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Abstract 16-1-01

Title: Clozapine Induced Urinary Incontinence: A Case Report and Management of a Rare Side Effect

Authors: Philip Dayley, BS; Kelly Buchanan, BS; Christina Talerico, MD; W. Bogan Brooks, MD

Summary: Treatment resistant schizophrenia (TRS) affects approximately 30% of patients with schizophrenia, leaving many to suffer from a myriad of intolerable side effects or insufficiently treated.[1] Clozapine, the most effective medication for TRS, has many known side-effects ranging from neutropenia to gastrointestinal discomfort.[2] We describe a patient treated with clozapine who developed the rarely reported side-effect of urinary incontinence. We discuss current treatment options of clozapine induced urinary incontinence ranging from behavioral modification to additional medications.[3,5,6] Further, specific treatment given to our patient is compared and contrasted with those treatments found in the literature.

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Abstract 16-1-02

Title: The Challenges of Treating a Huntington's Disease Patient with Undiagnosed Obsessive-compulsive Disorder

Authors: Jun Liu, MD; William Tillman, BS; James Hart, DO

Summary: It is well established that psychiatric symptoms often occur in Huntington's disease. Studies have investigated the presence of psychosis, mood disorders, and obsessive-compulsive disorder among patients with Huntington's disease[1, 2, 3]. The significance and association of these disorders to Huntington's disease is less clear. Current data indicate an etiological relationship between obsessive-compulsive disorder and Huntington's disease, with the leading psychopathological theory being a dysfunction in frontal-striatal circuits that would explain symptoms in both diseases[2, 4]. Individuals with Huntington's disease and obsessive and compulsive symptoms appear to have poorer functioning, a longer duration of illness, and more psychiatric comorbidities[3]. This makes treating such patients complicated and challenging.

We report a case of a 44 year old Caucasian male with Huntington's disease who presented after a suicide attempt via overdosing on clonazepam. The events leading to his suicide attempt involved an obsessive, delusional belief that his wife was having an affair. Further questioning revealed a long history of disruptive behaviors and paranoid delusions regarding law enforcement. He was started on quetiapine and lamotrigine which decreased his paranoia and delusions. However, he developed robust and recurrent obsessive, mood incongruent, homicidal thoughts towards a staff psychiatrist. His history revealed longstanding obsessive thoughts with compulsions, prompting a diagnosis of OCD and treatment with fluoxetine. After several days of treatment his obsessive thoughts lessened, his insight improved, and his anxiety subsided.

Although there is mounting evidence that there is a relationship between OCD and movement disorders, there is a paucity of longitudinal and family studies that would shed light on the nature of this relationship[2]. It has been suggested that Huntington's disease patients with obsessive and compulsive features may represent a subtype of the genetic disease[1]. Physicians should be aware that patients with both OCD and Huntington's disease may have a unique clinical picture which may require a specialized treatment plan.

References:

1. De Marchi N, Mennella R. Huntington's disease and its association with psychopathology. Harv Rev Psychiatry. 2000 Jan-Feb;7(5):278-89.
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Abstract 16-1-03

Title: Checklist Utilization to Standardize UAB Psychiatry Residency Training Call Ensures a Comprehensive Training Experience: A Quality Improvement Project

Authors: Blessing Falola, MD; Ellen Amrock, MD; Laura Montgomery-Barefield, MD; Rachel Fargason, MD

Summary: Improving the Clinical Learning Environment via a review program (CLER), has recently become a top priority of the Accreditation Council for Graduate Medical Education (ACGME), with the intent to promote quality of care through engaging residents in 6 crucial areas of focus, including quality improvement. Previously, there has been less specificity with objectives and core training curriculum in the UAB Psychiatry Residency Training Call for interns, in readiness for independent patient care. Consequently, there was noted variability in the individual resident report of training experience. This quality improvement project investigated if standardization is likely to result in a more universal, comprehensive training experience for residents. A Training Call Log checklist of 41-standardized key training items was completed by nine interns during their 5 training calls. Encountered or discussed clinical scenarios or key training items were checked off as they occurred during training. A post intervention survey containing similar items as the training log was administered both to the interns and the senior residents (PGY 2-4) to ascertain which group had a more complete experience during their training. Of the 33 residents, 25 (76%) completed survey. Response rates for the intern and senior residents groups were 100% and 67% respectively. Nonparametric analysis of the number of uncovered items between the groups showed a statistically significant difference in the number of uncovered items between the two groups ($p < 0.0001$). The intern group had lower number of uncovered items than the senior residents (median- 0 v 11). Pareto analysis of recurring uncovered items among the senior residents group showed that 7 (~20%) of the 41 items represents 80% of the uncovered items. Additionally, of the 7 most recurring uncovered items, 3 were high impact items in relation to patient safety (MET Team call, Delirium and After hour hospital consult/ transfer).These findings demonstrate a predictably comprehensive and equitable training experience results from standardization of the training call which positively impacts quality of training and future patient care and safety.

Abstract 16-1-04

Title: Clinical and Genetic Predictors of Antidepressant Treatment Response in STAR*D Cohort

Authors: Michael Falola, MD, MPH

Objective: Major depressive disorder (MDD) poses a great burden for individuals and our society at large due to its high prevelance, comorbidities[1], and unpredictability of antidepressant response. The goal of this analysis was to identify clinical and genetic characteristics that can be used to recognize MDD outpatients who would respond quickly to antidepressant treatment using National Institute of Mental Health (NIMH)-sponsored Sequenced Treatment Alternative to Relieve Depression (STAR*D) study.

Method: STAR*D is a prospective, randomized, multistep study conducted to determine subsequent treatments for the participants who did not respond to initial citalopram treatment at 18 primary care and 23 specialty care centers in the United States. The study enrolled male and female outpatients, aged 18-75, with DSM-IV diagnosis of moderate-to-severe nonpsychotic MDD i.e. baseline score >14 on the Hamilton Rating Scale for Depresion (HRSD). The initial clinical cohort consisted of 4041 participants but clinical and genetic data are available for 1953 who provided blood samples for DNA extraction. Genotyping was performed using the Illumina BeadArray platform. All participants in the Level 1 received citalopram treatment; those who showed lack of efficacy or developed side effects were randomized in Level 2 and 2a which involved switching or augmenting with sertraline, bupropion, venlafaxine, and cognitive therapy. Likewise, Level 2 and 2a nonremitters were randomly assigned in Level 3 which involved switching to mirtazapine, nortriptyline, or augmenting with lithium or thyroxine and finally nonremitters from Level 3 were randomized in Level 4 to either switch to tranylcypromine or combination of mirtazapine and venlafaxine. For this analysis, all the levels were treated as a single cohort; remission was defined as a score < 5 on Quick Inventory Depressive Symptomatology scale and time to remission was defined from Level 1 entry point to whenever remission was achieved regardless of the type or number of treatment received. Kaplan-Meier estimator was used data description, proportional hazard regression for model building, and binary logistic regression for measures of predictive accuracy.

Results: The average rate of remission across all the treatment levels was 65.6% and the overall median (interquartile range) of time to remission was 11.4 weeks (6.0, 17.9). The significant predictive factors of faster response to antidepressant treatment include female gender ($p = 0.038$), higher level of education ($p = 0.02$), employment ($p = 0.02$), absent or less medical comorbidity ($p = 0.002$), less severe depression ($p < 0.0001$), absent PTSD ($p = 0.03$) or dysthymic ($p = 0.009$) symptoms, serotonin receptor 1A ($p=0.036$), and CYP-2D6 ($p = 0.0002$) markers. Important interactions between race and gender ($p = 0.061$), and age and degree ($p = 0.063$) significantly improved the model. The final model has good predictive measures of accuracy of AUC 72%; sensitivity of 88% but low specificity.

Conclusion: The results have significant implications for identifying depressed patients who are likely to respond more quickly to antidepressant treatment. By extension, clinician can identify individuals with difficult-to-treat depression and be more aggressive in their treatment early on.

Abstract 16-1-05

Title: Diagnosing Schizophrenia When Delusions Are Influenced By Cultural Norms: A Case Study Involving Voodoo

Authors: Lucas Boone, BS; James LePage, MS; Sarah Siddiqui, DO; James Hart, DO

Summary: Schizophrenia is defined in both the DSMIVTR and DSM5 as requiring two of five characteristics for Criterion A, one of which may be the presence of delusions. [1,2] Both the DSMIVTR and DSM5 make mention of cultural norms when defining delusions. For example, the DSMIVTR glossary states, "the belief is not one ordinarily accepted by other members of the person's culture or subculture." [2] On the other hand, the DSM5 deems a delusion to be bizarre if it is "not understandable to same-culture peers." In some cases, whether the belief is ordinarily accepted or understandable to peers becomes a subjective judgment call on the part of the clinician, with the version of DSM employed impacting this decision. [4,5,6]

We describe the case of a patient with documented schizophrenia whose delusions are centered around his estranged girlfriend's purported use of Voodoo to control his mind and body. Since our patient and his girlfriend both purportedly share a belief in Voodoo, the possibility of Shared Psychotic Disorder (folie à deux) involving an inducer and a recipient is discussed. [3] Because the patient in question does not exhibit any of the other 3 characteristics besides delusions and hallucinations in the DSM Criterion A of schizophrenia, his diagnosis hinges on the presence or absence of delusions. We examine this patient's diagnosis from both a DSMIVTR and a DSMV perspective.

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Abstract 16-1-06

Title: Refractory Depression: Never Give Up

Authors: Maria Hamilton, MD; Jacob Abraham, BS; W. Bogan Brooks, MD

Summary: Refractory depression is difficult to treat and there are limited treatment options. We will present the case of Mrs. F, an elderly patient with major depressive disorder, severe, recurrent, without psychotic features, who initially presented in the outpatient setting and then required inpatient hospitalization for refractory depression. She refused to eat or drink for long periods of time and had suicidal ideation. She had previously failed ECT and augmentation with Lithium and did not further treatment with ECT.

We will present the multiple treatments utilized to stabilize this patient and review the options for refractory depression, including the use of atypical antipsychotics, thyroid augmentation and the use of multiple antidepressants in order to stabilize her.[2,3] Through this case presentation we will highlight an unconventional treatment plan that lead to this patients stabilization.

References:

1. Lisanby, S. H. (2007). Electroconvulsive Therapy for Depression. *The New England Journal of Medicine*, 357(19), 1939-1945.
2. Fleurence, R., Williamson, R., Jing, Y., Kim, E., Tran, Q. V., Pikalov, A. S., & Thase, M. E. (2008). A systematic review of augmentation strategies for patients with major depressive disorder. *Psychopharmacology bulletin*, 42(3), 57-90.
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Abstract 16-1-07

Title: Aripriprazole Induced Tardive Dyskinesia: Improvement with Clonazepam

Authors: Maria Hamilton, MD; Elaine Duffee, BS, Lindsey Stewart, BS; W. Bogan Brooks, MD

Summary: We will present the case of Mrs. H, a patient with Major depressive disorder, moderate, recurrent who presented in the outpatient setting with a major depressive episode. She had previously been treated with several antidepressants with low efficacy, so aripiprazole was added to augment her current antidepressant. After several months, she developed oral dyskinesia. The medication was stopped but the side effect persisted and did not diminish over the next six months and became intolerable to the patient. She developed mouth sores from constant tongue thrusting and her depression subsequently worsened as she worried the side effect was permanent.

The treatment options for tardive dyskinesia are limited. Initially, she was transitioned to quetiapine with a slow taper to help reduce oral dyskinesia, however, it significantly worsened and treatment had to be discontinued.[2] A literature review was done, and clonazepam was chosen instead.[1] With this case presentation, we emphasize that even following a slow taper with an atypical antipsychotic, tardive dyskinesia may still continue to worsen, and a benzodiazepine is the appropriate treatment of choice.

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Abstract 16-1-08

Title: Lewy Body Dementia: A Dynamic Disease and Challenging Diagnosis

Authors: David Rizk, BS; Thomas Lunsford, BA; Erica Fasano, MD; W. Bogan Brooks, MD

Summary: Lewy Body Dementia (LBD) is the second-most common form of neurodegenerative dementia behind Alzheimer's Disease, and it is the third-most common form of dementia overall. Despite this high prevalence, diagnosing LBD poses a challenge for physicians due to its varied presentation and similarity to other forms of dementia.

The central feature of LBD is "progressive dementia with primary persistent memory impairment with deficits in attention, executive, and visuospatial abilities."[1] At least one of the following core criteria is also necessary for a diagnosis: fluctuating cognition, visual hallucinations, and spontaneous Parkinsonism. [2] In addition, REM sleep disorder, severe neuroleptic sensitivity, and low dopamine transporter uptake in the basal ganglia based on PET/SPECT scans are all suggestive but non-essential features of LBD. [2]

We report the case of a 60-year-old male who presented with anxiety, REM sleep behavior disorder, audiovisual hallucinations, memory deficits, and deterioration of motor function. After several hospitalizations and management efforts, he was diagnosed with Lewy Body Dementia. Our case highlights the gradual onset and wide range of symptoms that make diagnosis and treatment challenging. The dynamic, progressive, and debilitating nature of LBD underlines the need for awareness of LBD among physicians.

References:

1. Blazer, Dan G., ed. *The American psychiatric publishing textbook of geriatric psychiatry*. American Psychiatric Pub, 2009.
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Abstract 16-1-09

Title: Dissociative Disorders: A Case Report Highlighting the Subtle Differences in these Diagnoses

Authors: Sean Sinclair, MD; Maria Hamilton, MD; Kelly Buchanan BS; Ann Sinclair, BS; W. Bogan Brooks, MD

Summary: Dissociative Amnesia is a rare disorder often not encountered in the outpatient setting. In this case report, the patient Mrs. C, a 57 year old Latin American female, was evaluated and proved a unique challenge to the treatment team due to her dissociative symptoms and the legality involved, as well as the potential culture-bound symptoms that she described[1]. As consistent with the diagnosis of Dissociative Amnesia, her symptoms were characterized by the inability to recall important autobiographical events that both should be successfully stored in memory and ordinarily would be readily remembered. While complex enough as a diagnosis, the patient had "hysterical fits" witnessed by family and pending legal charges that also had to be considered while diagnosing and treating this patient[2]. In addition, she has a variety of symptoms associated with multiple of the other DSM V's grouping of diagnoses under the heading of Dissociative Disorders. In this case report, the focus will be on the unique challenges found both with this patient and with dissociative symptoms, and the treatment options explored.

References:

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2. Fleurence, R., Williamson, R., Jing, Y., Kim, E., Tran, Q. V., Pikalov, A. S., & Thase, M. E. (2008). A systematic review of augmentation strategies for patients with major depressive disorder. *Psychopharmacology bulletin*, 42(3), 57-90.
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