

## **APPA 2015 Spring Meeting Resident Poster Presentation**

### **Abstract 15-1-01**

**Title:** Treatment of ADHD in a Patient with Supraventricular Tachycardia (SVT)

**Authors:** Julie Bernstein, DO; Kelly Anderson, BS; Lalit K. Singh, MD, MPH

**Summary:** Summary: Attention-deficit/hyperactivity disorder (ADHD) is one of the most common childhood disorders persisting into adulthood. Mainstay treatment involves stimulants with an 85%-90% response rate. Even though there is recent evidence that suggests stimulants are safe in the absence of structural cardiac defects<sup>1,2,3</sup>, concerns exist among practitioners when a patient is suffering from a known cardiac abnormality.

We present the case of a preadolescent male whose ADHD symptoms were well managed on stimulant medication over the course of more than a year. When he presented to routine follow up visit it was revealed that he was diagnosed with a supraventricular tachycardia (SVT) and was started on digoxin by his cardiologist. In this case, we explore the difficulty in addressing ADHD in children with known arrhythmias or structural cardiac defects due to lack of scientific evidence regarding treatment.

Due to the patient's success on stimulant medication, his family was resistant to explore alternate treatment options. The treatment team decided to discontinue stimulant therapy because of the lack of clinical guidelines and safety data for using stimulants in the presence of SVT. We initiated a trial of Atomoxetine to manage symptoms of ADHD. He had little response to starting doses, but once increased to around 1.2mg/kg/day, he began to function more appropriately in school and home life again. However, his magnitude of improvement was less when compared to those experienced with stimulants.

Thus, in the context of cardiac abnormalities, when treatment of ADHD is desired, Atomoxetine appears to be a valuable option while avoiding potential risk associated with stimulants.

#### **References:**

- 1) Copper et.al., ADHD Drugs and Serious Cardiovascular Events in Children and Young Adults, NEJM. 2011; 365; 20:1896-1904.
- 2) Habel et.al., ADHD Medications and Risk of Serious Cardiovascular Events in Young and Middle-aged Adults, JAMA. 2011; 306; 24:2673-2683.
- 3) Hammerness et. al., Cardiovascular Risk of Stimulant Treatment in Pediatric Attention-Deficit/Hyperactivity Disorder: Update and Clinical Recommendations, JAACAP. 2011; 50; 10:978-990.
- 4) Pliszka et al., Practice Parameter for the Assessment and Treatment of Children and Adolescents With Attention-Deficit/Hyperactivity Disorder, JAACAP. 2007; 46; 7:894-921.
- 5) Shetty et. al., Ablation of Supraventricular Tachycardia Allows More Liberal Therapy in Some Children with Attention-Deficit-Hyperactivity Disorder, Pediatrics International. 2011; 53:715-717.

## **Abstract 15-1-02**

**Title:** Charles Bonnet Syndrome: The Importance of a Comprehensive Psychiatric Evaluation in Geriatric Patients with Visual Impairment

**Authors:** Erica J. Fasano, MD; Lindsey Stewart, BA; Susan Zhong Ye, BS; W. Bogan Brooks, MD

**Summary:** Charles Bonnet Syndrome, a phenomenon first reported by Genoese philosopher Charles Bonnet in 1760, is characterized by complex visual hallucinations in cognitively intact individuals with no history of psychiatric illness and commonly correlated with acquired visual impairment.<sup>1,2</sup> Types of acquired visual impairment include macular degeneration, cataracts and dysfunction in temporal or frontal areas of the brain due to cerebrovascular accident, although there are many other causes.<sup>3</sup> These hallucinations are recurrent or persistent and individuals characteristically display insight into the unreality of their hallucinations.<sup>1</sup> These hallucinations are widely understood to be part of a "visual release phenomenon," where a loss of visual sensory input leads to deafferentation of the visual association cortex, resulting in abnormal intracerebral perceptions, a process analogous to the development of phantom limb syndrome.<sup>2</sup> Due to the ambiguous etiology of this syndrome and underreporting on the part of the patient, Charles Bonnet Syndrome has been widely unrecognized and under diagnosed.<sup>1</sup>

We present a case of Charles Bonnet Syndrome in a cognitively intact elderly person. An 82 year old woman with no prior psychiatric history and a non-psychiatric history significant for macular degeneration, eye implants and cerebrovascular accident develops visual hallucinations and delusions. She has insight during these hallucinations and they are disturbing to her. This case highlights the importance of doing a comprehensive psychiatric evaluation in any geriatric patient with visual impairment in order to diagnose and treat them appropriately. As professionals we can offer reassurance to patients experiencing this syndrome, which in some cases is the only treatment required.<sup>1</sup>

### **References:**

- 1) Menon GJ. Complex Visual Hallucinations in the Visually Impaired: A Structured History-Taking Approach. *Arch Ophthalmol.* 2005; 123:349-55
- 2) Nguyen ND, Osterweil D, Hoffman J. Charles Bonnet Syndrome: Treating Nonpsychiatric Hallucinations. *The Consultant Pharmacist.* March 2013; 28(3):184-8
- 3) Jenkins M, et.al. Neuropsychiatric Factors in the Illusion of Visitors among Geriatric Patients: A Case Series. *J Geriatr Psychiatry Neurol.* 1997; 10:79-87

## **Abstract 15-1-03**

**Title:** Carbamazepine-Induced DRESS Syndrome

**Authors:** Ashley Dumas, MD; Maria Hamilton, MD; Elaine Duffee, BS; Bradley Sadler, MD

**Summary:** DRESS (Drug Reaction with Eosinophilia and Systemic Symptoms) Syndrome is a potentially life-threatening drug-induced reaction, with an estimated incidence ranging from 1 in 1000 to 1 in 10,000 drug exposures.<sup>1,2</sup> It represents a varied constellation of symptoms, including rash, fever, eosinophilia or the presence of abnormal lymphocytes, and internal organ involvement, most typically the liver<sup>1</sup>. Its etiology is only poorly understood with multiple mechanisms of pathogenesis hypothesized. A variety of different medications have been implicated in DRESS, but the medication most commonly responsible is carbamazepine.<sup>1</sup> Carbamazepine is an antiepileptic agent commonly used as mood stabilizer in treatment of psychiatric illnesses. We present the case of D.M., a middle-aged Caucasian female, seen in the outpatient setting and diagnosed with Bipolar Disorder, NOS. D.M. underwent slow titration of carbamazepine and after reaching the goal dose of 400 mg daily, contacted the clinic to report the development of a diffuse rash. She was advised to seek evaluation at either an Emergency Department or Urgent Care Center, and if her evaluating physicians felt the rash was not due to the carbamazepine, she was asked to continue her carbamazepine. Through a series of questionable medical judgments, the patient was advised to continue taking carbamazepine. Ultimately, she presented to the emergency department of a large university medical center with 100% TBSA involvement. While hospitalized, carbamazepine was discontinued, a course of corticosteroids was initiated, and laboratory results were analyzed. Differential diagnoses predominantly included Stevens-Johnson Syndrome (SJS) vs. DRESS Syndrome. Discussed in this case presentation are recommendations for how best to address a patient's report of new-onset rash, particularly in the setting of limited general medical experience regarding rash due to SJS vs. DRESS, as well as potential screening tests, which might better inform clinical suspicion for DRESS in the event that a rash develops following initiation or use of carbamazepine.<sup>1,3</sup>

### **References:**

- 1) Cacoub P, Musette P, Descamps V, et al. The DRESS syndrome: a literature review. *American Journal of Medicine*. July 2011; 124: 588-597.
- 2) Fiszenson-Alabala, F, Auzeir V, Mahe E, et al. A 6-month prospective survey of cutaneous drug reactions in a hospital setting. *British Journal of Dermatology*. 2003; 149: 1018-1022.
- 3) Yip VL, Marson AG, Pirmohamed M, et al. HLA genotype and carbamazepine-induced cutaneous adverse drug reactions: a systematic review. *Clinical Pharmacology & Therapeutics*. December 2012; 92: 757-765.

## **Abstract 15-1-04**

**Title:** Neuropsychiatric Systemic Lupus Erythematosus: A Case Report with Diagnostic Challenges

**Authors:** J. Christopher Buckley, BS; Brandon Newsome, BS; Christina Talerico, MD; Bradley Sadler, MD

**Summary:** Neuropsychiatric systemic lupus erythematosus (NPSLE) often presents physicians with a diagnostic challenge given the constellation of nonspecific findings that may be exhibited by patients, as well as there being no laboratory or radiological tests that definitively confirm a potential diagnosis.<sup>1</sup> Without a high degree of clinical suspicion for NPSLE the event of reaching a diagnosis is often delayed, which is troubling, as the prognosis of SLE is worse when there is neurological involvement.<sup>2</sup>

We present the case of a 20 year-old female with newly diagnosed NPSLE and multiple comorbidities. In this report we discuss difficulties that arose in reaching a definitive diagnosis in an academic hospital setting where providers mistakenly attributed her symptoms to major depressive disorder with postpartum onset, rather than pursuing an underlying medical condition. The diagnosis of NPSLE was made only after a CT angiogram confirmed cerebral vasculitis that was suggested by an earlier MRI. A course of methylprednisolone was successful in improving the patient's symptomology and she was soon discharged afterwards.

### **References:**

- 1) Szabo Zardi, Enrico M., Arianna Taccone, Benedetta Marigliano, Domenico P. Marigiotta, and Antonella Afeltra (2014). "Neuropsychiatric Systemic Lupus Erythematosus: Tools for the Diagnosis." *Autoimmunity Reviews*, 13.8: 831-839.
- 2) Bernatsky S, Clarke A, Gladman DD, Urowitz M, Fortin PR, Barr SG, et al (2006). Mortality related to cerebrovascular disease in systemic lupus erythematosus. *Lupus*, 15: 835-9.

## **Abstract 15-1-05**

**Title:** Seized Up: Catatonia Complicated by Epilepsy

**Authors:** Ashley Dumas, MD; Fanisha Porter, MD; Keri Metcalf, BS; Bayani Abordo, MD; Marianne Saitz, MD

**Summary:** Catatonia is characterized by a myriad of motoric, behavioral and systemic symptoms developing from an unknown mechanism.<sup>1</sup> A diagnosis of catatonia has frequently been associated with Schizophrenia, but has also been linked to other medical disorders. We present the case of an 82 year old Caucasian male with a prior psychiatric diagnosis of Schizophrenia, that was later amended to Bipolar Disorder, NOS, and multiple comorbid medical diagnoses, including seizure disorder. Over the course of the patient's treatment he has experienced recurrent episodes of catatonia, further complicated by seizures. Within this case presentation we will discuss the progression and treatment of an elderly patient over two years. We will reinforce the definition of catatonia along with the etiology, epidemiology, differential diagnosis, pathophysiology and treatment. We will also further explore the inherent complications attendant on treating a patient whose other medical comorbidities may further predispose him to episodes of catatonia.<sup>2</sup>

### **References:**

- 1) Stern TA, Herman JB, Gorrindo T. *Massachusetts General Hospital Psychiatry Update & Board Preparation*, 3<sup>rd</sup> ed., 2012, ISBN 978-0-9855-3180-5, pp. 233-236.
- 2) Suzuki, K., et al. Epileptic Seizures Superimposed on Catatonic Stupor. *Epilepsia*. 2006; 47: 793-798.

## **Abstract 15-1-06**

**Title:** A Case Report on the Neuropsychiatric Manifestations of Neurosarcoidosis

**Authors:** Sarah Siddiqui, DO; Gretchen Vandiver, BS; Praveen Narahari, MD

**Summary:** Sarcoidosis is a rare inflammatory granulomatous disease affecting multiple organ systems. While often subclinical, neurosarcoidosis is seen in approximately 25% of patients with systemic sarcoidosis<sup>1</sup>. Neurosarcoidosis more commonly occurs with other sarcoidosis forms, wherein only 1 % of cases involve the central nervous system alone<sup>2</sup>.

We report a case of a 39 year old African American man that presented with seizures, dementia and intermittent psychosis. He had multiple previous hospitalizations prior to the establishment of his diagnosis, with multiple unsuccessful attempts at management of psychiatric symptoms that included hallucinations, delusions and disorganized thoughts.

Neurosarcoidosis is a difficult disease to treat and may present with a myriad of symptoms. It is vital that mental health professionals are aware of its neuropsychiatric manifestations. Recently, new drugs such as antitumor necrosis factor  $\alpha$  have been proven valuable in the treatment of neurosarcoidosis in all major organ systems<sup>3</sup>. The complexity of this illness and several modalities of management will be described in this report.

### **References:**

- 1) Szabo et al. J Morphol Emroyol. Isolated Neurosarcoidosis. 2011; 52 (3 Suppl): 1139-42.
- 2) Renata Hebel, Mirosława Dubaniewicz-Wybieralska Anna Dubaniewicz. Overview of Neurosarcoidosis: recent advances, J Neurol (2015) 262:258–267. Pliszka et al., Practice Parameter for the Assessment and Treatment of Children and Adolescents With Attention-Deficit/Hyperactivity Disorder, JAACAP. 2007; 46; 7:894-921.
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