PP-004 https://doi.org/10.5080/61upk.ozt502

SPINOCEREBELLAR ATAXIA ACCOMPANIED BY PSYCHOSIS: A CASE REPORT BASED ON NEURODEVELOPMENTAL AND STRUCTURAL FINDINGS

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OBJECTIVE: [Spinocerebellar ataxia (SCA) is a neurodegenerative disorder characterized by cerebellar degeneration that may affect individuals' cognitive processes, mood regulation, and motor functions. Psychosis accompanying SCA is rare. This case report evaluates a patient with spinocerebellar ataxia accompanied by psychotic disorder, sensorineural hearing loss, and intellectual disability in the context of neurodevelopmental and structural findings.

CASE: (The patient consent must be provided and specified with appropriate terms). A 28-year-old single male patient was admitted to our forensic psychiatry clinic due to psychotic symptoms and aggressive behaviors. He had a history of imbalance, speech difficulties, and hearing loss since early childhood. Neurological examination revealed dysarthria, dysmetria, ataxic gait, and prominent tremor. Brainstem Auditory Evoked Response testing demonstrated bilateral severe sensorineural hearing loss, while cranial MRI revealed cerebellar atrophy, ventriculomegaly, and a cavum septum pellucidum et vergae variation. Psychiatric evaluation showed erotomanic delusions and impaired impulse control. Initial treatment with risperidone and valproate was initiated; however, valproate was discontinued due to worsening ataxia and tremor. Following the addition of olanzapine, psychotic symptoms markedly improved. Written informed consent was obtained from the patient for the publication of this case report.

DISCUSSION: Psychiatric manifestations—particularly depression—may accompany SCA, whereas psychotic disorders are rarely reported. The psychotic features and disinhibited behaviors observed in our patient are consistent with the "cognitive dysmetria" model, attributing psychosis to disrupted cerebellar connections with frontal and limbic circuits. Neurodegenerative involvement affecting judgment and behavioral inhibition may increase forensic vulnerability in such patients. Impaired impulse control and aggressive behavior requiring forensic hospitalization highlight the relevance of cerebellar pathology in forensic psychiatric settings. Exacerbation of ataxia following valproate underscores the need for individualized pharmacological strategies. This case emphasizes the importance of recognizing neuropsychiatric symptoms in cerebellar disorders and adopting a multidisciplinary approach, particularly in evaluating forensic risk, criminal responsibility, and long-term institutional care needs.

Keywords: Spinocerebellar ataxia, psychosis, cerebellum, neurodevelopmental anomaly, cavum septi pellucidi