12/2/23 IMG VMR with @CPSolvers and Washington State University IMRP Everett

***"One life, so many dreams" Case Presenter**: Kevin Cheng, Oluwatosin Fajana (@tosin_faj), and Aisha Alam*
***Case Discussants**: Sharmin (@sharminzi), Yazmin (@minheredia), and Bettina (@salfopsi)*

CC: Early 30yo M to ED w/ R sided chest mass

HPI: A few months ago when doing push ups, started to hear "pop" and felt a R-sided mass between breast and axilla. Flexeril and toradol prescribed by PCP provide minimal relief. Patient lost to f/u.
Presents now to ED b/c lump has increased to tennis-ball size and now producing arm pain that is dull, constant, without radiation. No pain to palpation. Difficulty fully raising arm.
ROS: 30 lb weight loss x months, n/v, loss of appetite. Difficulty opening both of his eyes, L>R. No numbness, other motor weakness, rashes, fever, joint stiffness.
Recently taking a lot of tums due to perceived nutritional deficiency. No trauma.

PMH: Previously healthy

Meds: Tums ($CaCO_3$)

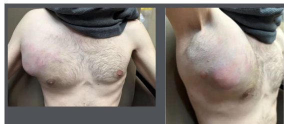
Fam Hx: Hemochromatosis (mother), MI (father). No fam hx of autoimmune dz/cancer.

Soc Hx: Works in tech. Traveled to >10 countries (Middle East, SE Asia, Africa). >30 sexual partners w/ unprotected sex. Lives w/ 2 cats.

Health-Related Behaviors: Healthy lifestyle. Does not see PCP.

Allergies: No known allergies.

Vitals: T: afebrile **HR:** wnl **BP:** wnl **RR:** wnl on RA
Exam:
Gen: BMI 19, temporal wasting, non-toxic
HEENT: bilateral non-fatigable ptosis L>R, diplopia during eye tracking
CV, Pulm, Abd: wnl
Neuro: alert, no upper or lower extremity weakness
Skin: no bruit over mass



Notable Labs & Imaging:
Hematology: WBC: 4.83, no blasts Hgb: 14.5 Plt: 195

Chemistry: Na: 143 K: 4.9 CO2: 30 BUN: 23 Cr: 1.24 glucose: Ca: 13.6 Mag: 2.2
Alk-P: 60 Albumin: 4.6 Tbili 0.7 Protein 8.3
GFR >60 Troponin nl LDH: 2348 Uric acid: 5.9 Ferritin: 771
UA: few WBCs
Hep A reactive, hep B non-reactive HIV reactive CD4: 19
AFB smear negative, toxoplasma negative, EBV negative
LP: clear, 94% lymphocytes, glucose 46,protein 49
Paraneoplastic labs: negative

Imaging: EKG: nl
CXR: large anterior chest wall mass, T11 vertebral body loss and associated bone metastases, lungs clear
CT chest: 12 cm R anterior chest wall mass, bone metastases of T11 re-demonstrated. Otherwise no other invasion observed.
CT A/P nl
CT brain: enhancing R frontal calvarial lesion extending craniocaudally.
MRI brain + CT angio: marked abnormal enhancement of b/l CNV and b/l CNIII, extracranial and intracranial lesions re-demonstrated. No parenchymal lesions.
MRI total spine: pathological fracture of T11, c-spine and l-spine nl
Lymph node biopsy: diffuse high-grade metastatic B-cell lymphoma

Dx: B-cell lymphoma, currently receiving R-CHOP and ARVs and doing well

Problem Representation: 30yo M w/ newly diagnosed HIV p/w b/l diplopia, non-fatigable ptosis, ROM-limiting R-sided chest mass ISO 30 lb weight loss, n/v, anorexia x3 months c/f malignancy vs chronic infection.

Teaching Points (Francisco):
Chest mass: infection or neoplastic, if signs of inflammation: abscess
Pain relievers not alleviating pain: think neuropathic
Mass in axilla + ptosis: mass compressing sympathetic chain
Weight loss in a young person + expanding chest mass: malignancy or indolent infection
Weakness of eye muscles: neuro or musculoskeletal
Tums can cause electrolyte abnormalities (hypercalcemia) and cause muscle weakness
Temporal wasting is a sign of chronic inflammation suggests more neoplastic
Weakness: neuro, neuromuscular junction or muscle inflam
Neuromuscular junction disease:
MG ptosis is fatigable (thymoma is an associated mass)
Lambert Eaton: associated with malignancy
Large and irregular mass suggests sarcoma
Hypercalcemia (not PTH mediated) + mass: PTHrP, granulomatous disease (vit D, TB), bone lesions (metastasis), milk-alkali synd
Patient that is chacetic + normal creatinine: AKI is frequent
HIV + soft tissue mass: nocardia, TB, actinomycosis, bartonella
HIV predisposes to non-Hodgkin lymphomas