propranolol initiated during inpatient rehabilitation. However, patient continued to report insomnia, profuse night sweats and fatigue.
Setting: Acute Rehabilitation Hospital.
Results: Following initiation of tizanidine at bedtime, her night sweats resolved and she was able to sleep through the night. She also reported significant improvement in fatigue. Blood pressure remained stable while on tizanidine.
Discussion: Tizanidine is a centrally acting alpha-2 adrenergic receptor agonist that is typically used to treat spasticity. We propose tizanidine may inhibit the increased sympathetic activity that is responsible for causing night sweats in this patient by decreasing norepinephrine release via its alpha-2 adrenergic receptor agonist activity. Literature review reveals sparse reports on this topic with regards to neurological disorders.
Conclusions: Initiation of tizanidine resulted in improved sleep and significantly reduced night sweats in a patient with dysautonomia due to cervicothoracic syrinx status post craniotomy. This case raises the question if tizanidine may be effective in treating night sweats associated with other conditions as well as other symptoms associated with autonomic dysfunction and warrants further study.
Level of Evidence: Level V

Poster 258
A Novel Approach to the Treatment of Stiff-Person-Syndrome with Botulinum Toxin: A Case Report

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Disclosures: Chirag Shah: I Have No Relevant Financial Relationships To Disclose
Case/Program Description: Patient is a 53-year-old man with waxing and waning symptoms of low back pain and leg cramps. Patient noted localized and symmetric stiffness in his quadriceps, hamstrings, and adductors bilaterally. Tightness is associated with pain and decreased range of motion (ROM). This resulted in impaired ambulation, transfers, and balance with frequent associated falls. Physical exam noted bilateral spasticity rated at 2/4 on Modified Ashworth Scale in bilateral hip flexors, adductors, and knee extensors; 4/4 in hamstrings. After extensive workup for stated symptoms, patient was found to have elevated anti-GAD antibodies (>250 in 2009) and was diagnosed with SPS. Patient was initially treated with IVIG and went into remission for several years. In 2012, aforementioned symptoms returned. He subsequently received a course of PLEX and Rituximab x2. Since 2012, patient has been receiving IVIG 1mg/kg divided over 2 days every 4 weeks. In addition to monthly IVIG, patient has tried warm baths, heating pads, TENS unit, corticosteroids, and chiropractor care over several years without any relief in stiffness. His medication management includes baclofen, diazepam, and gabapentin without significant relief in pain nor rigidity.
Setting: Tertiary Care Hospital.
Results: After bilateral treatment with botulinum toxin injections to the long head of biceps femoris, adductor magnus, and rectus femoris patient noted significant pain relief, decreased stiffness, and improved ROM. He subsequently endorsed fewer falls, increased distance for ambulation, and improved balance and gait mechanics.
Discussion: Stiff-Person-Syndrome is an uncommon autoimmune process characterized by progressive axial muscle stiffness, rigidity, and spasms resulting in severely impaired ambulation. This syndrome is commonly associated with anti-GAD antibodies. Traditional treatment includes use of benzodiazepines, baclofen, muscle relaxants, glucocorticoids, IVIG, and plasma exchange. In refractory cases, botulinum toxin can be an adjunct therapy that can improve symptoms.
Conclusions: Use of botulinum toxin in refractory symptoms for SPS can improve overall function with improved pain control, gait mechanics, and balance.
Level of Evidence: Level V

Poster 259
Bilateral Corpus Callosum Stroke: Case Review of Neurostimulants to Treat this Patient Population

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Disclosures: Shaessa Wright: I Have No Relevant Financial Relationships To Disclose
Case/Program Description: A 58-year-old man underwent a CABG x 3 vessels and on postop day 3 acutely decompensated decreased verbal output, decreased command following. MRI brain demonstrated multifocal cerebral ischemia predominately in the corpus callosum secondary to embolic infarct attributed to his paroxysmal A Fib. His deficits included left hemiparesis, aphasia, dysphagia, decreased arousal and poor initiation secondary to a bilateral corpus callosum embolic infarct for which he presented for acute inpatient neurorehabilitation. After further discussion and evaluation a decision was made to treat this patient with Amantadine and Methylphenidate to address issues of decreased initiation, poor arousal and the inability to initiate speech.
Setting: Acute Inpatient Rehabilitation Hospital.
Results: After several days of treatment with amantadine starting dose 100 mg BID titrated up to 150 mg BID and methylphenidate starting dose 5mg BID titrated up to 10 mg BID we documented improvements in the patient's arousal, ability to follow commands, speech initiation and recall. We found that after four weeks of utilization of neurostimulants and acute inpatient neurorehabilitation the patient significantly improved reasoning, processing speed, and communication with significant improvement in his ADLs.
Discussion: The utilization of neurostimulants appears to aide in functional outcomes of patients treated with altered levels of consciousness secondary to TBI. Neuropharmacologic therapies are commonly used off label to enhance arousal and behavioral responsiveness, on the premise that injury induced derangements in dopaminergic and noradrenergic neurotransmitter systems can be improved through supplementation.
Conclusions: The use of such stimulants is not widely studied in stroke patients. Limited studies have been done in the stroke population, however, improvements have been noted in mood, motor functioning and ability to conduct ADLs in stroke patients.
Level of Evidence: Level V

Poster 260
The Rehabilitative Management of a Patient with Anti-N-methyl-D-aspartate Receptor Encephalitis: A Case Report

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Disclosures: Paolo Mimbella: I Have No Relevant Financial Relationships To Disclose
Case/Program Description: The patient is a 25-year-old woman with no known past medical history who recently emigrated from Mexico after her husband was no longer able to care for her. She had a 3-month history of hallucinations, formication, altered mental status, bursts of anger, anxiety, episodes of frothing at the mouth, and insomnia. She lost the ability to care for herself. Previously she was treated with hydroxyzine, divalproex, pramipexole, and levothyroxine. During her acute stay workup revealed positive anti-NMDA receptor antibodies in the cerebrospinal fluid. Pan-CT, transvaginal ultrasound, and further workup for paraneoplastic syndromes, were all negative. MRI was within normal limits. Electroencephalograms were negative for epileptiform activity. Autoimmune encephalitis was

diagnosed and the patient was started on intravenous methylprednisolone along with plasma exchange. A modest improvement in her symptoms was noted. Functional gains were slow and she was transferred to the inpatient rehab unit.
Setting: Tertiary Care Hospital.
Results: The patient continued to improve throughout her acute inpatient rehabilitation stay. She was eventually safely discharged home to the care of her family. The particular rehabilitative challenges encountered, treatments provided, and progress observed, are herein described.
Discussion: Since its discovery in 2007 anti-NMDA receptor encephalitis is a disease currently believed to be under- as well as often misdiagnosed. It is typically multistage and progressive, characterized by various neurological, physical, and psychological symptoms. Psychiatric symptoms can range from mild alteration of mental status, to florid psychosis, and even catatonia.
Conclusions: This case outlines a treatable form of encephalitis that all clinicians should be made aware of. Scant literature is currently available describing the rehabilitative management of such patients and no current consensus exists regarding the best approach for afflicted patients. Further research may yield a better approach to management resulting in improved outcomes and maximized functional gains in this patient population.
Level of Evidence: Level V

Poster 261

Treatment of Recurrent Strokes Due to Behçet's Disease with IV Steroids and Inpatient Rehabilitation: A Case Report

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Disclosures: Venessa Lee: I Have No Relevant Financial Relationships To Disclose
Case/Program Description: A 53-year-old woman with Behçet's disease and recurrent pontine strokes. Patient was diagnosed with Behçet's disease while living in South America after developing aphthous ulcers and biopsy was performed. When her ulcers flared, she had tongue numbness and sensory changes in her extremities. At age 42, she developed acute onset ataxia, left-sided numbness and slurred speech and underwent a neurological work up. MRI revealed acute ischemia left posterior pons. She was treated with IV Solu-Medrol 5 days with near total symptom resolution. Rheumatology confirmed diagnosis of neuro Behçet's syndrome. She continued mild residual right-sided deficits including right hand clumsiness and slightly increased tone in her right upper extremity. She had mild flares of disease involving sensory changes and ulcers. At age 53, developed acute right hemiplegia and was re-admitted to hospital for neurologic evaluation. Imaging confirmed acute left pontine stroke. CTA head and neck unremarkable. Treated with methylprednisolone 5 days and cyclophosphamide. Admitted to inpatient rehabilitation hospital day 3.
Setting: Academic Hospital.
Results: On admission to the hospital, right-sided strength was 0/5. After five days IV steroids strength improved to 2-3/5 upper and lower extremities. She made significant progress functionally with physical, occupational and speech therapy. Further developments to be discussed.
Discussion: Behçet's disease involves recurrent oral, genital ulcers and uveitis. Neurologic involvement can be seen in Behçet's disease but stroke is uncommon.
Conclusions: Behçet's disease can be uncommon cause of recurrent stroke and stroke in the young. It should be suspected if a patient presents with recurrent neurologic symptoms, uveitis and recurrent oral and genital ulcers. The rehabilitation course of patient with Behçet's disease includes IV steroids and standard inpatient stroke rehabilitation.
Level of Evidence: Level V

Poster 262
Autonomic Dysreflexia Associated with an Arnold Chiari 1 Malformation: A Case Report

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Disclosures: Zachary Fausel: I Have No Relevant Financial Relationships To Disclose
Case/Program Description: A 50-year-old woman presents with worsening presyncopal episodes and orthostasis associated with progressively worsening weakness, headaches and discoordination. Physical examination demonstrated paresthesias in all four extremities, discoordination and right sided weakness. Cine MRI showed an 8mm displacement of the tonsils, consistent with Arnold Chiari Malformation Type 1, as well as CSF obstruction. Given the patient's neurologic decline she underwent surgical decompression by the neurosurgical team. While her pain and discoordination subsequently improved after surgery, she unfortunately developed emotional lability, photophobia, hyperacusia and poor concentration. She also developed debilitating autonomic dysfunction and symptoms consistent with autonomic dysreflexia which impaired her social reintegration. These included urinary retention, diaphoresis, tachycardia, hypotension, orthostasis and headaches as well as other symptoms. She was sent to Cardiology and Endocrinology clinics which were unable to improve her symptoms and was eventually referred to the Physiatry department for outpatient evaluation a year after the initial insult. It was recommended she undergo treatment with a multidisciplinary team approach including speech therapy, occupational therapy, physical therapy and neuropsychological evaluation and treatment.
Setting: Outpatient Clinic.
Results: The patient's physical and emotional limitations have improved and she has been able to use several neuropsychological strategies to improve her symptom management. She has since had success reintegrating into her community including plans to return to work as a hospitalist.
Discussion: This case report is one of the few reports of autonomic dysreflexia and dysautonomia associated with Arnold Chiari Type 1. It is also important to show the progress that can be made from taking a multidisciplinary approach in the treatment of a rare but complicated consequence of this disease.
Conclusions: A multidisciplinary approach is key to treating autonomic disorders and physiatrists are uniquely trained to address such issues with a team approach.
Level of Evidence: Level V

Poster 263
The Effect of Pharmacologic Treatment of Depression on Number of Clinician Visits for Persistent Post-Concussion Symptoms in an Adult Population: A Retrospective Review

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Disclosures: Ryan Kruse: I Have No Relevant Financial Relationships To Disclose
Objective: To identify whether or not, amongst patients with a history of depression, pharmacologic treatment of depression at the time of sustaining a concussion results in fewer clinician visits for post-concussion symptoms, compared to depressed patients not on pharmacologic depression treatment at time of concussion.