



10/18/23 Morning Report with @CPSolvers



"One life, so many dreams" Case Presenter: Maddy (@MadellenaC) Case Discussants: Jack and Sharmin (@Sharminzi)

CC: 38 yo woman left sided neck swelling and pain

HPI: She said that she was healthy until one week ago when she had a sore throat that resolved after a few days. Two days ago she started to present this progressive neck swelling and pain, associated with jaw discomfort and odynophagia, first time happening, complains of difficulty to eat/drink and move her neck. No wt, no chest pain. Refers compression feeling.

PMH: None
Poor dentition
No surgical history

Meds: None

Soc Hx: Not currently employed, lives in a trailer around SF

Health-Related Behaviors: 10 year tobacco history, fentanyl and amphetamine smoking, last time, 10 days ago. No injections drug use, denied drug injection in the neck

Vitals: T: febrile 39.3 HR: 105 BP: 102x59 RR: intermittent hypoxemia (high eighties -> NC 4-6% -> increased to 97%)
Gen: Well developed adult, sleepy
HEENT: Poor dentition, drooling, left sided edema and erythema, no fluctuations, unable to move her neck
CV: no murmurs
Pulm: no wheezes
Neuro: sonolent, responsive to voices, AOX3, no focal deficits, intact cranial nerves
Extremities/skin: No edema or rashes

Notable Labs & Imaging:

Hematology:
WBC: 30,000 neutrophil predominance Hgb:12.1 Plt: 483 ESR 116

Chemistry:
Lactate 1.1 PCO2: 65
Blood cultures: negative, HIV negative,

Imaging:
EKG: unremarkable
CXR: right basilar atelectasis, no pleural effusion, no pneumothorax, asymmetry of the left neck soft tissues
Echocardiogram:
CT chest: subcutaneous soft tissue stranding, supraglottic mass and narrowing of the laryngeal airway, associated thrombosis of the left internal jugular vein, extensive lymphadenopathy, no drainable fluid collections.
Patient was started on zosyn and clindamycin. Course complicated by abscess formation in the same region, that was drained. She was also treated for septic thrombophlebitis.

Dx: Lemierre's syndrome - source: periodontal/pharyngitis

Problem Representation: 38 yo woman appearing with neck pain and swelling after an episode of pharyngitis. Follow up revealed hypoxemia, fever and neutrophilia, and CT showed no drainable fluids.

Teaching Points (Mark_Heslin):

- Neck Masses (anatomic approach):** think of no miss diagnoses like abscesses, then cysts, LAD, thyroid cancer, salivary glands (stones or enlargement), vascular (IJ thrombosis), parathyroid gland abnormalities
- How does the recent sore throat change our reasoning? Thyroiditis can cause sore throat, LAD, etc
- Then, we can consider a complication of pharyngitis like a **deep space infection or airway obstruction**
- What are red flags for these complications?:
- Deep space:** unilateral, swelling in oropharyngeal cavity, trismus, severe pain
- Airway obstruction:** drooling, stridor, hot potato voice
- How can a throat problem lead to shortness of breath?
- Airway obstruction, vascular (IJ thrombus), and extension into mediastinum
- Treat before diagnosis (**ABCs!**) in this case given hypoxemia, drooling, and mental status - get a blood gas and call anesthesia and ENT
- A normal pulmonary exam does not rule out a parenchymal lung problem
- Leukocytosis to 30K - think **abscesses** that is hiding
- A PCO2 of 50 is not normal, especially in the absence of known obstructive lung disease - this will be something to track because worsening hypercapnic resp failure would be an indication for intubation
- Masses can be incredibly inflammatory (**IMADE approach**): infection vs cancer vs autoimmune, however prioritize infection given **base rate and morbidity**
- Complications of septic IJ thrombophlebitis - pulmonary septic emboli, lung abscess, and large joints (shoulders, hip, vertebrae, etc)
- Micro of **Lemierre's Syndrome:** anaerobes, fusobacterium, staph, strep, bacteroides - blood cultures can be negative!
- Pathophysiology: primary infection, then local invasion into IJ vein and septic embolic phene