Catatonia, hypoxia, and arrhythmia, oh my!
The importance of a multidisciplinary approach to medically complex patients with catatonia

Sara V Carlini, MD[1] and Samuel P Greenstein, MD[2,3,4]

[1]Department of Psychiatry, Maimonides Medical Center, Brooklyn, NY 11219, USA; [2]Consultation-Liaison Psychiatry, Long Island Jewish Medical Center/Northwell Health, New Hyde Park, NY 11040, USA; [3]Department of Psychiatry, Zucker Hillside Hospital, Northwell Health, Glen Oaks, NY 11004, USA; [4]Department of Psychiatry, Zucker School of Medicine at Hofstra/Northwell, Hempstead, NY 11549, USA.

Background

- Catatonia is a neuropsychiatric syndrome primarily characterized and assessed by the presence of motor symptoms (Francis, et al., 1997).
- Catatonia may arise in the medically ill (Denysenko et al., 2018) and may complicate medical treatment or directly cause complications such as deep vein thrombosis, decubitus ulcers, and urinary retention (Funayama, et al., 2018).

Case Presentation

A 28 year-old male with a past psychiatric history of bipolar disorder and autism and with a past medical history significant for Wolff Parkinson White (WPW) syndrome was admitted to a psychiatric hospital for worsening mania despite having a therapeutic lithium level on admission as well as recently receiving long-acting aripiprazole decanoate. Five days into his admission, he developed altered mental status and urinary retention, necessitating a transfer to a medical hospital where he was found to be febrile, hypoxic, drooling, tachycardic, and grossly catatonic with waxy flexibility, catalepsy, staring, posturing, repetitive grunting, and withdrawal.

Due to hypoxia, aggressive treatment of catatonia with lorazepam was not undertaken and the family was involved in the discussion to utilize electroconvulsive therapy (ECT). Although malignant catatonia with autonomic instability was a part of the differential, his symptoms of persistent hypoxia as well as his cardiac history raised suspicion for possible organic etiology.

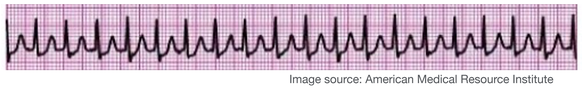

Image source: American Medical Resource Institute

On day 3 of his medical hospitalization, the patient went into supraventricular tachycardia necessitating an ablation of accessory pathways per cardiology. Following these urgent interventions, the patient's fever, hypoxia, and tachycardia resolved, and he was treated with lorazepam for catatonia with good effect on symptoms. His urinary retention resolved.

He was medically stabilized and transferred back to inpatient psychiatry for further management of his mania, which re-emerged with improvement of his catatonia.

Discussion

- The underlying etiology of catatonia may be difficult to determine in a medically complex psychiatric patient. Acute medical problems should be identified and treated as possible causative agents.
- Additionally, treatment of catatonia may be complicated by acute medical symptoms.
- Expedient collaboration between CL psychiatry, medicine, and cardiology allowed for rapid detection and treatment of acute medical symptoms complicating treatment of catatonia that ultimately allowed for pharmacotherapy to obviate the need for ECT.

Conclusion

Our case highlights the complexity of treating patients with catatonia in a medical setting and emphasizes the importance of an interdisciplinary approach for such patients.

References

Denysenko, L. et al. (2018). Catatonia in the medically ill: Etiology, diagnosis, and treatment. The Academy of Consultation-Liaison Psychiatry Evidence-Based Medicine Subcommittee Monograph. *Annals of Clinical Psychiatry*, *30*(2), 140–155.

Francis, A., Divadeenam, K. M., Bush, G., & Petrides, G. (1997). Consistency of symptoms in recurrent catatonia. *Comprehensive Psychiatry*, *38*(1), 56–60.

Funayama, M., Takata, T., Koreki, A., Ogino, S., & Mimura, M. (2018). Catatonic Stupor in Schizophrenic Disorders and Subsequent Medical Complications and Mortality. *Psychosomatic Medicine*, *80*(4), 370–376.