

(21.2%). In addition, females involved in leadership activities were significantly less likely to report depressive symptoms (21.9%) than those who were not involved in these activities (28.7%). Consistent with previous research, females were more likely to report depressive symptoms than males. Females also were more likely to participate in arts and leadership activities.

CONCLUSION: For males and females, sports participation, and for females, involvement in leadership activities, may represent protective factors against depressive symptoms during adolescence. However, clinicians might consider inquiring about depressive symptoms among adolescent males involved in art-related activities.

ORIGINAL CITATION:

Waler A, Taliaferro L. Extracurricular Activity Involvement and Depression Among High School Students. Oral presentation and poster presentation, 10th Annual FIRE Conference, Orlando, Florida. February 21, 2019.

103

Atypical Progressive Bulbar Palsy presenting with Dropped Head

Alexander Carvajal-González, MD, PhD¹; and Antonio H Iglesias, MD²

¹ Assistant Professor, School of Medicine, Universidad El Bosque, Bogotá, Colombia

² Associate Professor, Neurology Department, Loyola University Medical Center, Chicago, USA.

ABSTRACT: Introduction: Typical amyotrophic lateral sclerosis (ALS) presents on neurological examination with specific signs of upper and lower motor neuron degeneration (Brooks et al, 1995), which can account for 85% of patients with ALS (Turner and Talbot, 2013). There are different types of clinical presentations, including progressive bulbar palsy (PBP), Limb-onset ALS, progressive muscular atrophy (PMA) and upper motor neuron (UMN) predominant ALS. PBP has mainly brainstem signs. There are a few case reports of dropped head syndrome in ALS, mainly in patients with the limb involvement variant.

METHODS: Case report

RESULTS: A 56 year old right-handed male, presented to the clinic with four months of dysphagia to liquids and solids, neck pain and progressive neck weakness causing constant drop head. No dysarthria or other neurological symptoms, no dyspnea. Neurological examination: Cranial Nerve (CN) CN XII: Nasal voice, bilateral atrophy of the tongue with tremor and fasciculations. Motor: Diffuse atrophy and decreased tone of the sternocleidomastoid and trapezii bilaterally, strength: 2/5 in neck flexors and

extensors. Sensory: Hypoesthesia of the tongue. The rest of his neurological examination was normal. Labs: Routine blood work, thyroid function tests, collagen vascular work-up, and protein electrophoresis were normal. Creatine Phosphokinase (CPK) and Acetylcholine Receptor Antibodies (AChR Ab) were negative. Brain and Spinal Cord MRI: Showed mild brainstem, cerebellar and cervical spinal atrophy.

CONCLUSIONS: Patients with ALS initially present with symptoms localized to the limbs or bulbar muscles. A very small percentage 1-2% of ALS patients had neck muscle weakness with head drop (Jokelainen et al, 1977; Gourie-Devi et al, 2003). However, in all the previously reported cases, the patients had limb involvement at the time of presentation which was absent in this case, and the head drop occurred after the onset of symptoms (Lange et al, 1986; Katz et al; 1996). Dropped head syndrome can be seen in inflammatory myopathies, myasthenia gravis, facioscapulohumeral muscular dystrophy, spinal muscular atrophy, nemaline myopathy and carnitine deficiency (Umapathy et al, 2003) but ALS should also be considered in patients with atypical presentations.

104

Long-term Efficacy of Lurasidone in Antipsychotic-naïve vs. Antipsychotic-exposed Adolescents with Schizophrenia: Analysis of a Two-Year Study

Christoph U. Correll, MD¹; Robert Goldman, PhD²; Michael Tocco, PhD²; Jay Hsu, PhD²; and Andrei Pikalov, MD, PhD²

¹The Zucker Hillside Hospital, Department of Psychiatry, Northwell Health, Glen Oaks, NY, USA; Hofstra Northwell School of Medicine, Department of Psychiatry and Molecular Medicine, Hempstead, NY, USA; and Charité Universitätsmedizin, Department of Child and Adolescent Psychiatry, Berlin, Germany

²Sunovion Pharmaceuticals Inc, Fort Lee, NJ and Marlborough, MA

ABSTRACT: Background: Early-onset schizophrenia is characterized by greater severity and more functional impairment than adult-onset schizophrenia. Few studies have prospectively evaluated short- or long-term antipsychotic efficacy in treatment-naïve (vs. previously treated) first-episode schizophrenia. The aim of this post-hoc analysis was to evaluate the long-term efficacy of lurasidone in antipsychotic-naïve adolescents with schizophrenia.

METHOD: Patients aged 13-17 years with schizophrenia were randomized to 6 weeks of double-blind (DB), fixed-dose treatment with lurasidone (40 mg/day or 80 mg/day) or placebo. Six-week completers were eligible to enroll in an open-label (OL), flexible dose 2-year

lurasidone treatment study. Efficacy over 104 weeks of OL treatment with lurasidone was evaluated for 2 patient groups based on treatment status prior to entering the initial DB study (treatment-naïve [TN] vs. treated previously [TP]). Treatment-naïve was defined as never having received antipsychotic treatment prior to randomization. Efficacy measures included the PANSS total score and the Clinical Global Impressions-Severity (CGI-S) score. Treatment response was defined as $\geq 20\%$ reduction from baseline in PANSS total score.

RESULTS: A total of 50 TN and 221 TP patients completed the 6-week DB study and entered the extension study; and 30 (60.0%) TN and 126 (57.0%) TP patients completed 104 weeks. In the ITT population of the initial DB study, treatment with lurasidone (vs. placebo) yielded larger effects at DB endpoint on the PANSS total score in the TN group (-25.0 vs. -14.4; $P < 0.02$; effect size [ES]=0.75) compared to the TP group (-17.3 vs. -10.0; $P < 0.001$; ES=0.45); and in the CGI-S score in the TN group (-1.07 vs. -0.28; $P = 0.002$; ES=0.97) compared to the TP group (-0.91 vs. -0.55; $P = 0.005$; ES=0.38). During OL treatment with lurasidone, the magnitude of improvement from DB baseline continued to be somewhat larger in the PANSS total score for TN patients ($n=38$) vs. TP patients (151) at week 52 (-32.6 vs. -28.1) and week 104 (-33.6 vs. -29.2); and in the CGI-S score for TN vs. TP patients at week 52 (-2.1 vs. -1.5) and week 104 (-2.1 vs. -1.6). Responder rates during treatment with lurasidone were 72.0% (TN group) and 61.1% (TP group) at OL baseline (number-needed-to-treat [NNT]=10), 100% and 90.1% at week 52 [NNT=11], and 100% and 88.9% at week 104 [NNT=11]. During OL treatment, the most common adverse events for TN vs. TP patients were headache (26.0% vs. 23.5%), nasopharyngitis (24.0% vs. 5.4%), nausea (16.0% vs. 11.8%), and dizziness (16.0% vs. 4.1%).

CONCLUSION: In this post-hoc analysis of a 2-year OL extension study, antipsychotic-naïve adolescents with schizophrenia responded well to treatment with lurasidone at doses of 40 mg/day or 80 mg/day. TN patients achieved greater improvement than TP patients during acute treatment; and these greater treatment effects were largely maintained during 2 years of continued treatment with lurasidone.

Funding Acknowledgements: Supported by funding from Sunovion Pharmaceuticals Inc

105 Health-Related Quality of Life in Patients with Possible Tardive Dyskinesia Based on Patient and Clinician Assessments

Andrew J. Cutler, MD¹; Stanley N. Caroff, MD²; Huda Shalhoub, PhD³; William R. Lenderking, PhD⁴; Ericha Franey, PhD⁵; and Chuck Yonan, PharmD⁶

¹ Clinical Associate Professor of Psychiatry, SUNY Upstate Medical University, Syracuse, NY

² Professor, Department of Psychiatry, Perelman School of Medicine and Corporal Michael J. Crescenz Veterans Affairs Medical Center, University of Pennsylvania, Philadelphia, PA

³ Research Scientist, Patient Centered Research, Evidera, Waltham, MA

⁴ Vice President and Executive Director, Patient-Centered Research, Center of Excellence for Outcomes Research, Evidera, Waltham, MA

⁵ Manager, Medical Affairs, Neurocrine Biosciences, Inc., San Diego, CA

⁶ Senior Director, Neurocrine Biosciences, Inc., San Diego, CA

ABSTRACT: Study Objective: Tardive dyskinesia (TD) is a persistent and potentially disabling movement disorder associated with prolonged antipsychotic use. RE KINET, a real-world screening study of antipsychotic-treated outpatients, included patients with movements that were clinician-confirmed as possible TD (Cohort 2) and patients with no involuntary movements (Cohort 1). Baseline data from the patient rated EuroQoL 5-Dimension 5-Level questionnaire (EQ-5D-5L) and Sheehan Disability Scale (SDS) were analyzed to evaluate health related quality of life (Cohort 2 vs. Cohort 1) and the effects of possible TD on quality of life (Cohort 2).

METHODS: Assessments included EQ-5D-5L utility score (0=equivalent to death to 1=perfect health); SDS total score (0=no impact to 30=highest impact); patient- and clinician-rated severity of possible TD in 4 body regions (0=none, 1=some, and 2=a lot; summary score, 0 to 8); and patient-rated impact of possible TD in 7 daily activities (0=none, 1=some, and 2=a lot; summary score, 0 to 14). Populations included Cohort 1 (N=450); full Cohort 2 (N=204); and limited Cohort 2 (N=111, patients who self-reported “some” or “a lot” of TD severity in ≥ 1 body region). Mean differences between Cohort 2 and Cohort 1 in EQ-5D-5L utility and SDS total scores were analyzed using a generalized linear regression model that was adjusted for potentially confounding factors (e.g., age, sex, psychiatric diagnosis). Associations between TD summary scores (severity, impact) and quality of life (EQ-5D-5L utility, SDS total) were analyzed using a regression model.

RESULTS: The mean score difference between full Cohort 2 (N=204) and Cohort 1 (N=450) was significant for EQ-5D-5L utility (-0.037; $P < 0.05$ [adjusted analysis]) but not SDS total (0.267; $P > 0.05$). However, when limited to Cohort 2 patients who self-reported “a lot” of TD severity ($n=53$) or impact ($n=33$), both EQ 5D 5L utility and SDS total scores were significantly worse than in Cohort 1 ($P < 0.05$). Regression coefficients indicated significant associations between patient-rated impact and