

were reported as mean differences for continuous outcomes and odds ratios for binary outcomes; each with a 95% credible interval.

RESULTS: Lurasidone had significantly greater improvement compared with placebo for PANSS (-7.95 [-11.76, -4.16]) and CGI-S (-0.44 [-0.67, -0.22]), but did not differ from comparators. The differences in weight gain for lurasidone relative to comparators were as follows: clozapine (-3.81kg [-8.03, 0.42]), olanzapine (-3.62kg [-4.84, -2.41]), quetiapine (-2.13kg [-3.20, -1.08]), risperidone (-1.16kg [-2.14, -0.17]), asenapine (-0.98kg [-1.71, -0.24]), paliperidone (-0.85kg [-1.57, -0.14]), aripiprazole (-0.15kg [-0.88, 0.58]), and ziprasidone (0.38kg [-0.49, 1.24]); all were statistically significant except for clozapine, aripiprazole, and ziprasidone. Rates of all-cause discontinuation and extrapyramidal symptoms were similar for lurasidone and comparators, except aripiprazole and paliperidone, which had higher rates of all-cause discontinuation.

CONCLUSIONS: In this network meta-analysis of atypical antipsychotics for the treatment of adolescent schizophrenia, lurasidone was associated with similar efficacy, but less weight gain than active comparators.

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110 Increased Intracranial Pressure induced Mal de Debarquement Syndrome

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ABSTRACT: Study Objective: Mal de Debarquement Syndrome (MdDS) is a prolonged rocking or swaying type of imbalance that occurs after lengthy exposure to motion, yet ensuing in the absence of motion. The provoking motion is most commonly following sea travel. MdDS has not heretofore been described in association with increased intracranial pressure. Such a case is presented.

METHODS: Case Study: A 46-year-old female, with a history of hydrocephalus after infantile meningitis with ventriculoperitoneal shunt placement and multiple revisions, has a constant feeling of 'rocking side to side'. One year and one-half year prior to presentation, she suffered two epochs of severe bilateral headaches coinciding with, as she describes, "the feeling of rocking, as if on a ship". Both of these episodes were constant and lasted all day,

progressively increasing in intensity for one week. During these events, she admits to nausea, but denied any vomiting, spinning, epigastric rising, or déjà vu or jamais vu. During the epochs there was no tinnitus, orthostatic hypertension, visual obscuration, loss of consciousness, syncope, seizures, weakness or falls. Prior to, or associated with the swaying sensation, she denies lightheadedness, pallor, salivation, blurred vision, tachycardia, visual auras or other neurological auras. There were no alleviating or aggravating factors, and were unrelated to position change, head movement, neck extension or rotation, coughing, or urination. She denies any recent air-travel, diving, sleeping on a waterbed, or alcohol use. In both epochs, shunt malfunction and associated increased intracranial pressure were discovered. Immediate resolution of the headache and dizziness episodes were achieved after shunt revision with correction of increased intracranial pressure.

RESULTS: Abnormalities in Cranial Nerve (CN) Examination: CN I: Alcohol Sniff Test: 14 (hyposmia). CN II: Visual Acuity OS 20/25. CN III, IV, VI: Saccadization of horizontal eye movement. Bilateral ptosis left > right. CN IX, X: Uvula deviated to the right. Motor Examination: Drift Testing: Left upward and outward drift with left Abductor Digiti Minimi sign. Reflexes: 3+ throughout.

CONCLUSIONS: Typically seen in middle aged woman, MdDS is a rare, self-limiting condition in which an abnormal sensation of rocking or swaying back and forth is perceived after exposure to air, car, land or sea travel (Nwagwu 2015). The phantom perception of self-motion occurs upon return to ground (Nwagwu 2015). This has been postulated to be due to maladaptation of the vestibulo-ocular reflex (Hain 2016) or disorder of connection between the entorhinal cortex and amygdala (Cha 2012). Increased intracranial pressure can affect the entire neural axis, including brainstem and cortical areas associated with MdDS. In those who present with intractable MdDS, measurement of intracranial pressure and treatment of any elevations may be warranted.

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111 A Novel Dual-Channel Deep Transcranial Magnetic Stimulator for Major Depressive Disorder

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ABSTRACT: Background: Repetitive deep transcranial magnetic stimulation (dTMS) is efficacious for treatment resistant major depressive disorder (TRD) with the H1 coil by stimulating the prefrontal cortex, left more than right, at high frequency. Theoretically, the efficacy of dTMS could be optimized by simultaneously stimulating the right and left lateral prefrontal cortices (PFC) with different frequencies. This study tested the efficacy of a novel dual-channel dTMS stimulator with dual dTMS coils, in patients with TRD.

METHODS: This study recruited forty-seven outpatients diagnosed with TRD, age 18-65, Hamilton Depression Rating Scale (HDRS-21) score ≥ 25 . Each patient received 20 open label treatment sessions, five days a week for 4 consecutive weeks. Treatments were administered with the dual-channel stimulator (Brainsway Multiway dTMS device) using two channels: a. 10 Hz over the left PFC. b. 1 Hz over the right PFC. Primary and secondary efficacy outcome measures were the change in HDRS-21 score and response/remission rates at week 5, respectively.

RESULTS: The HDRS-21 score decreased from an average of 25.94 to 14.69 ($P < 0.001$). Thirty-six patients completed four weeks of treatment. Of them, seventeen (47%) responded (HDRS-21 score decrease of $\geq 50\%$ from their initial score) and eight (22%) remitted (HDRS-21 score of < 10 at the end of the study).

DISCUSSION: This open study shows promising results for multichannel simultaneous dTMS treatment of TRD using the Brainsway Multiway Device. Further randomized controlled studies are necessary to aid the high number of patients with TRD.

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112 Healthcare Utilization and Costs for Patients With Tardive Dyskinesia

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ABSTRACT: Introduction: Tardive dyskinesia (TD) is an often-irreversible movement disorder that usually results from prolonged use of antipsychotics. Although the burden of TD on patients' quality of life has been reported, there is limited evidence of its impact on the healthcare system.

OBJECTIVE: To assess healthcare utilization and costs between TD and non-TD patients in a sample of patients from the commercially insured and Medicare Supplemental US populations.

METHODS: A retrospective cohort analysis was conducted using Truven MarketScan Commercial/Medicare claims data. For each patient included in the analysis, the index date was set as the first TD diagnosis between 1/1/2008 and 9/30/2014. Patients with TD were then matched to similar patients without TD to compare resource utilization and costs. Descriptive statistics on the incidence of resource utilization and costs of healthcare were reported.

RESULTS: A total of 1020 patients were included in this analysis. TD patients had significantly greater annual all-cause (TD: \$54,656; non-TD: \$28,777) and mental health-related (TD: \$10,199; non-TD: \$2,605) healthcare costs compared with non-TD patients ($P < 0.01$). This was primarily because a higher proportion of the TD patients experienced hospitalizations (all-cause 56%; mental health 17%) and emergency room visits (all-cause 62%; mental health 27%) compared with non-TD patients (hospitalizations: all-cause 26%, mental health 5%; emergency room visits: all-cause 41%; mental health 13%) (all $P < 0.001$).

CONCLUSIONS: Patients identified as being diagnosed with TD demonstrate significantly higher healthcare utilization and costs in the 12 months after diagnosis than do similar patients without TD.

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113 Dasotraline for the Treatment of Moderate to Severe Binge Eating Disorder in Adults: Results From a Randomized, Double-Blind, Placebo-Controlled Study

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