7/30/24 Neurology Morning Report with @CPSolvers

*"One life, so many dreams" **Case Presenter**: Aye(@AyeThant94) **Case Discussants**: Aaron Berkowitz (@AaronLBerkowitz) and Valeria (@valeroldan23)*

CC: 65 yo F w/ headache and double vision

HPI: Sudden onset right headache at temporal and orbital areas without fever or congestion. Hx of "runny nose" a week ago and treated as sinusitis. After 1 week, headache still persisted w/ sudden onset R sided ptosis and double vision - all directions, no blurred vision. Headache was throbbing, persistent. Pertinent negs: Congestion, lacrimation, rhinorrhea, fever, anosmia, facial numbness and asymmetry, decreased hearing, dysphagia, slurred speech or proptosis, not associated w/ aura, N/V, photo or phonophobia. Never experienced this headache before. No motor weakness or sensory disturbances.

PMH: HTN, DM
No surgeries

Meds: amlodipine, metformin, multivitamins

Fam Hx: -
Soc Hx: smoker - 40y, 4-5 cigars/ day. Non alcoholic, no drug use. Single, lives w/ her niece family

Health-Related Behaviors: -

Allergies: Denied

Vitals: T: 97,4 **HR:** 80 **BP:** 140/90 **RR:** 12 **Sat O2:** 100%
Exam:
Gen, Pulm, Abd, Extremities: normal
CV: regular heart sounds, mild systolic murmur at aortic area, no gallops or rubs
Neuro: alert and oriented for time place and person, recalled 3/3 words after 5 minutes. Language normal.
Cranial nerves: I- no anosmia. II - pupil equal and reactive to light, no RAPD. III, IV, VI - R ptosis, R eye movement restricted in all direction, double vision. V1 - decrease R pinprick sensation. V2, V3, VII, VIII, IX, X, XI, XII - normal.
Intact vibration and proprioception.
Cerebellum: No gait, nystagmus.

Notable Labs & Imaging:
Hematology:
WBC:11 Hgb: 11 Plt: 250 ESR 21 CRP 13,25
HbA1c 7%
Chemistry:
ANA Anti dsDNA neg. Lyme, Hep, HIV, syphilis nl
Imaging:
MRI w/ contrast: brain nl
LP: nl pressure, glucose, protein, CSF cytology
CXR: nl
Steroid trial - symptoms resolved slowly. After 3 months, similar presentation, R sided headache, periorbital pain followed by double vision, symptoms more severe.

MRI: focal asymmetric enhancement along the lateral wall of R cavernous sinus posterior to orbital apex

Dx: Tolosa Hunt Syndrome

Problem Representation: 65/F with headache and diplopia presents with multiple cranial nerve palsies: III, IV, V1, VI and ptosis with no pupillary involvement

Teaching Points (Gerardo):
Headache:
- Primary vs secondary -> Red flags (SNOOPP): systemic signs, neurologic symptoms, onset sudden, onset > 50 yo, pattern change, papilledema, pregnancy
- Not to miss external causes: oral cavity, eyes, ears, sinuses, skin.
- Not to miss systemic causes: flu, vaccine

Diplopia:
- Binocular: eye misalignment due to damage to nuclei, nerve, NMJ or muscle
- Monocular: ocular problem

Ptosis:
- Diplopia + ptosis: possible CN III involvement
- Peripheral fibers of CN III: parasympathetic, affected by compression (aneurysm) -> pupillary involvement
- Central fibers of CN III: motor, affected by ischemia (HTN, DM, smoking) -> pupillary sparing

Multiple oculomotor palsies, possible structures involved:
- Orbital apex: II, III, IV, V1, VI
- Cavernous sinus: III, IV, V1, V2, VI
- Superior orbital fissure: III, IV, V1, VI

Tolosa-Hunt syndrome: orbital apex syndrome (II, III, IV, V1, VI). important PMH: idiopathic, prior infections, vaccination. MRI: enhancement in the cavernous sinus walls