

Introduction: Tourette's syndrome is a neuropsychiatric disorder marked by motor and phonic tics frequently associated with psychiatric comorbidities, beginning in childhood. While most cases improve or resolve with age, some are refractory.

Objectives: To review new strategies for the management of Tourette's Syndrome, following an outpatient clinical vignette.

Methods: We performed a review based on the PubMed® database.

Results: A 50-years-old female patient with a long-term outpatient psychiatric follow-up presented with motor tics appearing in adolescence, including winking and facial grimacing, as well as episodes of coprolalia. Over the years, she developed an anxiety disorder and social isolation. In addition to psychological therapy, pharmacological therapy had already been approached with the use alpha-adrenergic agonists and several antipsychotics, such as risperidone and aripiprazole, with the patient showing only partial response to pimozide. In Tourette's syndrome, the therapy must be adequate to the patient's individual needs. Emerging treatments for refractory cases, such as anticonvulsants, cannabinoids or antiglutamatergic drugs have been the target of several studies. Botulinum toxin injections are particularly effective in patients with focal motor tics and complex phonic tics. Non-pharmacological treatment options, such as electroconvulsive therapy and deep brain stimulation may prove effective in some cases.

Conclusions: A significant proportion of patients fail to respond to conventional strategies. Thus, new pharmacological and non-pharmacological therapies are on the horizon and may represent an important step in treatment algorithms for refractory cases in the future.

Keywords: Deep brain stimulation; antiglutamatergic; Tourette syndrome; Tics

EPP1081

Predictors of response to electroconvulsive therapy and its importance in the treatment of patients with obsessive-compulsive disorder

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Introduction: Electroconvulsive therapy (ECT) presents itself as a highly effective therapeutic approach in various psychiatric conditions, especially affective disorders and catatonia. Although obsessive-compulsive disorder (OCD) is not an established indication for ECT, there are several positive results that have been replicated, giving us an account of its potential applicability.

Objectives: To emphasize the importance of defining predictors of response to ECT in OCD.

Methods: The authors' clinical experience is combined with the review of clinical cases, available in the literature, related to the application of ECT in OCD.

Results: Personal or family history of affective pathology and obsessions of sexual content were identified as potential predictors of response to ECT in patients with obsessive and compulsive symptoms.

Conclusions: Although preliminary and based solely on case reports, the replicability of results should promote special attention to situations in which OCD is marked by particular characteristics that favor the response to ECT. In this way, it would be possible to prevent the dragged consumption of health resources and minimize the expected chronicity associated with this clinical condition.

Keywords: obsessive-compulsive disorder; Electroconvulsive therapy

EPP1082

Cortical excitability and its modulation in obsessive-compulsive disorder - a systematic review

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Introduction: Obsessive-Compulsive Disorder (OCD) is an incapacitating Neuropsychiatric condition characterized by the presence of obsessions and/or compulsions. Although the disorder's phenotype is well described, its pathophysiology remains elusive (Aouizerate et al, 2004). Over the last decade, techniques to noninvasively study the brain's neurophysiology, such as Transcranial Magnetic Stimulation (TMS), have found widespread use in psychiatric research. For OCD, single- and paired-pulse TMS protocols have been used to explore abnormalities in motor cortex excitability and cortical neuroplasticity. Here we propose to systematically review and, where possible, meta-analyse existing case-control studies that compared such measures in patients and healthy subjects.

Objectives: To systematically review and meta-analyse published case-control studies comparing cortical excitability measures, as measured by single- or paired-pulse TMS, in subjects with OCD and healthy controls.

Methods: We have conducted a systematic review of published literature (PROSPERO registration CRD42020201764) reporting measures of cortical excitability as measured by single or paired-pulse TMS, in patients with OCD and healthy controls. We searched 4 different electronic libraries (PubMed, Web of Science, EMBASE, PsycINFO). The resulting list of articles was reviewed, separately, by two researchers. Disagreements were discussed and resolved by consensus, until a final list of eligible articles was obtained.

Results: 13 studies reporting motor cortex excitability measures were included in our final list. The total number of participants included in our analyses is 615 (349 OCD; 180 healthy subjects; 86 other conditions)

Conclusions: A sufficient number of studies was found to allow for meta-analyses, currently ongoing.

Keywords: Obsessive-Compulsive disorder; transcranial magnetic stimulation; Neurophysiology; Cortical excitability

EPP1083

Electroconvulsive therapy in the psychiatric department of the Mahdia EPS over two years

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Introduction: The electroconvulsive therapy is an ancient therapeutic technique used in the treatment of certain psychiatric diseases.

Objectives: discuss the technical aspects, indications, therapeutic response and tolerance of ECT

Methods: This was a descriptive retrospective study that interested all patients who were hospitalized in the psychiatric department of the Mahdia University Hospital in 2017 and 2018 and were benefited from ECT sessions

Results: The number of patients who received ECT was 34, representing 4.33% of patients, 25 men and 9 women with an average age of 39, the number of ECT sessions was 785. The major diagnosis was bipolar disorder in 47,1% of patients, followed by schizophrenia in 35,3% and major depressive disorder in 14,7 %. Resistance to treatment and major suicidal risk were the main indications. All sessions were performed in a bilateral temporal mode. the initial energy delivered varied between 50 and 101 millicoulombs. The duration of the crisis obtained was predominantly between 21 and 30 seconds. The average number of sessions during the attack phase was 13.88, whereas it was 2.5 sessions during the consolidation phase. The mean scores of the psychometric evaluations showed a marked improvement, especially in the mania scores (65.89%) and the beck depression inventory (63.55%). Only four incidents were reported in all patients. Only five patients (14,7%) had side effects and the most marked effect was anterograde amnesia.

Conclusions: Mental health programs in Tunisia should promote the generalization of this method throughout the Tunisian territory, given the efficacy demonstrated in mood disorder, several psychoses and other psychiatric pathologie.

Keywords: electroconvulsive therapy; Treatment; Suicide; bipolar disorder

EPP1084

Transcranial magnetic stimulation in the management of autism spectrum disorder: Narrative review

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Introduction: Fifty years ago, the estimated prevalence of autism was 30-60 per 10,000; now, it has increased to 18.5 per 1,000. Autism disorders are 4.3 times as prevalent among boys as among girls.

Objectives: This systematic review provides an overview of the management of AD with Transcranial Magnetic Stimulation.

Methods: A systematic review was conducted using (“Autism spectrum disorder” AND “Repetitive Transcranial Magnetic stimulation” AND “RTMS” OR “Children and adolescent”) in PubMed, Embase, and PsycINFO, resulted in 453 hits and finally qualified 18 studies.

Results: We found 18 eligible studies, 8 randomized controlled clinical trials, 10 non-controlled clinical trials comparing TMS effects with waiting-list controls (n = 6), sham-treatment (n = 8) and no control group (n=4). There was a significant reduction of repetitive, stereotyped behaviors, irritability, social behavior, and executive function improvements with a medium-size effect. Eleven studies in this review had a moderate to high risk of bias due to small sample size, lack of blinding to treatment, and inadequate follow-up period. Four studies reported the stability of these gains in clinical outcomes for more than six months with no clarification after that.

Conclusions: The data encourages the potential safety and efficacy; it provides significant evidence to support TMS's efficacy in symptom severity reductions and improved clinical outcomes in children with autism. Therefore, future large-scale randomized controlled trials are required to conclude intervention efficacy in a larger sample size further.

Keywords: TMS; Children; Autism spectrum disorder; Repetitive Transcranial Magnetic stimulation

EPP1087

Personality and psychophysiological self-regulation influence individual efficacy of neurofeedback in tension-type headache

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Introduction: Due to limited efficacy and side effects of pharmacological therapy in tension-type headache (TTH), alternative approaches are feasible. Neurofeedback is a noninvasive neuromodulation technique increasingly used in practice, but, however, there is limited research on its efficacy.

Objectives: To evaluate the efficacy of neurofeedback in TTH and to reveal the factors moderating treatment effects.

Methods: We analyzed the data from a pilot phase of an ongoing single case design cross-over sham-controlled study. Four females with TTH underwent 10 sessions of neurofeedback and 10 sessions of sham-neurofeedback in a randomized order. Participants filled a detailed headache diary 3 weeks before, during and 3 weeks after the treatment. At enrollment, we evaluated the personality factors with the MMPI, and performed a specially developed test on psychophysiological regulation of breath.