

Clinical commentary

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GAD65 antibody-associated autoimmune epilepsy with unique independent bitemporal-onset ictal asystole

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Autoimmune Epilepsy (AE)

- AE is an immunologically mediated disorder in which recurrent seizures are the primary clinical feature.
- AE should be suspected with frequent seizures from the outset, neuropsychiatric manifestations, seizure variability or multifocality, and family or personal history of autoimmunity or neoplasm.
- 6% of patients present with late-onset seizures.
- Neurological antibodies have been found in 11-35% pts with epilepsy.

Dubey D, Alqallaf A, Hays R, et al. Neurological Autoantibody Prevalence in Epilepsy of Unknown Etiology. JAMA Neurol 2017; 74: 397-402.

Brenner T, Sills GJ, Hart Y, et al. Prevalence of neurologic autoantibodies in cohorts of patients with new and established epilepsy. Epilepsia 2013; 54: 1028-35.

GAD65 AE

- Seizures and epilepsy may be the primary presentation in GAD65-associated AE with patients typically experiencing temporal lobe seizures.
- GAD65-antibody titres greater than 20 nmol/L are considered to be highly indicative of neurological autoimmunity.
- GAD65 AE has limited response to immunotherapy.

Malter MP, Helmstaedter C, Urbach H, et al. Antibodies to glutamic acid decarboxylase define a form of limbic encephalitis. Ann Neurol 2010; 67: 470-78.

Ictal Asystole (IA)

- IA is a rare yet well-known complication of focal epilepsy; particularly temporal lobe epilepsy.
- The epileptic lateralization of IA has been observed in both the right and left hemispheres.
- Although not associated with SUDEP, IA can cause traumatic falls due to syncope with sudden loss of muscle tone.
- In cases in which seizures cannot be fully controlled, implantation of a cardiac pacemaker may be advisable to prevent syncope-related injuries.

Tényi D, Gyimesi C, Kupó P, et al. Ictal asystole: A systematic review. Epilepsia 2017; 58: 356-62.

Benditt DG, van Dijk G, Thijs RD. Ictal asystole: life-threatening vagal storm or a benign seizure self-termination mechanism? Circ Arrhythm Electrophysiol 2015; 8: 11-4.