TRUST BUT VERIFY, DON'T DISREGARD THE SIMPLEX ANSWER: AN UNCOMMON PRESENTATION OF HERPES SIMPLEX ENCEPHALITIS.

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INTRODUCTION

- HSV1 encephalitis - MCC of sporadic fatal encephalitis worldwide.
- Sx: Fever, altered mental status, focal cranial nerve deficits, and seizures.
- Dx: PCR of CSF, sensitivity of 98% and specificity of 94%.
- Atypical symptoms: urinary and fecal incontinence, aseptic meningitis, Guillan-Barre syndrome, amnesia, Kluver-Bucy syndrome, and hypomania.
- Sinoatrial dysfunction causing syncope?

CASE DESCRIPTION

- 50 yo M w/ PMH of childhood TBI and Hep B on Entecavir presented to the hospital after new onset syncopal episodes.
- PE: afebrile, tachycardic, WBC 14k, K+ 2.8, and lactate 3.7.
- Antibiotics were briefly initiated but not continued due to lack of source.
- K repleted and patient was prepping for dc when another syncopal event occurred.
- Telemetry showed sinus pauses > 10s. Electrophysiology was consulted and performed heart catheterization and pacemaker placement.

CASE DESCRIPTION

- Next day T of 39.2 C, AMS, and seizure. He was transferred to the ICU and started on broad spectrum antibiotics and acyclovir.
- EEG showed left frontotemporal epileptogenicity and CTA and CT head were negative.
- LP had normal cytology, negative PCR for herpes, echoviruses, and negative antibodies for flaviviridae.
- Acyclovir was discontinued, antiepileptic medication started, and antibiotics were changed to rule out drug fever.

CASE DESCRIPTION

- Fevers up to 40 degrees continued despite thorough source investigation and advanced cooling efforts.
- A second LP showed lymphocytic pleocytosis and a CT head with contrast showed a new enhancing focus of the mesial left temporal lobe.
- Despite negative culture data, our clinical suspicion remained very high for herpes encephalitis so acyclovir was then restarted.

CASE DESCRIPTION

- Several days later culture data from both spinal fluid samples became positive for herpes simplex 1.
- His fever broke, he showed clinical improvement on antiretroviral therapy, and he was discharged home several days later in stable condition.

DISCUSSION

- In this case, the patient presented with syncope and then developed typical findings of HSV1 encephalitis but the misleading negative HSV PCR led to disregarding the correct diagnosis.
- This resulted in a delay in care until unsurmountable evidence forced a clinical diagnosis which was then later reinforced by corrected objective data.

DISCUSSION

- Herpes Simplex Virus 1 has been known to precipitate encephalopathy and seizures but significant viral load causing sinoatrial conduction abnormalities is less described.
- It is thought that SA node dysfunction is secondary to autonomic dysfunction in the central nervous system rather than myocardial involvement evidenced by autopsy examination.
- Be aware of atypical presentations of HSV encephalitis as well as the potential for clinical and laboratory disparity in order to not miss this life-threatening illness.

RESOURCES

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