

post-traumatic stress disorder (17.5%), and diabetes (14.8%). During the first observed and treated MDE (mean \pm SD duration: 14.7 ± 8.6 months), patients received a mean of 1.6 ± 1.0 LOTs, with 36.5% and 14.6% of patients receiving ≥ 2 and ≥ 3 LOTs, respectively; 0.8% of patients received ≥ 6 LOTs. The most commonly observed therapies were SSRI monotherapy (58.9%) followed by SNRI monotherapy (8.8%) in LOT1; SSRI monotherapy followed by AD augmented with anticonvulsants in LOT2 (SSRI monotherapy: 48.7%; AD augmentation with anticonvulsants: 12.1%) and LOT3 (SSRI monotherapy: 43.5%; AD augmentation with anticonvulsants: 15.0%).

Conclusions. This study used an episodic approach to evaluate the current standard of care among veterans with MDD. During the first observed and treated MDE, about one in seven veterans received ≥ 3 LOTs, suggesting presence of treatment-resistant MDD. Monotherapy with SSRIs or SNRIs and combination therapies of AD with anticonvulsants were the most common therapies in the first three LOTs.

Funding. Janssen Scientific Affairs, LLC

Ornithine Transcarbamylase Deficiency Presenting with Symptoms of Mania in a Young Adult Male

Jonathan Pentz, MD, Blessing Igboeli, MD and Julie Niedermier, MD

The Ohio State University, Columbus, OH, USA

Presenting Author: Jonathan Pentz

Abstract

Study Objective. The purpose of this case study is to review the clinical presentation and medical workup of a young adult male presenting with acute behavior changes in the setting of undiagnosed ornithine transcarbamylase deficiency (OTCD)

Method. This case study involves a 19-year-old male with a psychiatric history of depression and one previous suicide attempt, who presented to a large midwestern university hospital emergency department after being found by police naked in a neighbor's yard. He displayed manic signs and symptoms, including euphoria, lack of sleep for five days, and attempting to purchase a new car and three large screen TVs. Family reported the patient uncharacteristically announced three weeks earlier that he was vegetarian and stopped eating his frequent customary cheeseburgers. Due to increased anxiety and inability to sleep, the patient received lorazepam 2 mg in the emergency department. Upon transfer to the psychiatric unit, therapy was initiated with aripiprazole 5 mg daily and valproate 1000 mg nightly on Day 1 of treatment. The patient refused medications on hospital Day 2, then received this combination again on Day 3. The next morning, the patient complained of lethargy, headache, nausea, and vomiting.

Results. The patient's ammonia level was found to be 204 micromol/L with ALT and AST of 714 and 647 IU/L respectively. Tests

for infectious hepatitis were negative. Medical consultation recommended discontinuation of current medications, vigorous hydration, and further work up. On further investigation, the patient was found to have low plasma citrulline level of 8 micromol/L, undetectable plasma arginine, and high urinary orotic acid. The laboratory data showed a biochemical phenotype consistent with a diagnosis of partial OTCD, an X-linked urea cycle disorder resulting in toxic hyperammonemia. The patient was treated with a low protein diet modification as well as a combination of sodium benzoate and sodium phenylbutyrate to reduce serum ammonia concentration. With treatment the patient's laboratory values normalized, and mental status improved.

Conclusions. In conclusion, partial ornithine transcarbamylase deficiency may manifest with psychiatric symptoms in early adulthood. In young patients with elevated ammonia and mental status change, OTCD is an important diagnosis to consider, as it is the most common inherited cause of hyperammonemia.

The Effectiveness of De-Escalation Techniques as Compared to Physical Restraint/Seclusion on Inpatient Psychiatric Units: A Quantitative Systematic Review

Shavar Chase, DNP, PMHNP-BC

Rutgers University, Newark, NJ, USA

Presenting Author: Shavar Chase

Abstract

Background. Restraint and seclusion were considered a form of treatment but consistently has led to physical and mental injuries to staff and patients. De-escalation has been viewed as a safer option. Understanding which intervention yields decreased injuries, aggression and violence will guide policy and inform practice.

Objectives. To identify which intervention leads to decreased physical and psychological injury to patients and staff.

Methods. The frequency of physical injuries to patients and staff from aggressive patients; frequency of psychological injuries to patients and staff from violent, aggressive incidents; frequency of violence, agitation and aggression; competence of staff at managing aggression and violence were evaluated.

Results. Fourteen studies were included in this review. There are many forms of de-escalation. Studies where techniques were taught to staff, the intervention was effective in decreasing injury in approximately half the studies. De-escalation techniques taught to patients decreased injury in 100% of the studies included in this review.

Conclusion. Consensus on which intervention works best could not be reached, nor is there overwhelming evidence for a particular type of de-escalation better suited for decreasing aggression and violence. Caution should be exercised when choosing a de-escalation technique for implementation in institutions due to lack of regulating agencies that inform practice and standards. In