Poster 326 Paraneoplastic Ovarian Teratoma Anti-NMDA Receptor Encephalitis: A Case Report

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Disclosures: Lauren Kremm: I Have No Relevant Financial Relationships To Disclose

Case/Program Description: A 26-year-old woman presenting to acute care hospital with new-onset seizures and was discharged home on Keppra with neurology follow-up. She re-presented to the acute care hospital with psychotic behaviors including agitation, auditory hallucinations, and catatonia. A lumbar puncture demonstrated encephalitis and she received IV steroids and IVIG. She was transferred to a tertiary care center for a whole-body PET scan which was inconclusive for malignancy. The results of a paraneoplastic panel were significant for anti-NMDA receptor antibodies. Ultrasound of the pelvis showed a left ovarian mass. She underwent left oophorectomy with tumor pathology positive for a mature teratoma. Further treatments included total plasma exchange, IVIG, and methylprednisolone IV burst with taper. Patient was transferred to acute rehabilitation on post-operative day three. She was previously independent and at time of transfer to acute inpatient rehabilitation required Min A mobility, Mod I ADLs, and Mod A for cognition.

Setting: Tertiary Care Hospital/Acute Inpatient Rehabilitation Hospital.

Results: The patient completed a course of acute inpatient rehabilitation and was discharged to home at a supervision level for ADLs, mobility, and cognition. Patient's psychotic behaviors resolved prior to discharge.

Discussion: Anti-N-Methyl-D-Aspartate receptor (NMDA-R) encephalitis is a rare autoimmune disorder that results in acute inflammation of the brain. The associated syndrome is frequently characterized in young women with teratomas of the ovary who develop symptoms that resemble acute psychiatric illness/symptoms. Pathophysiology of the syndrome is poorly understood; however, in the case of ovarian teratomas, it is suspected that the tumor releases NMDA-R. NMDA-R antibodies in serum and CSF target the NR1 of the NMDA-R of the tumor and in neural tissue. The receptors suppress the NMDA protein channels/electrical pathways in the brain. Review of literature suggests that tumor resection, immunomodulation, and corticosteroid therapies are associated with improved outcomes.

Conclusions: Anti-NMDA-R encephalitis is rare autoimmune disorder. In young women, it is frequently associated with ovarian teratomas. Anti-NMDA-R encephalitis should remain in the differential diagnosis in previously healthy young women with new onset psychiatric symptoms.

Level of Evidence: Level V

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The Tribulations, Trials, and Triumphs of Treating and Rehabilitating Hemiballismus: A Case Report

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Disclosures: Michael Hodde: I Have No Relevant Financial Relationships To Disclose

Case/Program Description: This is a case of a 56-year-old man with right-sided hemiballismus following an acute left thalamic hemorrhagic stroke who presented with acute onset of involuntary, large-amplitude, non-rhythmic right-sided movements, leg greater than arm. Head CT: acute left thalamic intraparenchymal hemorrhage. The patient suffered an atraumatic fall on acute inpatient rehabilitation day 1 (AIR_1) due to uncontrollable movements and impulsivity requiring 1:1 observation. Therapists noted bruising and rough skin on the right calf attributed to "extreme involuntary movements," developing by AIR_14 into an open abrasion requiring bed padding and

nursing wound care. Clonazepam 0.25mg BID was started on AIR_5 taking the edge off the agitation, but there were no rehabilitation gains. Haloperidol 0.5 mg/day was started on AIR_14 with rapid improvement in agitation and a significant decrease in the amplitude and force of ballistic movements with subsequent dramatic functional improvement. Clonazepam was stopped AIR_18 without decrement in agitation or rehabilitation gains.

Setting: Tertiary care hospital.

Results: AIR_1 the patient was moderate to maximum assistance for ADLs, and ambulated 40' with three person maximum assist with a rolling walker. Despite weighted vest, ankle weights, and weighted RW the patient continued to require maximum three person assist to ambulate 40'. AIR_17 the patient ambulated 50' and 40' with moderate assistance. By AIR_30 he was ambulating 125' with close supervision to minimum assistance without assistive device and was at supervision for bed mobility, and transfers. Hemiballistic movements of the right leg persisted, but amplitude and frequency were significantly decreased. His right calf abrasion completely healed by AIR_26. No adverse motor or other effects of haloperidol noted.

Discussion: Hemiballismus has dramatic negative functional and safety impacts for which a very low dose of haloperidol precipitated dramatic functional improvement.

Conclusions: Hemiballismus is a rare condition to be seen in AIR. Further research into the mechanism and use of haloperidol for this and related indications is warranted.

Level of Evidence: Level V

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Does Mobility Status or Spasticity Contribute to the Metabolic Profile and Body Composition in Individuals with Cerebral Palsy?

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Objective: To assess whether greater levels of mobility or of spasticity in individuals with cerebral palsy (CP) are associated with a more favorable metabolic profile and/or body composition analysis.

Design: Prospective Cross Sectional Study. **Setting:** Urban Academic Rehabilitation Facility.

Participants: Older Adolescents and Adults with Cerebral Palsy.

Interventions: Not applicable.

Main Outcome Measures: Anthropomorphic measures: Body mass index (BMI), waist circumference (WC) and waist to hip ratio (WHR); Body Composition using DXA measures of percent body fat/lean mass, Ashworth Scale measures of elbow flexors (EF), Penn Spasm Frequency/Severity Scale (PennSFS), High Density Lipoprotein (HDL) Levels: <40 mg/dcl, 40-59 and 60 or greater; Gross Motor Functional Classification System (GMFCS)(I-V).

Results: 35 participants (mean age 36.9 years, range 18-77) enrolled. GMFCS of participants was I(17%), II(20%), III(17%), IV(34.2%), and V(11.4%). 28.5% were overweight by BMI criteria, of which 3 were obese. PennSFS ratings were: 0(42%), 1(34%), 2 or 3(8.6% each) and 4(5.7%). 1 subject had either elbow AS 4,4 (AS 3), and 9 (AS least 2).22.8% of subjects had favorable HDL levels (60 or greater), including 21% of those GMFCS IV/V vs 25% of those I-III). 17.1% had levels less than 40 mg/dcl. Comparing ambulatory participants(GMFCS I-III) vs nonambulatory(IV-V), there was no significant difference in HDL categories (Cardiac protective, neutral or increased risk), percent lean or percent fat mass, HDL levels, and percent fat/lean mass was not associated with either self- or physician-rated tone measures.WC and WHR were also not associated with percent fat mass by DEXA.

Conclusions: Neither subject or examiner ratings of increased tone were associated with favorable HDL levels or lower levels of percent