



01/11/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Andrew (@ASanchez_PS) Case Discussants: Rabih (@rabihmgeha) and Jia (@JiazhangXing)



CC: 60yo M brought in by EMS for c/f seizure

HPI: Found on ground of store w/o witnessed fall, confused but communicative. On chart review, recent dx of late-onset unprovoked seizure disorder w/ negative MRI brain. Fingerstick negative. Previous EEG w/ multiple seizure types. Symptoms improved w/ anti seizure treatment. ROS: + episodes with staring, body wobbling, loss of balance w/ fall, characteristic rhythmic movements. Last seizure 1 mo ago. No weight loss, fever, night sweats, myalgias, CP, dyspnea, bowel incontinence.

PMH: generally healthy, witnessed nocturnal seizures, h/o vehicle collision

Meds: depakote, oxcarbazepine, zonisamide

Fam Hx:

Soc Hx: previously construction worker, lives with dog

Health-Related Behaviors:

Allergies:

Vitals: T: afebrile BP: 120/80 RR: nl O2 sat: nl

Exam:

CV: no murmurs

Pulm: CTAB

Neuro: oriented to self but not place or time, overall non-focal

Extremities/skin: no lesions, no palpable LAD

Notable Labs & Imaging:

Hematology: WBC: nl Hgb: macrocytic anemia Plt: nl

Chemistry:

BMP, coags nl

ESR 2

Depakote levels mildly low

HIV, blood cultures, syphilis, toxo negative

PSA negative

Imaging:

NCHCT: L frontal 2.4 x 1.3 ring-enhancing lesion, L and R temporal lesions, lesions close to the skull

MRI Brain: four T1 hyperintense lesions w/ surrounding edema & central restricted diffusion, small b/l subdural fluid collections

CT contrast CAP: negative for malignancy/abscesses

TTE: negative

Brain biopsy: hemorrhagic and necrotic tissue, negative infectious stains/cultures

D/c'd w/o antibiotics or other specific treatment w/ interval decrease in size/resolution of ring-enhancing lesions

NSGY re-evaluated for dx

Dx: Multifocal contusions 2/2 repeated trauma from falls

Problem Representation: 60M w/ h/o late-onset seizure disorder p/w c/f seizure with nl labs but new ring-enhancing lesions on NCHCT.

Teaching Points (Ashutosh):

Seizure vs seizure like other episodes (like hypoglycemia, syncopal episodes) . Provoked vs unprovoked seizure.

MRI negative seizure: Small focus of abnormality or not a seizure.

Seizure vs syncope: Tongue bite is more helpful compared to urinary incontinence. Response to anti seizure medication is also helpful to confirm the diagnosis of seizure disorder.

Evaluating seizure: Blood workup like electrolytes, glucose, measuring medication level, UA, Utox & Stox to check for provoked causes followed by EEG & MRI to look for structural causes.

Altered mental status represent diffuse cortical issue while it is focal in seizure. Work up of seizure is pretty similar to it. Electrolyte, UTI, hypoglycemia, alcohol withdrawal can all cause both of the conditions.

Bupropion reduces seizure threshold but probably won't cause AMS. It is important to order medication level. Ordering BZD is also important but we can wait before administering it.

Findings on imaging: Compare with older as new findings can give us insights on whether new pathology like infection or cancer is the cause.

Brain mass: Mass effect, Ring Enhancement, Parenchyma. Diffusion restriction= Pus or highly necrotic tumor which reflects lack of motion of water. Central -> Infection. Subdural fluid collection could also be 2/2 infection.

Look Down->Peripheral cause of brain mass: Lungs (cancer or immunocompromising condition), Skin (Melanoma, Nocardia), & Liver (Klebsiella abscess). MRI Spine: Some conditions may cause demyelination in both brain & spine.

Autoimmune conditions that cause brain masses: Sarcoidosis, Acute hemorrhagic leukoencephalitis, vasculitis.

Spontaneously resolving hemorrhage & necrosis: Some tumor may regress:

Keratoacanthoma, metastatic HCC. This is immune system working at their best. Infection this deep in the body is less likely to get better by itself. Trauma like SDH may resolve.

Mnemonic for Ring enhancing lesion: MAGIC DR

Empiric t/t: Pros (can save life) vs Cons (masks diagnosis).

Residency tip: Follow up with your patients!