

## Psychosurgery and Stimulation Methods (ECT, TMS, VNS, DBS)

### EPV0845

#### Non MRI Guided Accelerated Intermittent Theta Burst Stimulation is Effective in Patients with Treatment Resistant Depression and Suicidality

A. E. Zayed\*, M. M. Bassiony, U. M. Youssef, G. M. Salah Eldeen, H. M. Elgohary, M. G. Sehlo and O. A. Hefny

Psychiatry, Zagazig University, Zagazig, Egypt

\*Corresponding author.

doi: 10.1192/j.eurpsy.2024.1459

**Introduction:** The U.S. Food & Drug Administration (FDA) has cleared SNT (Stanford Neuromodulation Therapy) for treatment of major depressive disorder (MDD) in adults who have failed to achieve improvement from at least two prior trials of antidepressants. SNT protocol requires both structural and functional connectivity MRIs which is limited by high cost and lack of availability, its use without neuronavigation is still considered an off label use and need more investigation.

**Objectives:** 1-To investigate efficacy of SNT like accelerated off-label protocol without Neuronavigation in treating patients with TRD and suicidality.

2-To investigate durability ( up to one month ) of SNT like accelerated off-label protocol without Neuronavigation in treating patients with TRD and suicidality

**Methods:** Two cases diagnosed as treatment resistant unipolar depression with suicidal ideations received accelerated intermittent theta burst stimulation (a iTBS); with figure of eight coil administered to the left dorsolateral prefrontal cortex (DL-PFC) determined using Beam method. Stimulation was at 90% MT for 1800 pulses with an intersession interval of fifty minutes. Patients received ten sessions every day for five consecutive days for a total of fifty sessions (90,000 pulses). The following scales were applied at the baseline and at the end of each day of five treatment days: The Montgomery and Asberg Depression Rating Scale (MADRS) The Beck Depression Inventory, Columbia Suicide Severity Rating Scale (C-SSRS) and Young Mania Rating Scale (YMRS).

**Results:** The two cases at the end of the fifth day were completely improved regarding both suicidal ideations and depression without emerging of hypomania. Follow up was done weekly for one month with durable results.

**Conclusions:** SNT protocol without neuronavigation needs to be well investigated in suppressing both suicidality and depression in patients with TRD.

**Disclosure of Interest:** None Declared

### EPV0844

#### Non-Invasive Brain Stimulation for Perinatal Depressive Disorder: A Literature Review

C. Pinheiro Ramos\*, M. Alves, D. Durães, S. Mendes and A. Gamito Setúbal Hospital Center, Setúbal, Portugal

\*Corresponding author.

doi: 10.1192/j.eurpsy.2024.1460

**Introduction:** Peripartum Depressive Disorder (PPD) is a Peripartum Mental Disorder (PMD) characterized as a Major Depressive Disorder (MDD), wherein the manifestation of depressive symptoms initiates either during pregnancy or within the first 12 months following childbirth.

PPD impacts both maternal well-being and infant health, resulting in unfavorable outcomes during pregnancy and the postpartum period.

Non-Invasive Brain Stimulation (NIBS) is one of the rapidly expanding fields in medicine, using a range of techniques to modulate the brain.

**Objectives:** This study aimed to summarize the latest evidence about the impact of NIBS (efficacy, tolerance, and safety) in PPD.

**Methods:** A review was conducted, drawing on reputable (PubMed and Web of Science databases).

Key brain stimulation modalities, such as Transcranial Magnetic Stimulation (TMS), Transcranial Electrical Stimulation (TES), and Electroconvulsive therapy (ECT) were analyzed in the context of PPD.

**Results:** Preliminary findings indicate promising positive effect of NIBS in reducing symptoms associated with PPD.

In the postpartum, the favorable outlook on the effectiveness of NIBS implies that, when feasible, women diagnosed with mild to moderate PPD, especially those reluctant to initiate pharmacological interventions, should be presented with TMS or TES as an alternative therapeutic approach.

However, some doubts persist about the safety of NIBS regarding fetus and preterm birth.

**Conclusions:** NIBS constitutes a viable option for pharmacological and psychotherapeutic interventions, and it can also be integrated into comprehensive treatment regimens.

Future research include large-scale clinical trials and longitudinal studies is needed to address the efficacy, security, and long-term effects of NIBS.

**Disclosure of Interest:** None Declared

### EPV0845

#### The perception of Romanian mental health professionals on electroconvulsive therapy

C. E. Anghel<sup>1,2\*</sup> and C. Băcilă<sup>1,2</sup>

<sup>1</sup>Faculty of Medicine, The "Lucian Blaga" University and <sup>2</sup>Scientific Research Collective in Neurosciences - The "Dr. Gheorghe Preda" Clinical Hospital of Psychiatry, Sibiu, Romania

\*Corresponding author.

doi: 10.1192/j.eurpsy.2024.1461

**Introduction:** The journey for the electroconvulsive therapy began in 1938, when convulsive seizures induced by electrical stimulus were used, for the first time, in the therapy of patients diagnosed with Schizophrenia. Over the time, this therapy remains an important one, due to its applicability and necessity in the therapeutic management of patients with psychiatric pathology.

**Objectives:** Electroconvulsive therapy has evolved as a technique, nowadays being applied under induced intravenous anesthesia with the administration of oxygen on the mask, and from 2001, the sinus electrical stimulus has been replaced by the one in the form of a short pulse, upon the recommendation of professional organizations, in order to increase its therapeutic effectiveness. However, this form of therapy continues to be stigmatized, largely due to the

way it is presented in the mass media. The objective of this work was to analyze how mental health professionals perceive electroconvulsive therapy.

**Methods:** We conducted a study in which we used a questionnaire applied to the Romanian professionals in the field of mental health.

**Results:** The results were analyzed in accordance with the objective of the study.

**Conclusions:** Through this analysis we wanted to understand how electroconvulsive therapy is seen through the eyes of mental health professionals and to identify those aspects that can help us in carrying out information programs, with a major impact on mental health, in order to reduce stigma forasmuch the therapeutic benefits of electroconvulsive therapy outweigh the possible risks.

**Disclosure of Interest:** None Declared

## EPV0846

### Experiences and attitudes of early career psychiatrists towards ECT – an international study

C. Tapoi<sup>1\*</sup>, C. Noël<sup>2,3</sup>, R. de Filippis<sup>4</sup>, D. Gurrea Salas<sup>5</sup>, K. Mize<sup>6</sup>, D. Almeida<sup>7</sup>, A. Pushko<sup>8</sup>, A. Wilkowska<sup>9</sup>, M. E. Gołębiewska<sup>10</sup>, L. Alexander<sup>11</sup> and M. Pinto da Costa<sup>11,12</sup>

<sup>1</sup>Department of Psychiatry, Prof. Dr. Dimitrie Gerota Emergency Hospital, Bucharest, Romania; <sup>2</sup>Department of Psychiatry, Centre Hospitalier Universitaire Saint-Pierre, Université Libre de Bruxelles, Bruxelles; <sup>3</sup>Child and Adolescent Psychiatry Hospital La Petite Maison, Chastre, Belgium; <sup>4</sup>Department of Health Sciences, University Magna Graecia of Catanzaro, Catanzaro, Italy; <sup>5</sup>Department of Addictive Disorders, Psychiatric Services Aargau, Brugg, Switzerland; <sup>6</sup>Department of Doctoral Studies, Riga Stradins University, Riga, Latvia; <sup>7</sup>Department of Psychiatry and Mental Health, Hospital de Loures, Loures, Portugal; <sup>8</sup>National Medical University, Communal Non-Commercial Enterprise Precarpathian Regional Clinical Center for Mental Health of the Ivano-Frankivsk Regional Council, Ivano-Frankivsk, Ukraine; <sup>9</sup>Department of Psychiatry; <sup>10</sup>Department of Developmental, Psychotic, and Geriatric Psychiatry, Medical University of Gdańsk, Gdańsk, Poland; <sup>11</sup>Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, United Kingdom and <sup>12</sup>Institute of Biomedical Sciences Abel Salazar, University of Porto, Porto, Portugal

\*Corresponding author.

doi: 10.1192/j.eurpsy.2024.1462

**Introduction:** Electroconvulsive therapy (ECT) is a psychiatric intervention that has proven effectiveness and safety in various psychiatric conditions, such as major depressive disorder, prolonged or severe manic episodes and catatonia. Despite positive scientific evidence, ECT was always seen as controversial by patients, caregivers, and even some psychiatrists, which lead to a decrease in its use over the years.

**Objectives:** To investigate the way young psychiatrists view the place of ECT in modern psychiatry by assessing their knowledge, attitude and access to training opportunities in ECT.

**Methods:** An anonymous survey was disseminated online among early career psychiatrists and psychiatric trainees. The questionnaire consisted of 36 multiple-choice and Likert scale questions.

**Results:** Most of our respondents consider ECT both an effective and a safe treatment option and would recommend ECT to their patients when indicated. Early career psychiatrists who had access to ECT training are more knowledgeable about the indications,

precautions and side effects of this method, but more than half of the participants mentioned ECT training was unavailable during their residency programme. Almost all respondents stated that they are interested in enhancing their theoretical and practical competencies in ECT.

**Conclusions:** Early career psychiatrists have a positive attitude towards ECT but express the need of targeted education aimed at improving levels of knowledge about ECT.

**Disclosure of Interest:** None Declared

## EPV0847

### Vagus nerve stimulation (VNS) as a long-term adjunctive treatment option in patients with difficult-to-treat depression (DTD)

E. Kavakbasi<sup>1\*</sup>, H. Bauermeister<sup>1</sup>, L. Lemcke<sup>2</sup> and B. T. Baune<sup>1,3,4</sup>

<sup>1</sup>Department of Psychiatry; <sup>2</sup>Department of Neurosurgery, University Hospital Münster, University of Münster, Münster, Germany; <sup>3</sup>Department of Psychiatry, Melbourne Medical School, The University of Melbourne, Melbourne and <sup>4</sup>The Florey Institute of Neuroscience and Mental Health, The University of Melbourne, Parkville, Australia

\*Corresponding author.

doi: 10.1192/j.eurpsy.2024.1463

**Introduction:** VNS is a long-term adjunctive treatment option in patients with DTD. It has been shown that patients with VNS as add-on to treatment-as-usual (TAU) have higher response and remission rates than TAU alone. Data on the impact of VNS on the other complex concomitant treatments are limited.

**Objectives:** In this study we evaluated changes in drug load from baseline to 12 months as well as the impact of previous ECT response status at baseline on changes in mean depression severity after 12 months of VNS.

**Methods:** We included n=20 DTD patients (mean age 52.6 years) in the prospective, observational, naturalistic Restore-Life study, who have been treated with adjunctive VNS as add-on to treatment as usual. The RESTORE-Life study is a multi-center study. In this analysis, we report on exploratory results from a single tertiary center. An index has been calculated for each drug by comparing the actual dose with the standard dose of the drug. The drug load for each patient has been constructed by summing up the indices of all agents prescribed for the patient.

**Results:** We observed a slight decrease in mean drug load from 4.5 at baseline to 4.4 at 12 months (p=0.594). The drug load was lower in previous ECT-responders than in ECT-non-responders at both time-points. There was a significant decrease in mean MADRS score from 27.3 at baseline to 15.3 at 12 months (p=0.001). Patients with a history of ECT response at baseline have experienced significantly greater improvement in mean MADRS score at 12 months (p=0.013). Number of maintenance electroconvulsive therapy (ECT) and esketamine sessions decreased from 37 ECT and 58 esketamine sessions in the first six months to 17 ECT (-54%) and 29 esketamine (-50%) sessions between months 6 and 12. VNS-related adverse events were present in 50 % of patients at 12 months (voice alteration/hoarseness 45%, dyspnea and pain during stimulation each 5%). There was no discontinuation of VNS due to adverse events.

**Conclusions:** Overall, VNS was associated with significant decrease in mean MADRS score at 12 months, whereas we did not detect any