04/04/24 Morning Report with @CPSolvers

***"One life, so many dreams" Case Presenter**: Han Nguyen(@Flower_freeland)* ***Case Discussants**: Rabih(@rabihmgeha) and Oumaima(@OOutani)*

CC: 28 M with headache and vomiting

HPI: - In the first month he presented with pain and red left eye accompanied with blurred vision; no diplopia, was diagnosed with uveitis He received eye drops but did not experience improvement in symptoms. From day 30 to day 37 patient had headache in frontal and temporal regions; took pain relief medication but pain became worse. Patient also complains of nausea and vomit 2-3 times a day. Patient endorses weakness, anorexia, leg shaking and dizziness, and 3 kg weight loss in 1 month.
No fever, no abdominal pain, no myalgias.

PMH:
-Broken jaw
-Injection SAT (anti tetanus injection) due to injury on the sole of foot

Meds: None

Fam Hx: None

Soc Hx: Construction worker, lives in Vietnam

Health-Related Behaviors: Sexually active with 10 partners over 20 years ; does not use contraceptives.

Allergies: None

Vitals: T: 37º C **HR:** 82/min **BP: 100/70 mm** Hg; **RR: 22/min ; O2 sat: Not obtained**
Exam:
Gen: Tired and ill appearing ; scar from forehead to nasolabial fold; white spots size 0.5 x 0.5 m on his tongue, throat redness, no LAD
HEENT: Left eye: Ptosis + vision loss and redness ; Right eye: Blurred vision; Oral thrush noted, throat redness +; No lymphadenopathy
CV: Normal ; **Pulm:** Normal ; **Abd:** Normal
Neuro: Ptosis in L eye; Kerning - negative ; Brudzinski - Negative ; no nuchal rigidity.
Extremities/skin: Warm ; muscle strength 4/5

Notable Labs & Imaging:
Hematology:
WBC: 10.32 ; Neutrophils - 89%, Lymphocytes - 6.7%, Monocytes - 4.4%
Hgb:12.6 ; MCV - 89.6 ; Hct - 37.1% Plt: 201
Chemistry:
Na: 128 K: 4.18 Cl: 90.4 Cr: 75 mmol/L Glucose: 11.07 mmol/L
AST: 25 ALT: 32 ; GGT - 153
HIV test: Positive

CSF Microbiology - TB, fungal, bacterial, viral, parasites - negative
CSF Chemistry: Protein - 0.587; glucose - 5.76, Chloride - 121.9; lactate - 2.49; color - clear ; WBC - 12; Lymphocytes - 89%, Neutrophils - 8%

Sputum cultures - negative

Imaging:
Abd US: Negative
CXR - Unremarkable
MRI brain: Scattered lesions in BL hemisphere ; **T1 - hypointense ; T2 - hyperintense - Ring enhancement with cerebral edema noted**.
Serum IgG was obtained - waiting for result

Dx: **Ring enhancing lesion d/t Toxoplasma gondii (presumed Dx)**

Problem Representation: 28 M with HIV presented with headache, vomiting, 3kg weight loss, left eye pain and redness accompanied by blurring of vision in both eyes since 1 month.

Teaching Points (Anmolpreet):
I] Headache: + vomiting→ increased intracranial pressure: Obstruction, Meningitis, retro-orbital involvement (CT Scan)
Headache does not necessarily mean a problem in brain; could involve extra brain issue: Acute ACG, GCA, orthopedic problem in skull.
Next steps: palpate the eye to check for hardness, pupillary examination, proptosis, ocular movement abnormality.
Dizziness, weight loss could indicate a systemic process with retro orbital involvement. It would be helpful to know vaccine status & immune status.
II] Ptosis:- loss of function of levator palpebrae→
mc cause-: dehiscence of tendon (age related); therefore to localise the lesion, we think of innervation which is via **Parasympathetic (CN3)** and **sympathetic innervation**
But with accompanying vision loss; we think of the visual pathway from **Retina** to **optic nerve:** vision loss makes us think no intraocular reason for ptosis, maybe a lesion behind the retina. Imaging(CT scan with contrast) would be helpful.
III] CSF pleocytosis: TB, fungal, viral etiologies.
Ring enhancing lesions : Toxoplasmosis, CNS lymphoma
IV] Brain mass: lungs, liver, skin, spine are important to be examined
Brain + spine lesions: autoimmune demyelinating lesions
Isolated brain mass: infection (Toxo, Chagas); malignancy (CNS Lymphoma)
V] Toxoplasmosis and CNS Lymphoma: Brain biopsy: gold standard; in cases we want to avoid this invasive procedure; we need to focus on other tests namely IMAGING→and focusing on the size of the mass;

1. Toxoplasmosis does not cause a large solitary lesion usually, because it grows and can break off.
2. A large lesion is more likely Lymphoma.
3. Small lesions would be Toxo/Lymphoma.

Tests to be considered: Imaging, Toxo IgG, CSF PCR, Cytology/Flow Cytometry.

- If Toxo IgG negative, Toxo is excluded.
- Proceed with Toxo treatment for 2 weeks, if not better then Toxo ruled out.