

Catatonic with COVID-19 – A Case Report

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Background

- Catatonia is a behavioral syndrome marked by psychomotor symptoms¹.
- Aberrations in the activity of several neurotransmitters have been implicated in catatonia, including GABA-A hypoactivity, dopamine hypoactivity, and possibly glutamate hyperactivity².
- COVID-19 is an infectious disease caused by the SARS-CoV-2 virus. The presentation of this disease can vary but is typically characterized by constitutional and upper respiratory symptoms. Severe disease can result in acute respiratory distress syndrome, sepsis, (multi-) organ failure, and death⁴.
- Lorazepam is considered a first-line treatment for catatonia³ though carries a risk of respiratory compromise.
- Limitations in the ability to utilize conventional treatments for catatonia in COVID patients warrants exploration of alternative treatments.

Case Presentation

- A 62-year-old female with psychiatric history of bipolar disorder was brought to the ED for altered mental status and subsequently admitted to the medical service for complicated urinary tract infection.
- Psychiatry was consulted in the ED for vague, active suicidal ideation and psychosis (auditory hallucinations). The patient was largely non-verbal but otherwise displayed minimal signs of catatonia.
- The C/L psychiatry team continued to follow the patient while inpatient medically for approx. one month due to failure to thrive.
- On hospital days 4-5, the patient became progressively more withdrawn, mute, and rigid, and displayed catalepsy and posturing. A positive low-dose Ativan challenge supported a diagnosis of catatonia. Standing Ativan was started and uptitrated gradually. The patient's home Haldol dose was held.
- Even at doses of 1 mg TID of Ativan, patient showed considerable oversedation, decreased respiratory rate, and decreased blood pressure.
- On hospital day 8, the patient was noted to have a new fever and respiratory symptoms; she was found to be COVID positive two days later. Given her new diagnosis of COVID, she was considered ineligible for ECT.
- Given fluctuations in her respiratory status, sedation, and catatonia, Ativan was up-titrated cautiously, and doses were often held.
- On hospital day 15, memantine 5 mg daily was started, uptitrated to 10 mg BID with improvement in catatonia, including rigidity and mutism.
- As the patient improved medically, Ativan was slowly titrated up to 2 mg TID as well with further improvement in catatonia.
- By approximately 30 days into hospitalization, the patient was once again able to endorse suicidal ideation and intermittent hallucinations. She was able to walk, eat, and follow commands, and demonstrated minimal rigidity, though still showed signs of catatonia including intermittent mutism, staring, and posturing.
- After medical clearance, she was transferred to inpatient psychiatry for further psychiatric treatment.

Discussion

- Treating COVID-19 positive catatonic patients presents various challenges including concern for the patient's oxygen saturation and respiratory status.
- In general, providers try to avoid medications that can lower respiratory drive or increase sedation.
- Catatonic patients who demonstrate sedation from lorazepam and have COVID-19 present a difficult scenario in that the main treatment for catatonia may put the patient at risk for respiratory compromise.
- When ECT is not available, the use of medications that modulate other neurotransmitters has been shown to be effective in treating benzodiazepine-resistant catatonia².
- For patients with COVID-19 and catatonia, non-BZD medications may be especially useful as there is less risk of respiratory depression.

Conclusion

- COVID-19 positive patients with catatonia present a unique challenge. When there is concern for the respiratory status of the patient, consider using other pharmacologic agents, such as memantine², in treating catatonia.

References

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