

normal CBC, CMP, CRP, CK, and TSH. Urine drug screen, CT angiography of the head, and Huntington's disease testing were all unremarkable, suggesting a decreased likelihood of illicit drugs, traumatic brain injury, or Huntington's disease etiologies. Confirmation of the diagnosis was made as the chorea symptoms abruptly resolved upon discontinuation of methylphenidate and administration of intravenous Benadryl. The patient has been on methadone alone for 11 months and methylphenidate alone 2 years back with no involuntary movements or any similar presentation that shows the possibility of drug interaction through cytochrome P450 metabolism between Methylphenidate and methadone.

Conclusion. We are presenting a rare case report that adds on to the scarce literature on methylphenidate-induced chorea. It also challenges the consulting psychiatrists to broaden their differential diagnosis for acute onset of choreiform movement disorders. This unique case intrigues the thought process to consider the interaction of methylphenidate in the presence of cytochrome P450 2D6 and 3A4 inhibitors like methadone.

Perampanel-Induced Cataplexy in a Young Male with Generalized Epilepsy

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Abstract

Perampanel is an anti-epileptic drug reported to exert its effects in the central nervous system (CNS) by inhibiting post-synaptic glutamate receptors. The most commonly reported neuropsychiatric side effects are affective dysregulation with some reports of psychosis. However, the precise therapeutic mechanism is unknown. We report on a 32-year-old African American male with recurring generalized tonic-clonic (GTC) seizures, who presented to our hospital with onset of mood lability for several months, subsequent to adding perampanel to his antiepileptic medications. On presentation, perampanel administration was temporarily withheld, and subsequently, noted to be coincident with neuropsychiatric symptomatology, including motor weakness in emotional contexts. The mechanisms underlying cataplexy are complex and, in our patient, most likely induced by an interaction between perampanel and the wakeful inhibition of the sublaterodorsal nucleus projections.

Untreated Insomnia in Corrections and Increased Risk of Death

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Abstract

Study Objectives. This review discusses the potential negative consequences of untreated insomnia in correctional settings.

Methods. A literature review was conducted on the association between insomnia and negative health outcomes, the best practices for treating insomnia with and without medications, and common practices that prohibit the treatment of insomnia in correctional settings.

Results. Untreated insomnia was associated with increased psychiatric distress, increased risk for suicide, and increased all-cause mortality. Common practices in many correctional institutions impose restrictions on treating insomnia. These practices lead to an increased likelihood for negative health outcomes, including suicide and an increase in all-cause death.

Conclusions. Practices that prohibit the treatment of sleep in correctional settings increase the risk of death by suicide and other adverse health outcomes. The practices are often put in place due to pressure from the security staff who have trouble controlling the black-market trade of prescribed medications and other contraband within jails and prisons. Healthcare professionals in the correctional setting must advocate for the importance of treating sleep problems in jails and prisons and work with security staff on ways to overcome the problems of pill diversion and the trade of contraband in order to provide quality healthcare to this protected population.

Implementation of NAVIGATE Coordinated Specialty Care for First Episode Psychosis: the Michigan Experience

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Abstract

Study Objectives. Coordinated specialty care (CSC) is widely accepted as an evidence-based treatment for first episode psychosis (FEP). The NAVIGATE intervention from the Recovery After an Initial Schizophrenia Episode Early Treatment Program (RAISE-ETP) study is a CSC intervention which offers a suite of evidence-based treatments shown to improve engagement and clinical outcomes, especially in those with shorter duration of untreated psychosis (DUP). Coincident with the publication of this study, legislation was passed by the United States Congress in 2014–15 to fund CSC for FEP via a Substance Abuse and Mental Health Services Administration (SAMHSA) block grant set-aside for each state. In Michigan (MI) the management of this grant was delegated to Network180, the community mental health authority in Kent County, with the goal of making CSC more widely available to the 10 million people in MI. Limited research describes the outcomes of implementation of CSC into community practices with no published accounts evaluating the use of the NAVIGATE intervention in a naturalistic setting. We describe the outcomes of NAVIGATE implementation in the state of MI.

Methods. In 2014, 3 centers in MI were selected and trained to provide NAVIGATE CSC for FEP. In 2016 a 4th center was added, and 2 existing centers were expanded to provide additional access to NAVIGATE. Inclusion: age 18–31, served in 1 of 4 FEP centers in MI. Data collection began in 2015 for basic demographics, global illness (CGI q3 mo), hospital/ED use and work/school (SURF q3 mo) and was expanded in 2016 to include further demographics, diagnosis, DUP, vital signs; and in 2018 for clinical symptoms with the modified Colorado Symptom Inventory (mCSI q6 mo), reported via an online portal. This analysis used data until 12/31/19. Mixed effects models adjusted by age, sex and race were used to account for correlated data within patients.

Results. N=283 had useable demographic information and were included in the analysis. Age at enrollment was 21.6 ± 3.0 yrs; 74.2% male; 53.4% Caucasian, 34.6% African American; 12.9 ± 1.7 yrs of education (N=195). 18 mo retention was 67% with no difference by sex or race. CGI scores decreased 20% from baseline (BL) to 18 mo (BL=3.5, N=134; 15–18 mo=2.8, N=60). Service utilization via the SURF was measured at BL (N=172) and 18 mo (N=72): psychiatric hospitalizations occurred in 37% at BL and 6% at 18 mo ($p<0.01$); ER visits occurred in 40% at BL and 13% at 18 mo ($p<0.01$). 44% were working or in school at BL and 68% at 18 mo ($p<0.01$). 21% were on antipsychotics (AP) at BL (N=178) and 85% at 18 mo (N=13) with 8% and 54% on long acting injectable-AP at BL and 18 mo, respectively. Limitations include missing data and lack of a control group.

Conclusion. The implementation of the NAVIGATE CSC program for FEP in MI resulted in meaningful clinical improvement for enrollees. Further support could make this evidence-based intervention available to more people with FEP.

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The Challenge of Managing Patients Suffering from TBI: The Utility of Multiparametric MRI

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Abstract

Traumatic brain injury (TBI) is a complex phenomenon affecting multiple areas of the brain in multiple ways. Both right and left hemispheres are affected as well as supratentorial and infratentorial compartments. These multifocal injuries are caused by many factors including acute mechanical injury, focal intracranial hemorrhage, blunt and rotational forces, epidural and subdural hematoma, hypoxemia, hypotension, edema, axonal damage, neuronal death, gliosis and blood brain barrier disruption. Clinicians and patients benefit by precise information about the neuroanatomical areas that are affected macroscopically, microscopically and biochemically in an individual patient.

Standard imaging studies are frequently negative or grossly underestimate the severity of TBI and may exacerbate and prolong patient suffering with an imaging result of “no significant abnormality”. Specifically, sophisticated imaging tools have been developed which reveal significant damage to the brain structure including atrophy, MRI spectroscopy showing variations in neuronal metabolite N-acetyl-aspartate, elevations of membrane related Choline, and the glial metabolite myo-inositol is often observed to be increased post injury. In addition, susceptibility weighted imaging (SWI) has been shown to be more reliable for detecting microbleeds versus calcifications.

We have selected two TBI patients with diffuse traumatic brain injury.

The first patient is a 43-year-old male who suffered severe traumatic brain injury from a motorcycle accident in 2016. Following the accident, the patient was diagnosed with seizures, major depression, and intermittent explosive disorder. He has attempted suicide and has neurobehavioral disinhibition including severe anger, agitation and irritability. He denies psychiatric history prior to TBI and has negative family history. Following the TBI, he became physically aggressive and assaultive in public with minimal provocation. He denies symptoms of thought disorder and mania. He is negative for symptoms of cognitive decline or encephalopathy.