



# 07/21/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Alexander Lundberg (@) Case Discussants: Kirtan Patolia (@) and Mark Heslin (@Mark\_Heslin)



**Scribing (Dan)**  
**CC:** 65F w/ intermittent edema of lower extremities for 2 weeks  
**HPI:**  
 Chigger bites at a friend's home about 2 weeks ago. Endorses subjective sweats. No fevers/chills. Intermittent palpitations. Chronic SOB (baseline over last year after COVID infection).  
**ROS:** Cough, wheezing, dizziness, paresthesias of lower extremities. White patches on gums. No n/v/diarrhea/dysuria.

**PMH:** HTN, Bipolar disorder, cerebral aneurysmal rupture s/p coiling, seizures, strokes (at the time of aneurysm events)  
**Meds:** Lisinopril 10 Lasix 20 (from last ED visit) + KCl 10

**Social Hx:**  
**Housing insecurity**

**Health-Related Behaviors:**  
 Intermittent Alcohol Remote Meth Hx  
**Active Tobacco Use (40 pack-year)**

**Allergies:**  
 Abilify Codeine

**Vitals:** T 99F | BP 171/93 (persistently elevated) | HR 80 |RR 14 | Weight: 90.7 kg (BMI 32.3)  
**HEENT:** flaky white lesions in mouth  
**CV:** RRR, no m/r/g; 3+ lower extremity edema  
**Pulm:** clear auscultation with normal WOB  
**Abd:** soft, no masses, no hepatosplenomegaly  
**Skin:** lesions from reported chigger bites on ankles bilaterally

**Notable Labs & Imaging:**  
**CBC:** WBC 12.5 (~ 8-9 after abx) (Neutrophils- 88%), Hgb 12.3, Hct 38.3, Plt 329  
**CMP:** Glucose 184, Bicarb 30, Cr 0.88, K 2.6 (recurrent, < 3), Mg 2.0. Alk Phos/AST/ALT wnl.  
 Serum Protein 5.9. Albumin 3.8. A1c 6.0%, BNP 182  
**ECG:** accelerated junctional rhythm at rate of 103  
**CXR:** unremarkable  
**TTE:** EF 60% with Grade 1 Diastolic Dysfunction and mild MR/TR  
**Liver Ultrasound:** Liver with ordinary signs and contours. No intrahepatic biliary dilatation. Left hepatic lobe mass.  
 - Aldo/Renin 11.3 (wnl). Metanephrines wnl. 5-HIAA wnl.  
 - TSH 0.11, fT4 0.7, fT3 2.11.  
 - ACTH 6.1 (wnl); Cortisol 50 (random). Chromogranin A 1160.  
**Triple-Phase CT Liver:** 6.1 cm mass in liver c/f HCC until proven otherwise with suspected peritoneal implants.  
**CT Sella Turcica:** Pituitary gland enhances homogeneously without evidence of mass.  
**Repeat testing:** ACTH 12, Cortisol 97.3. **Urine Cortisol** 2,005.5  
**CT Chest:** 8 mm anterior LUL nodule  
**CTAP:** Omental mass lesion. Eccentric anterior/greater curvature wall thickening with concern for malignancy (4.8 x 2.1 cm). Thickening of adrenal glands bilaterally.  
**Biopsy of liver:** Metastatic Grade 3 Neuroendocrine Tumor  
**Gastric Biopsy:** Invasive Well-Differentiated Grade 3 Neuroendocrine Tumor

**Problem Representation:** A 65 year old woman with a 40-pack year smoking history presents with two weeks of bilateral lower extremity edema along with oral thrush, found to have persistent hypokalemia, with concern for underlying endocrine-mediated pathology.

**Teaching Points (Anmolpreet):**

**I] Lower extremity edema:** swelling most likely seen in gravity-dependent areas; look for associated symptoms; main systemic organs to look for: 1. **Heart:** congestive heart failure, valvular disorder, pulmonary hypertension; 2. **Liver:** look for albumin levels, ascites; chronic liver disease 3. **Kidney:** chronic kidney disease, nephrotic syndrome; Other conditions: **Venous disease** (affecting IVC, retroperitoneum); **Lymphatics** draining the lower extremities; **Inflammatory process** affecting blood vasculature of lower extremities (capillary leak); **Drugs:** amlodipine, gabapentin

**II] CoVID:** short-term complications can include bacterial superinfection or myocarditis; long-term complications include interstitial lung disease→ chronic hypoxic respiratory failure→ pulm htn (longer course) and viral FSGS. CoVID is a hypercoagulable state (CTEPH).

**III] Cerebral aneurysms:** a component of systemic aneurysms ( ADPKD)/ unrelated.

**IV] Smoking history:** makes us think about COPD, need PFTs, which can cause pulmonary hypertension. Poor oral hygiene→ bacterial/fungal infection → causing oral white plaques. Other differentials: oral thrush, malignancy.

**V] Hypertension in emergency department** makes us want to look at previous BP control, if it is acute hypertension or chronic uncontrolled htn. Kidney (↑)

**VI] Hypokalemia:** confirm if true? Diuretic induced. GI loss? Renal wasting (RTA)? Stat ABG!  
 ?Hyperaldosteronism-?Paraneoplastic Cushing's 2/2 lung cancer 2/2 smoking? Chest imaging! Ectopic ACTH production! - ACTH levels. - look for a systemic cancer. ?Hypercortisolism- endogenous Cushing can also promote immunosuppression(can explain oral thrush, left lower limb cellulitis)

**VI] Aldosterone escape:** despite elevated aldo levels, prevents excess sodium and water retention, thus avoiding edema formation.

**VII] Chromogranin:** neuroendocrine marker; can hide in ileum, stomach.

**VIII] ACTH and Cortisol:** ACTH thought to be suppressed in high cortisol states due to negative feedback, but normal levels raise a concern.

**IX] After establishing the diagnosis of endogenous Cushing, testing plasma corticotropin between 8AM-9AM can distinguish a corticotropin-dependent from a corticotropin-independent source.**