7/4/23 TP VMR with @CPSolvers

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CASE 1 6/30/23

CC: Painful red eyes
Problem Representation: A 39yF from Mexico p/w progressive painful red eyes reproducible w/ extraocular eye movement, reduced vision, b/l papilledema, headache a/w mild ear ringing.

Teaching Points: -Approach to conjunctivitis: Allergic, irritant, viral or bacterial
-Recurrent flares: Step back and ask are we dealing with recurrent "Red eye"
-Almost all conjunctivitis is self-resolving without treatment, even bacterial conjunctivitis heals without abx. The fact that this is recurrent is a clue of another etiology.
-3 other benign conditions of "Red Eye": Blepharitis, subconjunctival hemorrhage, dry eye syndrome
-Should not have any pain or loss of vision. If there is no discharge or oozing, that is also a red flag.
-Central conjunctival irritation = Clue for possible Uveitis
-Eye anatomy is important for further clues: scleritis, episcleritis, conjunctivitis. All clues for anterior eye pathology, but does not rule out posterior chamber.
-Diplopia: misalignment of the eyes (EOM) -- however usually hard to differentiate with blurred vision.
-Localized HA: a clue that posterior chamber of the eye may be involved because the eye is the gateway to the brain. (Optic Neuritis, retinitis, posterior uveitis, etc)
-Could this be a panocular disease given visual loss, lack of discharge and localized headache; May want to start with basic labs such as RPR, Chest XR (Sarcoidosis), HIV.
-Optic disc swelling: Bilateral or Unilateral? Pseudopapilledema (Hypervisc, HTN, Etc) vs true (IIH), mass lesion, etc)
-Important to consider Venous cavernous Thrombosis, higher risk when patient is on OCP. However this presentation is concerning for optic neuritis
-If it was unilateral, Inflammatory etiology is highly likely (Infections, Autoimmune, Demyelinating). However, a systemic infection can still be possible, but an AI condition isolating itself to the CNS is less likely.
-Exudative (or serous) retinal detachment (ERD) occurs when fluid accumulates in the subretinal space between the sensory retina and the retinal pigmented epithelium (RPE) resulting in retinal detachment. Causes for fluid accumulation include inflammatory, infectious, and neoplastic diseases of the choroid or retina
-vogt koyanagi harada (VKH) disease -- isolated, rare CNS disease that can lead to visual and hearing loss. Diagnosis of exclusion.

CASE 2

CC: Shortness of breath
Problem Representation: Previously healthy young woman with family history of early sibling death presents with chronic persistent progressive dyspnea associated with dizziness, orthopnea, palpitations and hypoxemia with largely unremarkable physical exam.

Teaching Points: @Noah_Nakajima

Descriptors are key in narrowing down a broad differential diagnosis like shortness of breath

Lymphadenopathy with normal or small left atrium can represent pulmonary venous congestion.

Severe hypoxemia in pulmonary hypertension should prompt evaluation of shunting and PVOD.

Low DLCO and hypoxemia in pulmonary hypertension should raise the suspicion for this PVOD - cut-offs not established yet.

Clinical diagnosis is based on hemodynamic findings of PAH and CT findings of venous congestion (septal thickening, GGO, LAD).

CASE 3 6/24/23

CC: 45 year old male presenting with bilateral lower leg painful rash for 2 weeks.
Problem Representation: A 45yo M w/ painful rash in the presence of palpable purpura and small ulcers & necrosis on both legs, fever,myalgia, numbness and weakness on both hands and feet. PE and labs notable for respiratory distress, expiratory rhonchi and elevated Eosinophils, CRP and IgE.

Teaching Points:
-Identify "Rash" characteristics (painless/ painful, itching, morphology, other sites, prior similar rash or 1st episode, onset/progression, systemic symptoms, comorbidities)
-Purpura > palpable Vs non-palpable (palpable purpuric rash should make you think of vasculitides; especially if bilateral)
-Ulcers + palpable purpura = medium vessels > small vessels vasculitis
-Infections can give palpable rashes too. Reactive response to an infection? Drug-related? Many (abx penicillins, cephalosporins, etc
-Infection + rash = figure out the temporal relationship; not necessarily related
-Autoimmune: vasculitis (ask about bleeding from anywhere; fragile blood vessels could give rise to epistaxis, GI bleeds/melena)
-When thinking about vasculitis > do a full head to toe exam with a focus on the skin and mucous membranes as blood vessels are are everywhere
-Labs according to ddx (inflammatory markers, CBCD, hepatitis serology, autoimmune work up)
-Granuloma + eosinophils infiltrate + medium vessel involvement = EGPA
EGPA common involvement: lungs and skin; clinical features divided into 3 phrases: prodromal phase (asthma attacks, allergic rhinitis/sinusitis, eosinophilic phase (e.g., pericarditis, GI involvement) and vasculitic phase (e.g., cutaneous nodules, palpable purpura, mononeuritis multiplex). Biopsy confirms the diagnosis.