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Case of New Onset Alice in Wonderland Syndrome in Adolescent After Prolonged Hospitalization

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Case of New Onset Alice in Wonderland Syndrome in Adolescent After Prolonged Hospitalization

SIGNIFICANCE

- Alice in wonderland syndrome (AIWS) has been described as body image illusions involving distortions of the size, mass, or shape of the patient's own body or its position in space, often occurring with depersonalization and derealization. Most cases typically affect young children.
- Common distortions are micropsia, macropsia, metamorphopsia, and pelopsia.
- The term was adopted from the book by Lewis Carroll, wherein the main character perceived her size and shape to change in different scenarios.
- These distortions are often expressed as sensory perceptions rather than illusions or hallucinations, and are often distressing to the patient.
- AIWS onset has been found to be associated with infection, among most frequent pathogens are epilepsy, migraine, depression, and Epstein Barr Virus. The most common which have been reported to show association are infection and migraine/head trauma.
- This case describes a relatively quick onset of symptoms of AIWS in a patient after a prolonged hospital stay.



CASE PRESENTATION

- A 14-year-old female with a psychiatric history of ADHD and absence seizures was brought to the hospital after calling 911 stating that her mother and younger sister were dead. The patient had been discharged one day prior after a prolonged hospital admission for diabetic ketoacidosis and an acute infection.
- The patient's mother reported that since beginning treatment of this infection, the patient had experienced sleep disturbance and some mood lability. Additionally, she endorsed psychotic and bizarre behavior along with new paranoia that were significantly different from the patient's baseline.
- Mother described the patient as being happy and active just a week prior to hospitalization.
- During her stay in the psychiatric unit, the patient maintained a fixed delusion that parts of her body were swollen and asymmetrical. She reported there were parts of her body that were "too large". She reportedly adjusted her clothing often, appearing uncomfortable. She reported depressive symptoms, appeared withdrawn in groups, displayed a flat affect, and responded to internal stimuli at times.
- The patient and mother agreed to continuing care after this psychiatric hospitalization with intensive outpatient therapy along with continuation of the medications that were managing her symptoms on the unit. These medications were Aripiprazole, Risperidone, Sertraline, and ethosuximide for seizure prophylaxis.

DISCUSSION

- In this case, the patient's psychosis etiology may be due to delirium secondary to recent DKA, clindamycin treatment, or post ictal psychosis presentation of uncontrolled absence seizures.

- At the time, the patient was receiving treatment with Lamotrigine for seizures, which may have been serving a dual purpose and also providing mood stabilization. This may explain why the patient had not previously reported mood symptoms, but in the presence of acute infection and sleep disturbance may be presenting with psychotic features.

CONCLUSION

- Rare presentations such as AIWS are investigated far less frequently than more common conditions, which creates challenges in providing accurate health care.
- Literature has highlighted some association between infectious diseases at an early age with neuropsychiatric manifestations that are associated with AIWS.
- Additionally, one investigation showed a possible connection between symptoms of depression and AIWS and the posterior portion of the cerebral cortex.
- A deeper understanding of AIWS, through multispecialty research investigations may provide more insight into the syndrome, risk factors, and clinical features as well as treatment options.
- Nonetheless, the underlying medical, biological, and neurological conditions which may contribute to development of AIWS in general, and as seen in this case, also highlights the importance of interdisciplinary coordination.

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