Trapped in Silence: A Case of Terminal Malignant Catatonia Awaiting Life-Saving Electroconvulsive Therapy

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Disclosure: James Kingpeter, MD

With respect to the following presentation, in the 24 months prior to this declaration there has been no financial relationship of any kind between the party listed above and any ACCME-defined ineligible company which could be considered a conflict of interest.
Background

- Malignant catatonia (MC) is a rare, but lethal neuropsychiatric condition.
- It is characterized by catatonic symptoms, in addition to hyperthermia and/or autonomic instability.
- There are challenges to diagnosing MC, leading to delayed treatment and increase risk of morbidity and mortality.
- Standard treatment is characterized by benzodiazepine treatment and electroconvulsive therapy (ECT), though there is little research about the use of ECT in medically fragile patients with MC.
Case

• 67-year-old male with a past psychiatric history of schizoaffective disorder presenting from a nursing home after being found unresponsive, febrile, and tremulous.

• Home medications:
  • Clozapine
  • Lithium
  • Bupropion
  • Amantadine
Findings

<table>
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<th>Lab</th>
<th>Values</th>
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<tr>
<td>Temperature</td>
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<tr>
<td>WBC</td>
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<td>Sodium</td>
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</table>
Differential Diagnosis

- Malignant Catatonia
- Infection
- NMS
Treatment Course

Infectious Work-up
- Infectious panel
- Empiric antibiotics for meningitis

Psychiatry Consultation
- Consulted for whole-body involuntary movements 24 hours after admission
- Presumed Neuroleptic Malignant Syndrome
- Treatment with Dantrolene, Bromocriptine, Carbidopa/Levodopa, and PRN Ativan
After treatment for NMS...

- Lab values improved
- Vitals signs stabilized
- Tremulousness subsided, though subsequently noted to be rigid
- Mental status remained unchanged – obtunded to stuporous, not responding to commands or stimuli
Diagnosis of Catatonia

• Patient became febrile again
• Suspected catatonia with initial Bush-Francis Catatonia Rating Scale (BFRS) score of 19
  • Bilateral arm rigidity
  • Gegenhalten
  • Negativism
  • Mutism
  • Stupor
  • Verbigeration
  • Withdrawal
• Diagnosed with benzodiazepine-resistant malignant catatonia on day 28
• Planned transfer to a tertiary care medical hospital for ECT
Delayed care

• Course complicated by:
  • Aspiration pneumonia
  • Urinary tract infection
  • Decubitus ulcerations
  • Deep vein thrombosis
• Transfer delayed by 13 days
To treat or not to treat?

• Day before first planned ECT: "Pt tachypneic to 50's...MICU called for consult...Pt not getting ECT in am."

• Palliative care consulted for goals of care discussion

• Discussed case with Infectious Disease: "Without improvement in his mental status, seems unlikely that we will be successful in preventing infections"
Risk vs. Benefit Analysis

• Benefits:
  • Possibility of improvement in mental status
  • Prevention of further medical complications

• Risks:
  • Further aspiration events
  • Autonomic failure
9 ECT treatments later

• First ECT treatment administered on Day 60
• Mental status returned to baseline
• Catatonia resolved
• Discharged to subacute rehabilitation facility due to contractures in his arms and legs after being immobile for nearly 4 months
Discussion

- Illustrates the natural history of catatonia when left untreated
- Diagnosis was confounded by overlapping symptoms with NMS and sepsis leading to delay in diagnosis.
- One study identified average delay between symptom onset and first treatment was 15 days and average lag between first treatment and ECT initiation was 27 days (Tuerlings et al. 2010)
- ECT was pursued but due to accruing medical complications, treatments were further delayed.
- Though his mental status returned, the delay in treatment contributed to a severe decline in physical function.
Take-aways

• Early identification of benzodiazepine resistance is imperative
• Conduct early risk/benefit analysis of ECT utility prior to accrual of complicating medical sequelae
• Where feasible, incorporate ECT into the general medical hospital setting to improve morbidity and mortality associated with MC
Citations
