

Stuck at the Scene:



Trauma-Emergent Catatonia in a Patient with Landau-Kleffner Syndrome

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Background

Catatonia is a complex neurobehavioral disorder typically associated with psychiatric and medical conditions.

Early research suggests a potential link between psychological trauma and catatonia, supported by animal studies showing tonic immobility resembling catatonia as a fear response.¹

Individuals with neurodevelopmental disorders have a higher prevalence of catatonia compared to the general population and may be more susceptible to the impact(s) of trauma.² Landau-Kleffner syndrome, first described in 1957, is a rare childhood epileptic encephalopathy that results in seizures and loss of neurocognitive function—including an acquired aphasia—over time.³

To date, there are no documented cases of catatonia in a patient with Landau-Kleffner syndrome. This case report reveals the complexities of how trauma and catatonia might present in a patient with this disorder.

Case Description

A 21-year-old male with a history of Landau-Kleffner syndrome (verbal and on no anti-epileptics for over a decade) was brought to the hospital by his family for progressive functional and cognitive decline with complaint of recurrent abdominal pain.

He had not had any seizures since the age of 7 or 8 and had been off anti-epileptic medications since the age of 13. At baseline, he is unable to read or write, but he can engage in normal conversation.

He had been in his usual state of health until about 3 months prior, when he was involved in a single-passenger motor vehicle accident requiring the 'jaws of life' to remove him from the car, resulting in a frontal hematoma with concussion and a thigh laceration.

Since then, he had become increasingly labile and perseverative with staring spells.

Treatment Course

FIRST HOSPITALIZATION Presented with irritability **MVA** and personality changes Sustained a nasal since MVA, with acute bone fracture and worsening in the week concussion. prior presentation Required extraction Medical work-up with "jaws of life" revealed abnormal LTM, but was otherwise **EPILEPSY CLINI** unremarkable Loaded on levetiracetam Ongoing seizures and valproate Sent back to ED Repeat LTM was normal

Discussion

Despite limited existing research on the role of trauma in catatonia development, emerging evidence supports a potential association, as seen in animal studies and clinical observations.

Patients with Landau-Kleffner syndrome may be at increased risk in the setting of known deficits in cognition as well as language processing.

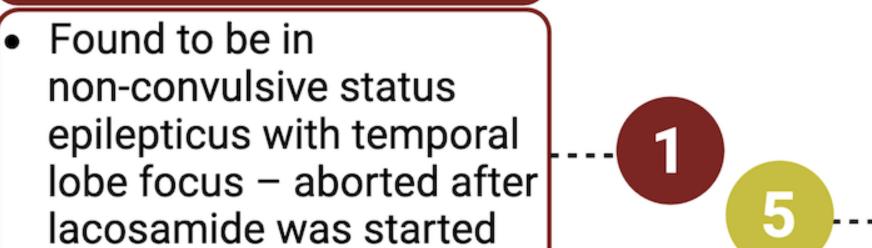
Effective treatment of seizures and catatonia uncovered the profound psychological impact that a traumatic event had on him.

Conclusion

This case underscores the importance of considering trauma as a potential contributor to psychiatric manifestations, including catatonia, in individuals with neurodevelopmental disorders.

Further research is warranted to elucidate the complex interplay between trauma, neurodevelopmental disorders, and catatonia, with the aim of informing targeted interventions and improving clinical care for affected individuals.

SECOND HOSPITALIZATION



DAY 0

Levetiracetam tapered

Psychiatry consulted –

echopraxia

stereotypy

negativism

increased

posturing

Deferred treatment for

for ongoing seizures

catatonia due to concern

DAY 8

Lorazepam challenge:

BFCRS 26 → 3

Started on scheduled IV

lorazepam which was

DAY 21

titrated to 2mg q4h

ECT initiated

BFCRS 14

DAY 6

psychomotor activity

 Symptoms of catatonia gradually improved

Became more verbal

 Rumination around the accident became more apparent

"I think I died in the accident'

"I don't want to be a ghost"

"I don't want to get burned"

DAY 34

Olanzapine was introduced to target internal preoccupation and rumination

Titrated to 7.5 mg nightly

Gradually became more engaged and less internally preoccupied

 Able to hold linear conversations

DAY 52 - DISCHARGE

Discharged on PO
lorazepam 2.5 mg TID,
olanzapine 7.5 mg qHS, and
ECT twice per week.

"The accident is in the past, it already happened"

References

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- 1. Moskowitz, A. K. (2004). "Scared Stiff": Catatonia as an Evolutionary-Based Fear Response. *Psychological Review, 111*(4), 984–1002.
- 2. Moore, S., Amatya, D.N., Chu, M.M. *et al.* Catatonia in autism and other neurodevelopmental disabilities: a state-of-the-art review. *npj Mental Health Res* **1**, 12 (2022).
- 3. Muzio MR, Cascella M, Al Khalili Y. Landau-Kleffner Syndrome. 2023 Jul 3. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. PMID: 31613525.