

CASPR2 Autoimmunity in an Elderly Patient with Cognitive Symptoms, Seizures and Movement Disorder - A Case Study

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Key takeaway: Clinicians should be aware of atypical changes in patients' phenotype over time and conduct relevant workup for co-existent pathologies rather than misattributing them to the underlying neurodegenerative process.

INTRODUCTION	RESULTS	CONCLUSIONS	REFERENCES
- Contactin-associated protein-like 2 (CASPR2) antibody associated disease is an uncommon yet clinically important cause of autoimmune encephalitis in the elderly. - Clinical manifestations are heterogeneous, ranging from cognitive and psychiatric symptoms to seizures, sleep disturbances, and movement disorders.	- A 78-year-old functionally independent lady presented with a one-year history of gradually progressive short-term memory loss and executive dysfunction in early 2020. She was treated for mild Alzheimer's Dementia (AD) with concordant neuroimaging features. - She remained stable up till late 2022 when she had a first onset seizure. In the ensuing two years, she developed fluctuating mental status, episodic limb tremors, followed by progressive limb stiffness and rapid deterioration in functional and cognitive abilities. - Examination revealed marked rigidity of her limbs with intermittent stereotypic painful dystonic posturing of her jaw and limbs with preserved consciousness.	- Routine laboratory investigations were unremarkable except for mild pancytopenia. Electroencephalography revealed moderately diffuse encephalopathy and repeat MRI brain in 2024 was unremarkable. Family declined lumbar puncture. - Given the atypical features, serum cell-based autoimmune encephalitis panel was sent, which returned positive for CASPR2-igG. - She was treated with pulse Methylprednisolone and Intravenous Immunoglobulin following which there was significant improvement in her dystonia. - She unfortunately succumbed to a hospital-acquired infection subsequently.	- Autoimmune encephalitis may occur alongside or occasionally masquerade neurodegenerative conditions. - The subsequent development of seizures, painful dystonic posturing and rapid cognitive and functional decline in our patient were red flags for autoimmune encephalitis. - Clinical phenotypes in CASPR2 antibody-associated syndromes are heterogeneous and a high index of suspicion is necessary to enable timely diagnosis and treatment.
			Felix et al. Distinct movement disorders in contactin-associated-protein-like-2 antibody-associated autoimmune encephalitis Brain 2023 Feb 13;146(2):657-667
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