A Unique Intersection: A Case of Malignant Catatonia, PRES, and Cotard Delusions

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Background:

• This report details a rare intersection of Malignant Catatonia (MC) and Posterior Reversible Encephalopathy Syndrome (PRES), marking just the fourth reported case. In addition, our case has further complexity with the emergence of Cotard delusions during treatment.

Case:

Patient Profile:

- •29-year-old African American woman with schizophrenia and asthma.
- Managed with long-acting injectables.

Initial Presentation:

- Admitted to outside hospital with worsening psychotic symptoms and autonomic instability.
- •ICU transfer following an MRI revealing PRES (Posterior Reversible Encephalopathy Syndrome).

Psychiatry Intervention:

- •Concerns of catatonia led to initiation of Lorazepam (titrated to 2 mg hourly).
- •BFCS score reached 30, confirming malignant catatonia (MC) with PRES.
- •Electroconvulsive therapy (ECT) started.

ECT Treatment Course:

- •ECT initially daily, then reduced to thrice-weekly sessions.
- Significant improvement in catatonia noted.
- •Experienced brief Cotard delusions and a delirium episode during ECT course.
- •Delirium resolved six days post-ECT.

Medication Adjustments:

- •Lorazepam titrated based on catatonia severity (peaked at 3 mg every 2 hours).
- Tapered to 1 mg twice daily by discharge, with no as-needed dosing.

Outcome:

- •BFCS scores stabilized at 2-6 post-ECT.
- •Increased sociability and stable mental state upon discharge.
- •Outpatient follow-up and home therapy planned.

Discussion:

Contribution to Literature:

- •Supports ECT's efficacy and safety in treating catatonia, including rare cases of malignant catatonia (MC) with PRES, of which only three cases have been previously reported (Spiegel, 2011; Klingensmith, 2017).
- •Unique aspects: younger patient age and Cotard delusions add complexity to the case.

ECT Response Rates:

- Catatonia: 80% to 100% response rate.
- •Suspected MC: 89% response rate (Luchini, 2015).

Functional Imaging Insights:

- •Parietal lobe hypoperfusion common in both catatonia and Cotard delusions aligns with findings in PRES patients (Fink, 2003).
- •Right parietal lobe abnormalities, linked to self-awareness and insight, deepen understanding of Cotard syndrome and related conditions.

Conclusions:

• This case emphasizes the effectiveness of ECT as a key treatment for catatonia, highlighting its significant role in alleviating symptoms even in intricate cases involving MC associated with PRES.

Reference

- 1.Spiegel, David R, and Charles Varnell Jr. "A case of catatonia due to posterior reversible encephalopathy syndrome treated successfully with antihypertensives and adjunctive olanzapine." General hospital psychiatry vol. 33,3 (2011): 302.e3-5. doi:10.1016/j.genhosppsych.2011.01.007
- 2.Klingensmith, Katherine E et al. "Co-occurring Catatonia and Posterior Reversible Encephalopathy Syndrome Responsive to Electroconvulsive Therapy." The journal of ECT vol. 33,3 (2017): e22. doi:10.1097/YCT.00000000000000407
- 3.Luchini, Federica et al. "Electroconvulsive therapy in catatonic patients: Efficacy and predictors of response." World journal of psychiatry vol. 5,2 (2015): 182-92. doi:10.5498/wjp.v5.i2.182
- 4. Fink, Max, and Taylor, Michael Alan. Catatonia: A Clinician's Guide to Diagnosis and Treatment. United Kingdom, Cambridge University Press, 2003.
- 5.Debruyne, Hans et al. "Cotard's syndrome: a review." Current psychiatry reports vol. 11,3 (2009): 197-202. doi:10.1007/s11920-009-0031-z