11/19/25 Morning Report with @CPSolvers

"One life, so many dreams" **Case Presenter**: *Ravi(@@rav7ks)* **Case Discussants**: *Sharmin(@) & Reza(@)*

https://clinicalproblemsolving.com/present-a-case/

Scribing (Sarah B)

CC: 46 year old man found parked in his car in a parking lot.

HPI:

He was noted to be confused and unable to operate the vehicle. Employees found him staring blankly ahead. They report that the car has been there "for hours," unmoved, and the man appears "off."

EMS arrived and he was found to be unable to answer simple questions, complained of headache, was generally weak. Challenges starting the car.

ROS:

Headache, weakness, confusion, procedural and recall memory impairment.

PMH (per medical record):

T2DM

HTN

No prior documented neurological conditions

No recent ED visits

Meds:

Unknown

Fam Hx:

Social Hx:

Health-Related Behaviors:

Allergies:

Vitals: T: 39 C (102.2 F) **HR**: 110 **BP**: 162/75 **RR**: 14 **Sat**: 98% RA **BMI**:

Exam:

General: Hot to touch, appears fatigued.

Mental status: Awake, alert to self only. Does not know location, date, or situation. Follows simple commands.

HEENT: Dry mucous membranes, no neck stiffness.

Skin: Warm, dry; no rash; no track marks; no trauma.

Neuro: No focal deficits. Strength appears symmetric but limited by poor cooperation. No facial asymmetry. Moves all extremities.

Cardiac: Tachycardic but regular.

Resp: Clear, non-labored.

Abdomen: Soft, non-tender.

Notable Labs & Imaging:

Hematology:

WBC 20 Hgb 15 PLT 400

Chemistry:

Na 127 K 5.4 Cl 89 Bicarb 19 Cr. 1.1 Glucose 831

BHB +, ketones +

Interval History: He was treated in the ICU for DKA, but patient had progressive AMS, tachycardia, persistent fever, and was presumed to have an infection. Sepsis and meningoencephalitis coverage was initiated with ceftriaxone, vancomycin, ampicillin, and acyclovir. He was intubated for airway protection, experienced hypotension requiring vasopressor support.

Imaging:

NCCT: No hemorrhage, stroke, mass effect or hydrocephalus.

LP(after antibiotics):

Glucose: 243 mg/dL (H) Protein: 91 mg/dL (H) RBC: 68 /µL (H) WBC: 11 /µL (H) Polys: 84% Lymphs: 5% Monos: 11%

Interpretation:

Elevated CSF protein and glucose. Minimal pleocytosis. Differential predominantly neutrophilic. Overall profile not consistent with bacterial meningitis. Broad antimicrobials were continued pending culture and PCR results.

Ongoing encephalopathy with persistent tachypnea, hypo/hypertension despite stabilization of DKA/HHS overlap. No clear infectious source and blood and urine cultures/UDS were negative. CXR negative.

TSH: Undetectable

Free T4: 3.0 ng/dL (0.6–2.5)

Total T3: 58 ng/dL (97–169)

Patient was treated for thyrotoxicosis and had marked improvement.

Dx: Thyrotoxicosis

Problem Representation: 46 year old male presents with acute encephalopathy and was found to have fever, tachycardia, and hyperglycemia consistent with DKA with thyroid function testing consistent with concurrent thyrotoxicosis.

Teaching Points (Vale)

AMS: Determine if the patient is encephalopathic vs confabulating vs with a disorder of language.

- 1st pass **Ss**: Stroke, Seizures, Sugar, Substances (opioids, intoxications and medications).

💎Ddx = localization x tempo + *context*. Understanding who is the patient to guide our workup.

Excess sympathetic tone: Toxidrome (anticholinergic or sympathomimetic), withdrawal, Infection, Endocrinopathy.

How does hyperglycemia affects the brain? -> Increased tonicity brings water inside the cells = edema. And causes other electrolyte derangements that may be confusing ex. False hyponatremia and hyperkalemia.

💎HHS and DKA are not isolated presentations, we need to look for the trigger: infections, med adherence and interactions.

💎DKA itself can cause a leukemoid reaction, but always rule out an infection.

No response to DKA management: Another problem all along? r/o structural brain lesion, seizure, toxidrome/withdrawal, infection. Incorrect abx coverage?

Cardiorespiratory collapse after intubation: Medication reaction? Ex. anaphylaxis, excess sedation. Pneumothorax? Insufficient ventilation during intubation?

CSF neutrophilic pleocytosis: bacterial meningitis, some viral meningitis ex. West Nile, early onset TB meningitis, neurosyphilis, autoimmune encephalitis.

Never forget the thyroid!! Problem representation is dynamic, keep reframing the case as the hospital course progresses.