



ALABAMA PSYCHIATRIC PHYSICIANS ASSOCIATION

A District Branch of the American Psychiatric Association

APPA 2016 Fall Meeting Resident Poster Presentation

Abstract 16-2-01

Title: Clozapine-Induced Myocarditis: A Case Report Describing Patient's Course and Subsequent Rechallenge

Authors: Bradley Edmonds, BS; Serena Nimityongskul, MD; Praveen Narahari, MD

Summary: We present a potential case of mild drug-induced myocarditis manifesting as flu-like symptoms and palpitations in a young patient with schizophrenia. The case describes a 23-year-old woman being treated in the involuntary psychiatry unit for schizophrenia. The patient was on Geodon, risperidone, and Haldol in the past with minimal response before we started her on clozapine. In the second week of clozapine treatment, the patient began complaining of fever and cough productive of green mucus. She was tachycardic and there were EKG abnormalities. On the 20th day, the patient was sent to outside hospital due to palpitations, fever and tachycardia. EKG there showed sinus tachycardia and normal cardiac enzymes. Patient was admitted to inpatient service where clozapine was stopped. Transthoracic echocardiogram was normal. Endomyocardial biopsy was not performed. Patient's symptoms resolved two days later. Pt was started on Haldol and discharged to group home. She relapsed within 12 weeks and was again admitted to the inpatient unit involuntarily. Patient was rechallenged on clozapine on readmission and remained asymptomatic throughout one month of inpatient treatment. She has continued to do well on outpatient basis for last 12 months. This case and its subsequent rechallenge are important to appreciate the potential side effects of this medication often used in refractory schizophrenia.

References:

1. Cooper Jr LT. Myocarditis. *N Engl J Med.* 2009;360(15):1526–38.
2. Manu P, Sarpal D, Muir O, Kane JM, Correll CU. When can patients with potentially life-threatening adverse effects be rechallenged with clozapine? *Schizophrenia Research.* A systematic review of the published literature. 2012;134(2-3):180-186.
3. Curto M, Girardi N, Lionetto L, Ciavarella GM, Ferracuti S, Baldessarini RJ. Systematic Review of Clozapine Cardiotoxicity. *Curr Psychiatry Rep.* 2016 Jul;18(7):68.

Abstract 16-2-02

Title: Considerations in Diagnosis of First Manic Episode Presenting with Elevated Thyroid Hormone and Pregnancy: A Case Report

Authors: Divya Nadella, BS; Adam Ali, MD

Summary: Mania, per the *Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5)*, is central to the diagnosis of Bipolar I Disorder⁽¹⁾, an affective illness. With a lifetime prevalence of 1%, Bipolar I Disorder is a debilitating disease that can put the patient and others in dangerous, potentially life-threatening, situations⁽²⁾. Prior to the diagnosis of bipolar disorder, it is common practice for the psychiatrist to rule out any organic causes for symptoms consistent with mania, such as hyperthyroidism as well as substance induced symptoms. In this case report, we present Ms. S, a 29 year old patient with no past psychiatric history who, under court ordered mental evaluation, was found to meet diagnostic criteria for a manic episode, but the etiology of which remains unclear. Complicating diagnosis includes a positive UDS for MDMA (an amphetamine) and TSH and free T4 levels that were outside the reference range. She was subsequently found to be pregnant and in her first trimester, which made interpreting the thyroid abnormalities more difficult.

The purpose of this case report is to look at the underlying role that the hypothalamic-pituitary-thyroid (HPT) axis plays in mania as well as in pregnancy. We consider the underlying effects of thyroid dysfunction and its potential to trigger pathologic affective states, particularly mania⁽³⁾. We will also discuss how the HPT axis undergoes a significant change in pregnancy with increased circulating thyroid hormone levels, altering thyroid hormone homeostasis⁽⁴⁾. We discuss the possible role that pregnancy-related thyroid changes and drug abuse may have played in Ms. S's manic presentation, as well as explore the pathophysiology of how a defective HPT axis can mediate manic symptoms^(5,6,7).

References:

1. Association AP. Diagnostic and statistical manual of mental disorders, 5th edition (DSM-5). 5th ed. Washington, DC, United States: American Psychiatric Publishing; May 22, 2013
2. Merikangas KR, Akiskal HS, Angst J, et al. Lifetime and 12-Month Prevalence of Bipolar Spectrum Disorder in the National Comorbidity Survey Replication. *Archives of general psychiatry*. 2007;64(5):543-552. doi:10.1001/archpsyc.64.5.543.
3. Bunevicius R, Velickiene D, Prange A. Mood and anxiety disorders in women with treated hyperthyroidism and ophthalmopathy caused by graves' disease. *General hospital psychiatry*. 2005;27(2):133-9. <https://www.ncbi.nlm.nih.gov/pubmed/15763125>. Accessed September 2, 2016.
4. Ross DS. Overview of thyroid disease in pregnancy. In: Post T, ed. UpToDate. Waltham, Mass.: UpToDate; 2015. www.uptodate.com Accessed September 1, 2016.
5. Cookson JC. The neuroendocrinology of mania. *Journal of Affective Disorders*. 1985;8(3):233-241. doi:10.1016/0165-0327(85)90021-7. <http://www.sciencedirect.com/science/article/pii/0165032785900217>. Accessed September 2, 2016.

6. Carta, M.G., & Angst, J. (2016). Screening for bipolar disorders: A public health issue. *Journal of Affective Disorders*, 205, 139-143. doi:10.1016/j.jad.2016.03.072
7. Lee S, Chow C, Wing Y, Leung C, Chiu H, Chen C. Mania secondary to thyrotoxicosis. *The British journal of psychiatry : the journal of mental science*. 1991;159:712–3.
<https://www.ncbi.nlm.nih.gov/pubmed/1756351>. Accessed September 2, 2016.

Abstract 16-2-03

Title: Catatonic Schizophrenia: A Case Report Highlighting Important Treatment Options

Authors: Kevin Putinta, BS; Shanthi Gatla, MD; William Billett, MD

Summary: Catatonia is the rarest presentation of schizophrenia. For the diagnosis of catatonic schizophrenia to be made, the DSM-V requires that a patient meet all the diagnostic criteria for schizophrenia, in addition to at least three of the following: mutism, posturing, catalepsy, mannerism, stupor, waxy flexibility, negativism, agitation, grimacing, echolalia, stereotypy, and echopraxia. In this case report, the patient, Mr. T, a 33 year old Asian male, was diagnosed with catatonic schizophrenia after being admitted to EastPointe hospital from jail. While in jail, the patient began following only simple commands and was agitated, pacing his cell and abruptly stopping to posture for a short duration of time. He was admitted after smearing feces on himself and his cell; he subsequently stopped following commands to shower, began standing still with no psychomotor activity, and developed marked alolia. Mr. T proved to be a challenge for treatment, as his symptoms persisted while on Abilify and Ativan. The patient was then started on Rexulti and Effexor after tapering his Abilify dose. Over time, the patient's catatonia and negative symptoms of schizophrenia resolved completely. This case study highlights the neurobiological rationale behind the addition of the new serotonin-dopamine activity modulator, Rexulti (brexpiprazole), and the serotonin-norepinephrine reuptake inhibitor Effexor (Venlafaxine) to the treatment regimen in this patient's treatment-resistant catatonic schizophrenia and documents the resolution of his symptoms.

References:

1. Tandon, R., Heckers, S., Bustillo, J., Barch, D. M., Gaebel, W., Gur, R. E., ... Carpenter, W. (2013). Catatonia in DSM-5. *Schizophrenia Research*, 150(1), 26–30. doi:10.1016/j.schres.2013.04.034
2. Walther, S., & Strik, W. (2016). Catatonia. *CNS Spectrums*, 21(04), 341–348. doi:10.1017/s1092852916000274
3. Roberto, A. J., Pinnaka, S., Mohan, A., Yoon, H., & Lapidus, K. A. B. (2014). Adolescent Catatonia successfully treated with Lorazepam and Aripiprazole. *Case Reports in Psychiatry*, 2014, 1–4. doi:10.1155/2014/309517
4. Sasaki, T., Hashimoto, T., Niitsu, T., Kanahara, N., & Iyo, M. (2012). Treatment of refractory catatonic schizophrenia with low dose aripiprazole. *Annals of General Psychiatry*, 11(1), 12. doi:10.1186/1744-859x-11-12
5. Stahl, S. M., & Muntner, N. (2013). *Stahl's essential Psychopharmacology: Neuroscientific basis and practical applications* (4th ed.). Cambridge: Cambridge University Press. 165-169.
6. Maeda, K., Sugino, H., Akazawa, H., Amada, N., Shimada, J., Futamura, T., ... Kikuchi, T. (2014). Brexpiprazole I: In Vitro and in vivo characterization of a novel Serotonin-Dopamine activity Modulator. *Journal of Pharmacology and Experimental Therapeutics*, 350(3), 589–604. doi:10.1124/jpet.114.213793
7. Mukaetova-Ladinska, E. B., da Silva, J. A., & Darley, J. (2010). Antipsychotic Augmentation with Venlafaxine for treatment of negative symptoms in chronic schizophrenia - A case series. *Macedonian Journal of Medical Sciences*, 3(2), 164–168. doi:10.3889/mjms.1857-5773.2009.0111

Abstract 16-2-04

Title: Tardive Dyskinesia: Management Options

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

Summary: Tardive Dyskinesia (TD) is a movement disorder most often caused by chronic use of central acting dopamine blocking agents.¹ The disorder usually requires at least three months use of dopamine blocking agents such as neuroleptics or prokinetic agents. Approximately one third of patients chronically treated with a dopamine antagonist will eventually develop dyskinesia.² TD can resolve after discontinuation of the offending medication or may be permanent despite best treatment efforts.

The elderly, females, and patients with coexisting brain damage are at increased risk for developing TD while on offending medications.³ Patients with TD usually present with retrocollis and involuntary buccal and facial movements; such movements can interfere with daily activities such as eating and dental hygiene, leading to additional medical complications.⁴ TD can be treated with benzodiazepines, muscle relaxants, dopamine depleting agents, and vitamin E, but treatment is often unsuccessful, thus prevention is ideal.⁵

We report a case of a 73-year-old female who presented with abnormal involuntary tongue movements after having been treated with aripiprazole. After discontinuing aripiprazole, the abnormal movements continued and treatment with clonazepam was initiated with some improvement although not complete resolution. Our case highlights the need for physicians to be cognizant of TD and continually reevaluate the necessity and dosing of antipsychotics and prokinetics.

References:

1. Bhidayasiri R, Boonyawairoj S. Spectrum of tardive syndromes: clinical recognition and management. *Postgrad Med J.* 2011;87(1024):132-41.
2. Tarsy D, Baldessarini RJ. Epidemiology of tardive dyskinesia: is risk declining with modern antipsychotics?. *Mov Disord.* 2006;21(5):589-98.
3. Chou KL, Friedman JH. Tardive syndromes in the elderly. *Clin Geriatr Med.* 2006;22(4):915-33, viii.
4. Fernandez HH, Friedman JH. Classification and treatment of tardive syndromes. *Neurologist.* 2003;9(1):16-27.
5. Kenney C, Jankovic J. Tetrabenazine in the treatment of hyperkinetic movement disorders. *Expert Rev Neurother.* 2006;6(1):7-17.

Abstract 16-2-05

Title: Psychosis as sequelae of paraneoplastic syndrome in Small Cell Lung Carcinoma: A psycho-neuro-endocrine interface

Authors: Stephen Layfield, MS3; Christiana Wilkins, MD; Victoria Johnson, MD; My Hanh Vu, MD, MPH; Badari Birur, MD

Summary: In 2013 more than 150,000 Americans died from all types of lung cancer. Small cell lung cancer (SCLC) represented about 13% of all lung cancers and is notoriously associated with paraneoplastic syndromes (PNS). Here we present an interesting case of psychosis associated with one such PNS-- ectopic Cushing syndrome of SCLC. Patient is a 56 year old African-American male with no prior psychiatric history and an inactive history of illicit substance use. He was diagnosed with SCLC 2 months prior to his presentation to the ER for treatment of a right arm laceration he sustained while fighting off attackers, with high concern these individuals may have been part of hallucinatory experiences. He also presented with well-systematized persecutory delusions regarding his wife. Physical assessment was notable for Cushingoid symptoms including glucose intolerance, hypertension, hyperpigmentation, and weight gain. On 24-hour urinary free cortisol (UFC) excretion test, cortisol level was 48.8 mcg/dL. For psychosis, patient was started on Olanzapine titrated from 5mg to final dose of 10mg nightly. Since patient was not a surgical candidate for SCLC, he was treated with metyrapone 250 mg four times/day per endocrinology recommendations, as well as continuation of radiation therapy throughout hospitalization. Cortisol level decreased steadily after initiation of metyrapone to 27.1 mcg/dl by time of discharge. Patient's psychotic symptoms dramatically reduced on regimen of olanzapine, metyrapone, and radiation therapy with apparently resolved persecutory delusions at time patient was discharged home with his wife. This case broadens the available literature discussing this rare crossover of medical and psychiatric management with discussion of phenomenology and possible treatment protocols.

References:

1. van der Lely A, Foeken K, van der Mast RC, Lamberts SWJ. Rapid Reversal of Acute Psychosis in the Cushing Syndrome with the Cortisol-Receptor Antagonist Mifepristone (RU 486). *Ann Intern Med.* 1991;114:143-144. doi:10.7326/0003-4819-114-2-143
2. Koide SS. Mifepristone. Auxiliary therapeutic use in cancer and related disorders. *J Reprod Med.* 1998 Jul;43(7):551-560. PMID:9693404.
3. Bilgin YM, van der Wiel HE, Fischer HR, De Herder WW. Treatment of severe psychosis due to ectopic Cushing's syndrome. *J Endocrinol Invest.* 2007 Oct;30(9):776-779. doi:10.1007/BF03350817. PMID:17993771.
4. Phillips LJ, McGorry PD, Garner B, Thompson KN, Pantelis C, Wood SJ, Berger G. Stress, the hippocampus and the hypothalamic-pituitary-adrenal axis: implications for the development of psychotic disorders. *Aust N Z J Psychiatry.* 2006 Sep;40(9):725-41. doi:10.1111/j.1440-1614.2006.01877.x. PMID:16911747.
5. Chaumette B, Kebir O, Mam-Lam-Fook C, et al. Salivary cortisol in early psychosis: New findings and meta-analysis. *Psychoneuroendocrinology.* 2016 Jan;63:262-70. doi:10.1016/j.psyneuen.2015.10.007. PMID: 26520686.

Abstract 16-2-06

Title: Megaloblastic Madness: Getting Caught in the Presentation

Authors: Haley Ballard, MD; Maridith Hollis, BA; Hays Todd, BS

Summary: Chronic psychiatric diseases often have an associated “diagnosis momentum,” which impedes an objective evaluation of new symptoms. We present a case of a woman with known schizophrenia who presented with signs and symptoms suggestive of relapsing psychosis, who in reality, suffered from severe vitamin B12 deficiency. Vitamin B12 deficiency is a relatively common cause of hematologic and neurologic dysfunction, but the severity and wide array of associated clinical features are rarely encountered. Since it is an easily reversible condition, prompt recognition and appropriate management are crucial. We hope to highlight the potential severity of the disease but also examine the ways in which cognitive biases impact diagnosis and treatment of patients with comorbid psychiatric disorders.

References:

1. Croskerry, P. From Mindless to Mindful Practice: Cognitive Biases and Clinical Decision Making. *New England Journal of Medicine*. 2013 June 27; 368(26):2445-8.
2. Rojas Hernandez C. and Oo T. Advances in Mechanisms, Diagnosis, and Treatment of Pernicious Anemia. *Discov Med*. 2015;19(104): 159-168.
3. Stabler, Sally. Vitamin B12 Deficiency. *New England Journal of Medicine*. 2013;368: 149-60.

Abstract 16-2-07

Title: Neurocognitive Disorder Due to Lewy Bodies: Treatment Including Placement Options.

Authors: Mark A. Haygood, DO, MS; Grant DeFrancisco OMS-III; Andrew Greene OMS-III

Summary: Major neurocognitive disorder due to Lewy bodies is a type of neurocognitive disorder in the elderly, characterized clinically by fluctuating cognitive impairment, attention deficits, visual hallucinations, parkinsonism, and other neuropsychiatric features.¹ This report will feature a case study of an 83-year-old female (Mrs. X) with a case of major neurocognitive disorder due to Lewy bodies. There are few clear cut answers on what to do with such a patient when safety concerns are present and the patient refuses treatment. In this report, we will discuss our decision making process with respect to treatment including placement options and associated complications. Rehabilitation, commitment to a psychiatric facility, short term nursing facilities, long term nursing homes, and hired caregivers for home are all explored as options.^{2,3}

References:

1. Kadlec H, Dujela C, Beattie B. Lynn, Chappell Neena. Cognitive functioning, cognitive reserve, and residential care placement in patients with Alzheimer's and related dementias. *Aging & Mental Health*. 2016;8. doi:10.1080/13607863.2016.1226766
2. Porter CN, Miller MC, Lane M, Cornman C, Sarsour K, Kahle-Wroblewski K. The influence of caregivers and behavioral and psychological symptoms on nursing home placement of persons with Alzheimer's disease: A matched case-control study. *SAGE Open Medicine*. 2016;4:2050312116661877. doi:10.1177/2050312116661877.
3. Yaffe K, Fox P, Newcomer R, et al. Patient and caregiver characteristics and nursing home placement in patients with dementia. *JAMA*. 2002;287(16):2090-2097. doi:10.1001/jama.287.16.2090.

¹ Kadlec H, Dujela C, Beattie B. Lynn, Chappell Neena. Cognitive functioning, cognitive reserve, and residential care placement in patients with Alzheimer's and related dementias. *Aging & Mental Health*. 2016;8. doi:10.1080/13607863.2016.1226766

² Porter CN, Miller MC, Lane M, Cornman C, Sarsour K, Kahle-Wroblewski K. The influence of caregivers and behavioral and psychological symptoms on nursing home placement of persons with Alzheimer's disease: A matched case-control study. *SAGE Open Medicine*. 2016;4:2050312116661877. doi:10.1177/2050312116661877.

³ Yaffe K, Fox P, Newcomer R, et al. Patient and caregiver characteristics and nursing home placement in patients with dementia. *JAMA*. 2002;287(16):2090-2097. doi:10.1001/jama.287.16.2090.