participating in healthylifestyle activities more frequently post-intervention when analyzed on the TTM continuum. Further studies are needed to analyze the most effective strategies to assist individuals in rural settings to make healthier lifestyle choices.

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Lurasidone in Children and Adolescents With Bipolar Depression Presenting With Mixed Features

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ABSTRACT: Objective: To evaluate the efficacy and safety of lurasidone in the treatment of children and adolescents with bipolar depression presenting with mixed features.

METHODS: Patients 10 to 17 years of age, inclusive, with a DSM-IV-TR diagnosis of bipolar I depression, were randomized to 6 weeks of double-blind treatment with once-daily, flexible doses of lurasidone 20-80 mg or placebo. The presence of mixed features (subthreshold hypomanic symptoms) was defined as a YMRS score > 5 at study baseline. Efficacy analyses included change from baseline to week 6 in Children Depression Rating Scale, Revised (CDRS-R) score (the primary outcome), and Clinical Global Impressions, Bipolar Severity of Depression Score (CGI-BP-S), using mixed model for repeated measures (MMRM) analysis.

RESULTS: At baseline, mixed features were present in 54.2% of patients (lurasidone, n = 97/173; placebo, n = 89/170). Treatment with lurasidone (vs placebo) was associated with significantly greater reductions in CDRS-R scores at week 6 in the mixed features group (-21.5 vs -15.9; P < 0.01; effect size, 0.45), and in the group without mixed features (-20.4 vs -14.8; P < 0.01; effect size, 0.45). Likewise, lurasidone was associated with greater effect size (vs placebo) for reductions inCGI-BP-S scores at week 6 in the mixed features group (-1.6 vs -1.1; P < 0.001; effect size 0.57), and in the group without mixed features (-1.3 vs -1.0; P = 0.05; effect size 0.30). Rates of protocol-defined treatment-emergent hypomania or mania were similar for lurasidone and placebo in patients with mixed features(lurasidone 8.2% vs. placebo 9.0%) and without mixed features (lurasidone 1.3% vs. placebo 3.7%).

CONCLUSIONS: In this post-hoc analysis, lurasidone was found to be efficacious for treating child and adolescent patients with bipolar depression presenting with mixed features(assessed cross-sectionally at study baseline). There was no increased risk of treatment-emergent mania observed in patients with or without mixed features.

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Comparative Efficacy and Tolerability of Lurasidone Versus Other Oral Atypical Antipsychotics for Pediatric Schizophrenia: A Network Meta Analysis

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ABSTRACT: Study Objective: This analysis assessed the relative efficacy and tolerability of lurasidone versus other atypical antipsychotics in the treatment of pediatricschizophrenia.

METHODS: A systematic literature review identified 13 randomized-controlled trials for the treatment of pediatric schizophrenia. A Bayesian network meta-analysis compared the efficacy and tolerability of the following atypical antipsychotics: aripiprazole, asenapine, clozapine, lurasidone, olanzapine, paliperidone, quetiapine, risperidone, andziprasidone. Patients were 7-17 years old and trial duration ranged from 6-12 weeks. Outcomes included Positive and Negative Syndrome Scale (PANSS), Clinical Global Impressions-Severity (CGI-S), weight gain, all-cause treatment discontinuation, and extrapyramidal symptoms. Results from the fixed effect models

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

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