Hemiplegic Migraines: A Barrage on the Mind

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Intro

Hemiplegic migraines are a rare type of migraine with an aura phase that includes muscle weakness.

While migraines commonly affect approximately 15% to 20% of the population, hemiplegic migraines is less than 0.01%.

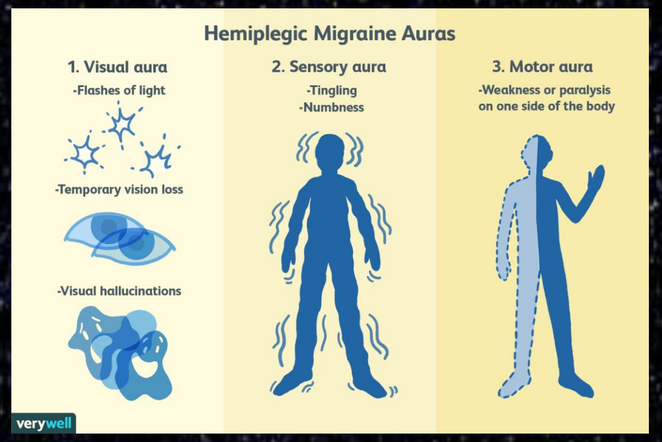
The motor auras seen in these migraines is thought to be caused by a self propagating neuronal and glial depolarization causing cortical depression.

Case

A 72 year old caucasian female with past medical history of TIA, paroxysmal atrial fibrillation, presenting to the ED with sudden onset of a headache, slurred speech and numbness and tingling in the left hand and leg.

Administered t-PA within the 45 minute window. CTA head and neck negative. Diagnostic of Hemiplegic Migraine given neurologic signs and symptoms with negative Neuro Imaging.

CACNA1A is an abbreviation of the gene's full name, 'CAlcium voltage-gated ChaNnel subunit Alpha 1A' which is a description of the protein coded for by the gene.



Discussion

Migraines are classically accompanied by phonophobia, photophobia, neurological symptoms, nausea or vomiting.

Hemiplegic migraine is a rare and complex disease, characterized by migraine with a reversible motor aura. Motor symptoms usually last hours to days with a spectrum of visual, sensory, or possibly speech impairments.

The etiology of this disorder is either idiopathic condition or genetic mutation in the CACNA1A, ATP1A2 and SCN1A encoding proteins involved in ion transport.

Differentiation of classical migraine from HM is the motor aura in HM is never isolated and rather associated with sensory, language or visual symptoms. Our patient presented with recurrent headaches with aphasia and confusion.

Conclusion

This case highlights the rarity of hemiplegic migraines and the genetic predisposition in these patients.