



# ALABAMA PSYCHIATRIC PHYSICIANS ASSOCIATION

*A District Branch of the American Psychiatric Association*

## **APPA 2017 Spring Meeting Resident Poster Presentation**

### **Abstract 17-1-01**

**Title:** Major Depressive Disorder Due to Dermatomyositis: A Case Linking Depression with Inflammation

**Authors:** Abhishek Reddy, MD; Badari Birur, MD; Richard C. Shelton, MD; Li Li, MD

**Summary:** Major depressive disorder (MDD) is one of the most common psychiatric disorders. Recent studies have shown a strong association between MDD and peripheral inflammation, shown by a higher incidence of depression in patients with inflammatory diseases including rheumatoid arthritis, inflammatory bowel disease, multiple sclerosis and systemic lupus erythematosus. Dermatomyositis (DM), an idiopathic inflammatory connective tissue disease that is associated with inflammation that predominantly affects skin and skeletal muscle. The association between DM and MDD in the context of inflammation has seldom been reported. Here we report a 30 year old Caucasian female with symptoms of depression dating back to 2 years. These symptoms started after cutaneous manifestations of DM. In the past two years, her DM symptoms have worsened that paralleled an increase of depressive symptoms. Also, during the course of the patient's DM, we tracked elevated inflammatory markers including C-reactive protein, creatinine kinase, C3, C4 and aldolase, which correlated with worsening of depression. Hence, a temporal relationship between the onset of the depression and DM symptoms suggests that DM may lead to the development of depression. We also posit that inflammation is probably the common mechanism linking these two conditions.

### **Abstract 17-1-02**

**Title:** Comparative Analysis of QbTest, NEBA System, and Clinicom in the Diagnosis of ADHD

**Authors:** Joni Kay, BS; Heather Theobald, BS, MPH; Nelson Handal, MD; Barbara Baldwin, MS; Michael Nellamattathil, MS

**Summary:** Attention Deficit Hyperactivity Disorder (ADHD) often presents with symptoms of hyperactivity, impulsivity, and/or inattention.<sup>1</sup> ADHD was once considered to be a disease only present in pediatric populations; however, recent data indicates that ADHD also affects many adults. The prevalence of ADHD is reported to be 5-7% in children and 2.5-5% in adults.<sup>2</sup> Patients frequently have comorbid psychiatric disorders that can complicate the diagnosis or result in a missed diagnosis altogether.<sup>3,4</sup> The long-term consequence of untreated ADHD can have substantial behavioral, academic

and vocational impacts making the successful identification and treatment of ADHD of critical importance. Currently, the diagnosis of ADHD is made clinically based on information collected during the history and physical; however, the use of electronic diagnostic tools may improve the accuracy of diagnosis.<sup>5,6</sup> Currently there are two FDA approved electronic diagnostic tools: the neuropsychological Quantified behavior Test (QbTest) and the Neuropsychiatric EEG-Based Assessment Aid (NEBA) System. A new non-FDA approved psychiatric assessment tool, Clinicom, was designed to correctly identify patients with ADHD as well as other psychiatric conditions. Our research analyzed the ability of these diagnostic modalities to correctly identify patients with ADHD in addition to other psychiatric comorbid disorders, and to determine if the number of comorbid conditions would affect the diagnosis. The data shows that the Clinicom assessment tool and the NEBA system tend to consistently agree on the primary diagnosis of ADHD when compared to the QbTest. However, the number of psychiatric comorbidities did not have a significant affect on ability to diagnosis primary ADHD across all three diagnostic modalities.

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### Abstract 17-1-03

**Title:** Rare interstitial deletion of chromosome 1q31.1q32 and chromosome 2p12 deletions. Report of a new patient with behavioral problems, developmental delays, dysmorphic features and Autism.

**Authors:** Birchall, EL; Martin, C

**Summary:** Studies have indicated that chromosomal deletion(s) is the most common structural anomaly accounting for approximately 8% of euploid blastocysts. There are a handful of cases in the medical literature describing interstitial deletions in the long arm of chromosome 1. To our knowledge there are less than 5 reported cases, which showed combined chromosome 1q and chromosome 2p deletions. In this article, we describe the case of an 8 year old with chromosome 1q31, 1q32 and chromosome 2p12 deletions. Both the chromosomal deletions, in isolation, have been shown to present with aggressive

behavior, developmental delays and specific phenotypes whose highly varying expression depends on the size of the deletion.

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#### Abstract 17-1-04

**Title:** Examining the Implementation of the High Reliability Unit for Inpatient Child & Adolescent Psychiatry

**Authors:** Laura Lockwood, DO; Clinton Martin, MD

**Summary:** High reliability in health care is a major goal by the Joint Commission in the quest to reduce medical errors. Children's of Alabama began applying the high reliability model to their inpatient units in the fall of 2015. In August 2016, this model came to inpatient child & adolescent psychiatry. There is a board which is used by nursing and physician staff during handoffs and rounding in order to call attention to any patients with potential safety concerns. We looked at patient safety reports (PSRs) from before and after the switch to the high reliability unit. These are placed in 5 different categories: assault on staff, patient falls, employee accident/injury/fall, patient accident, and patient misconduct (which includes restraints). There was a decrease in patient misconduct since the initiation of the high reliability unit, which was especially notable given that since the beginning of data collection in 2012 there had been an 11 bed increase on the unit. All other categories either increased or stayed roughly the same before and after the high reliability unit.

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## Abstract 17-1-05

**Title:** Dextromethorphan in Cough Syrup: The Poor Man's Psychosis

**Authors:** Bridgette Martinak, MD; Ramy A. Bolis, MS-3; Jeffrey Ryne Black, MS-3; Rachel E. Fargason, MD; Badari Birur, MD

**Summary:** Dextromethorphan (3-methoxy-N-methylmorphinan), also known as "DXM" and "the poor man's PCP," is a synthetically produced drug that is available in more than 100 over-the-counter cough and cold preparations. Dextromethorphan has overtaken codeine as the most widely used cough suppressant given its availability, safety profile, and efficacy when taken at directed doses. However, DXM is subject to abuse. When taken at inappropriately high doses (1500mg/day), DXM can induce a state of psychosis during which users experience Phencyclidine (PCP)-like psychological symptoms namely delusions, hallucinations and paranoia. Here we report an interesting case of cough syrup-induced psychosis in a 40-year-old Caucasian female, whose psychosis remitted only following treatment with a combination of an antipsychotic and mood stabilizer. Ms. X, a 40-year-old Caucasian woman, was admitted to a psychiatric unit after she was discovered sleeping in a stranger's house and physically assaulted a police officer. The patient's initial clinic presentation limited history gathering, however, she reported PTSD, depression, and use of "all" illicit substances. Her urine drug screen revealed only buprenorphine, for which the patient did not have a prescription. Upon admission to the psychiatric unit, the patient was irritable, suspicious of staff, and labile. Given her self-reported history of depression, she was started on Mirtazapine 15mg nightly. However, even after observation for several days to allow for substance washout, she remained inappropriate, hostile, and displayed an illogical, disorganized thought process with delusions of misinterpretation. The patient began to show more organized thought processes and appropriate affect following the addition of an antipsychotic. She was eventually stabilized on Olanzapine 10mg nightly with the addition of Valproic Acid Extended Release 1,000mg nightly. The patient ultimately revealed that she had been regularly abusing DXM. Initially she experienced psychotic symptoms only following DXM ingestion but she eventually began experiencing psychosis episodes that were unrelated in timing to DXM use. The patient remained in the hospital for twenty days until the resolution of the aforementioned symptoms; at time of discharge she was continued on the doses of Olanzapine and Valproic Acid ER mentioned above. This case demonstrates the risk of developing a prolonged substance-induced psychosis from an easily available over-the-counter medication, dextromethorphan. While some individual states have begun to limit the quantity sold or restrict sales to those over 18-years of age, there is currently no federal ban or restriction on the sale of dextromethorphan. As it is readily available, typically inexpensive, and not detected on a standard urine drug screen, abuse of dextromethorphan may be an underdiagnosed cause of substance-induced psychosis. It is imperative that clinicians be aware of the potential psychiatric sequelae of DXM abuse.

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## Abstract 17-1-06

**Title:** Autoimmune Limbic Encephalitis: Finding out that zebras live in our neighborhood.

**Authors:** Tina Jackson, MD; William A. Kilgo, MD; Lindsey Stewart, MD; Sandra Parker, MD

**Summary:** Over the past 20 years great strides have been made in the understanding of antibody-mediated limbic encephalitis (AMLE), including which tests should be ordered, how the diagnosis is established and what treatments show the best outcomes. Before this time, AMLE was theorized to be extremely rare. Since the availability of more sophisticated testing modalities, AMLE has become more clinically recognized and is considered concomitantly with paraneoplastic forms of limbic encephalitis in differential diagnosis. Unfortunately, because the presenting cases are often complex and there is still lack of consensus on management, it usually takes months for an accurate diagnosis and many cases are never properly identified. Most of the available literature is in the neurology texts, but patients usually present to their primary care providers or emergency departments with bizarre behaviors, memory loss, seizures, confusion, sleep disturbances, personality changes or movement disorders. Therefore, it is important that psychiatrists be alert to this diagnosis on their list of differentials. Furthermore, they need to know the basic emerging recommendations for diagnosis, treatment options and the role that they most effectively play in a multidisciplinary approach to addressing AMLE, as early recognition and treatment leads to better outcomes.

We present a case of a 10 year old African American female who presented with acute onset of psychosis following a 3-4 day history of a runny nose and sinus congestion. Otherwise, her medical history was unremarkable and her social history revealed no inciting events. Psychiatry was consulted after initial physical exam and workup was found to reveal no acute pathology. We highlight the evidence based recommendations for management of AMLE along with the ethical implications highlighted by this case.

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## Abstract 17-1-07

**Title:** The Ethical Use of Active Placebos

**Authors:** David Rizk, BS; Allison Sullivan, BS; Dustin Marmalich, MD; W. Bogan Brooks, MD

**Summary:** Placebos are well known for their use as non-therapeutic controls that aid in isolating a treatment's effect from the psycho-physiologic effects of taking a "sugar pill." While the historic utilization of placebos is well known, the use of both pure and impure placebos as active treatment agents is less studied and applied. We report the case of a 37 year-old patient, who requested an impure placebo for his own psycho-physiologic benefit, as well as, to appease his spouse's desire for him to be medicated.

Our case highlights the potential of placebos as active treatment options and calls into question the ethics and effectiveness of deceptive use versus open-label use of placebos. In this report, we discuss several trials that reveal the physiologic changes caused by placebos showing efficacy as active treatments with positive patient outcomes, as well as, physician and patient attitudes towards deceptive and open-label use of placebos in clinical practice.

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### **Abstract 17-1-08**

**Title:** Medical comorbidities contribute to increased mortality in schizophrenia: a case report following treatment of schizophrenia and medical comorbidities in the geriatric population.

**Authors:** Mary Marks Nelson, OMS3; Serena Nimityongskul, MD; Candace Perry, MD

**Summary:** Patients suffering from schizophrenia present with one or more medical comorbidities that may contribute to a decreased lifespan and increased mortality in this patient population. This poses many difficulties in treatment such as medical noncompliance, decreased access to healthcare in psychiatric inpatient units, and ensuring that psychotropic medications do not worsen existing health problems. A 78 year old woman with schizophrenia (Mrs. F), was treated for acute psychosis on an inpatient unit while presenting with Diabetes Mellitus, Hypertension, and Hypothyroidism. Each of these diagnoses required care and management, but in combination created numerous complications during her hospitalization. Due to the worsening progression of her medical illnesses secondary to medical noncompliance she was subsequently admitted to the local ICU for treatment of sepsis and myxedema coma. This case demonstrates the difficulties in managing medical comorbidities in schizophrenia and the increased mortality that can result.

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## **Abstract 17-1-09**

**Title:** The critical importance of recognizing Treatment Resistant Schizophrenia and its implications for alternate treatment strategies and future research

**Authors:** Rayikanti RS; Birur B; Scheifler P; Wilkins C; Snider K; Li , Li

**Summary:** A chronically debilitating and severe disease, Schizophrenia has a median worldwide lifetime prevalence of 0.4%. Compared to the general population, these patients have a life expectancy that is reduced by up to 20 years and are at a higher risk for physical morbidities and premature mortality. Adding to the challenge of Schizophrenia is a specific subset of patients who are considered to be Treatment-resistant that is they have not achieved adequate symptom control despite two trials of antipsychotics for at least six weeks in therapeutic dosages. Clozapine (CLZ), often considered the gold standard for Treatment-resistant Schizophrenia (TRS), may not alleviate symptoms in 30-40% of this subgroup. With limited treatment options, prognosis becomes bleak as TRS patients succumb to the natural progression of the disease, the impact of which is not just felt by the patient, but the health systems, families and society.

Determining the prevalence of TRS has been challenging due to the lack of a standardized definition and algorithm for treatment strategies. It is this inconsistency and marked variability in criteria for published studies on TRS that makes it difficult to effectively translate research findings into clinical practice. Further complicating the TRS crisis is not only the underuse of CLZ, but its delay based on widely accepted criteria. In the United States, rates for the use of CLZ have been, ranging from 2-10%. Dispelling myths and addressing prescribers concerns over CLZ's side effect profile and related concerns could lead to its earlier implementation and delay the progression of TRS with predominant negative symptoms, that is far more challenging to treat and manage compared to prominent positive symptoms. The financial impact of TRS is significant. Health care costs for TRS are 3 to 11 times greater than non-TRS patients that contribute to 60 to 80% of the total economic burden of Schizophrenia. Often facing higher degrees of social and functional disability have led TRS patients to higher rates of unemployment and job related difficulties. It is clearly evident that TRS's impact cannot be simply ignored, but recognized as a crisis that urgently warrants early identification, and aggressive treatment.