharmacological intervention. Symptom improvement was reported in 100% of cases and most achieved total remission. Total ECT sessions ranged from 5 to 15, with symptom improvement after 1-6 sessions and remission after 5-11 sessions. ECT side effects were transient and included memory loss, mild cognitive deficit, and pain.
Conclusions: High remission rates on ECT were demonstrated where pharmacological intervention was insufficient, highlighting its effectiveness as a rapid and safe intervention for PPP. Adverse effects were transient and manageable, underscoring ECT safety. Small sample sizes and variability in ECT protocols limit the generalizability of the findings. Further evidence from prospective studies is needed to consider ECT as a first line treatment for PPP.

Disclosure of Interest: None Declared

EPV1643

Deep brain stimulation for obsessive-compulsive disorder : A look back over 24 years of use

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Introduction: Deep brain stimulation (DBS) was first used in 1999 for the treatment of resistant obsessive-compulsive disorder (OCD), and it was not until 2009 that the Food and Drug Administration approved it for this purpose.

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 Frensh 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% ± 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 ("Electroconvuslive 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 Frensh 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

EPV1645

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).