



6/20/20 Morning Report with @CPSolvers



Case Presenter: Andrew Jenzer Case Discussants: Rabih Geha (@Rabihmegeha) and Reza Manesh (@DxRxEdu)

CC: fevers

HPI: 43M with 5 day history of fevers and malaise.

On day of presentation reports progressive DOE, and achy throbbing in the left auricular area. Worse at night. Over the counter pain meds help a bit, but benefit soon wears off.

Admitted, broad spectrum Abx

PMH:
T2DM (HbA1c 7.4 one year ago)
Nephrolithiasis (x3)
HTN

PSHx:
cholecystectomy (no complications)

Meds:
Metformin
Lisinopril

Fam Hx:
non-contributory

Soc Hx: works as rancher

Health-Related Behaviors:
Social alcohol
1 pack cigarettes/mo x 10 years
IVDU (no recent use)

Allergies: Penicillin

Vitals: T: 38.6 C HR: 93 BP: 144/84 RR: 20 SpO₂: 91% RA

Exam:
Gen: mild distress
HEENT: diffuse tenderness to left side of face, neck, jaw. Otitic exam normal. Oral: missing a few teeth, no obvious lesions. Mouth opening mildly restricted. No deviations, soft floor of mouth. Left neck erythematous, hoarse voice
CV: pain to right chest, worse with inspiration. Otherwise normal
Pulm: CTAB
Neuro: normal (including cranial nerves)
Extremities/Skin: normal

Notable Labs & Imaging:
Hematology:
WBC: 14.2 Hgb: 15.2 Plt: 255
CRP: 83, ESR 76

Chemistry:
Na: 138 K: 4.6 Cl: 101 CO₂:27 BUN:18 Cr: 0.9 glucose: 138

Imaging:
EKG: normal
CXR: unremarkable

CT Neck w/ contrast: 2 cm abscess left lateral pharyngeal space, with involvement of the left IJV. +PE

BCx: fusobacterium necrophorum

Problem Representation: Middle aged gentleman with PMHx of T2DM presents with acute fevers, malaise and auricular pain. Exam notable for fever, hypoxia with left face, jaw, neck tenderness and erythema with pleuritic chest pain. Found to have leukocytosis with imaging consistent with left lateral pharyngeal abscess involving L. IJV dx with Lemierre syndrome 2/2 F. necrophorum

Teaching Points (Smitha):
Clinical Reasoning Pearl (CPR): Think about how background layers onto the foreground, prioritize the background that might match with the foreground
Diabetes complications: glycemic extremes (DKA, hypoglycemia), vascular complications (micro and macrovascular), immunodeficiency (expands the spotlight to include infections like GBS, klebsiella, pseudomonas, endemic mycoses, *mucor*, malignant externa)
CPR: Threshold to activate inflammation schema should be lower in patients with immunodeficiency and priority is r/o infection
Inflammation + auricular bone pain: Prioritize infection and ask where is the source? 2 options: hematogenous or contiguous spread (e.g., contiguous from poor dentition or hematogenous with multi-system involvement).
Hoarseness: has localization value. Anatomic: upper airway/?local pathology OR neurologic pathology either locally or elsewhere. Anatomic (upper airway, mediastinum) OR Neurologic issue. Most common: laryngitis, irritants like smoking, meds (e.g., anticholinergic, steroids). Neurologic: localize the lesion in the neuraxis: CNS, peripheral nervous system. Must consider whether mediastinal involvement present because recurrent laryngeal nerve on L courses through mediastinum
Neck + mediastinal involvement + infection: retropharyngeal abscess: can start in neck and extend into mediastinum. Lemierre's syndrome can start in neck and extend and lead to lung abscess. Micro: Fusiform (can cause plt aggregation → DIC, thrombocytopenia), prevotella, bacteroides, peptostreptococcus.
Dental infection: infections in the neurovascular bundle can't be treated by antibiotics only, need source control. Think about the anatomy and where the bacteria can go. Example: Ludwig angina = bilateral inflammation of sublingual, submental. Infection in lateral pharyngeal space leads to peritonsillar abscess → retropharyngeal space → mediastinum. Often originate with aerobic organisms and can become polymicrobial with anaerobic infection
Trismus: true trismus mouth opening restricted <25mm should be RED FLAG for infection in the deep neck space!
Lemierre's syndrome: infection of lateral pharyngeal space. Usually originates from peritonsillar abscess 85% of the time, other 15%. Drains into vascular system and can lead to septic thrombophlebitis in the IJ.