

Palliative ECT for Catatonia in a Terminal Cancer Patient: A Case Report

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Introduction

- Catatonia is a psychomotor disturbance involving decreased movement or an inability to stop moving. It may result from medical problems and medications common at the end of life.
- Catatonia can decrease interactivity, which worsens a terminal patient's quality of life.
- Electroconvulsive therapy (ECT) involves electrically inducing a generalized seizure and is indicated for treatment resistant depression, suicidality, severe psychosis, and catatonia. Its mechanism is unclear but may involve changes in neurotransmitter signaling and/or neurogenesis.
- Though there is consensus that treating psychiatric disorders aligns with the palliative care philosophy, there is limited evidence that ECT has been used in end-of-life situations.
- The few case reports exploring palliative ECT involved continuation of prior ECT courses for chronic psychiatric conditions in psychiatric settings after a terminal diagnosis.^{1,2}
- No studies have explored palliative ECT in a medical setting for acute catatonia at the end of life.

Case

- The patient was a 78-year-old male with a history of catatonic schizophrenia, chronic obstructive pulmonary disease, coronary artery disease complicated by myocardial infarction, and advanced gastroesophageal junction and colon cancers treated with immunologic therapy, complicated by autoimmune hepatitis.
- He was admitted medically due to acute mental status change while receiving methylprednisolone infusion for autoimmune hepatitis.
- The consultation-liaison psychiatry (C-L) service was consulted for concern of catatonia. The C-L service noted stupor, withdrawal (requiring enteral feeding), mutism, gegenhalten, grimacing, and autonomic instability and calculated a Bush-Francis score of 17, consistent with catatonia.
- The patient's outpatient risperidone was discontinued, as antipsychotics can worsen catatonia, and a lorazepam trial was initiated but limited by sedation. Robust trials of memantine, methylphenidate, and amantadine were initiated (Figure 1).
- The patient slightly improved but remained catatonic and unable to communicate for weeks in the setting of ongoing corticosteroid treatment, the suspected cause of his catatonia.
- After extensive psychoeducation by the C-L service in interdisciplinary family meetings, four ECT treatments were completed with significant improvement in catatonic symptoms for several days, including meaningful family interactions.
- The first two treatments were well tolerated. The third and fourth treatments were associated with hypertension and desaturations.

- At this point, the patient developed a fever and tachycardia, and a non-operable duodenal perforation was found on imaging. ECT was no longer thought to be viable by the C-L and anesthesia services.
- The patient was transitioned to comfort care.

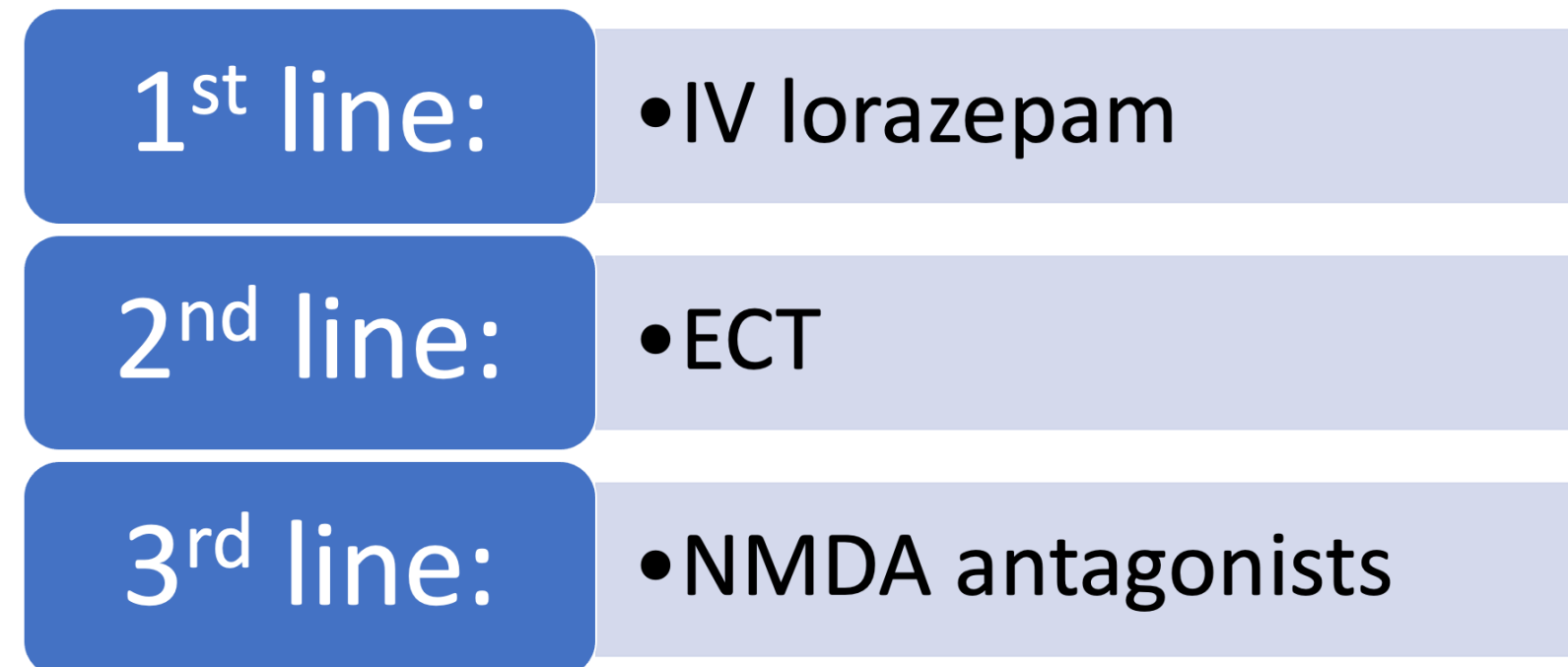


Figure 1: Evidence-based treatment for medical catatonia³

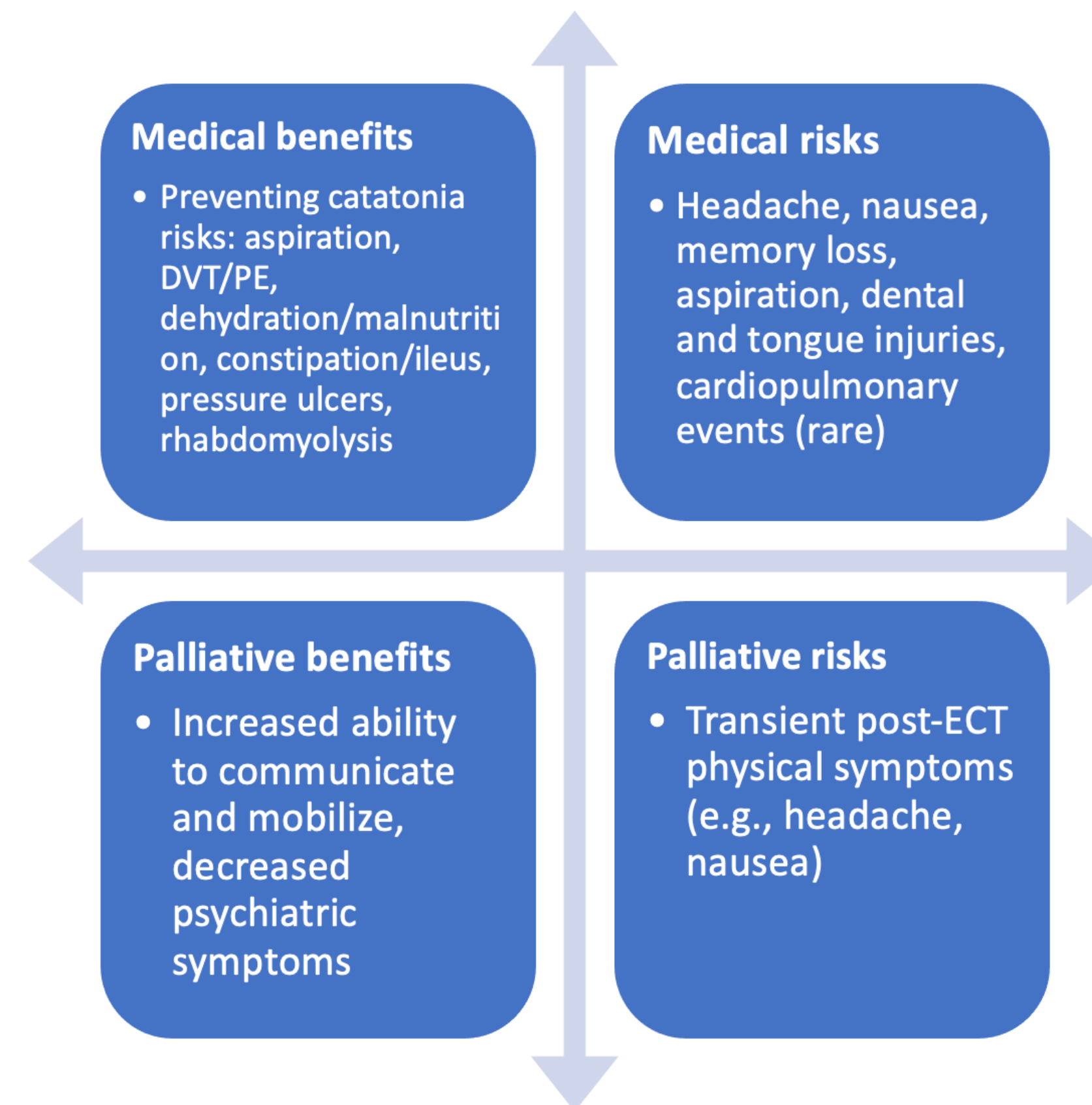


Figure 2: Overview of medical and palliative benefits and risks of ECT for catatonia⁴

Discussion

- We presented the case of an ECT-naïve older male with advanced cancer hospitalized for acute catatonia for whom the inpatient C-L service initiated ECT to rapidly improve end-of-life interactivity.
- By improving interactivity and decreasing the intense anxiety commonly associated with catatonia, ECT can improve a patient's quality of life.
- Similarly, the few case reports exploring palliative ECT have demonstrated communication improvement and symptom relief across multiple psychiatric disorders, including depression, psychosis (including psychosis with catatonic features), mania, and agitation in dementia.^{1,2}
- As in our case, the need for ongoing risk-benefit analysis of continuing ECT in medically ill patients was highlighted.^{1,2}
- Ours is the first case involving palliative ECT initiation in a general medical setting and in acute catatonia rather than continuation of ECT courses for chronic psychiatric conditions.
- The C-L service played a crucial role in coordinating ECT logistics in the medical hospital, psychoeducating the patient's family and primary service about ECT, and leading goals of care discussions, including weighing palliative and medical risks and benefits (Figure 2).
- Because end-of-life psychological distress and psychiatric disorders are prevalent, experts and accrediting bodies for C-L fellowships have recommended that psychiatrists be rigorously trained in palliative care.

Conclusion

ECT can provide comfort, relieve suffering, and improve quality of life. We propose considering palliative ECT for terminally ill patients to improve catatonia and other severe psychiatric symptoms. C-L psychiatrists should collaborate with primary and palliative care services to consider the full range of treatments, including interventional modalities, to assuage end-of-life suffering.

References:

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