12/21/23 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Laura (@_araujolaura) Case Discussants: Yazmin (@minheredia) and Rabih (@rabihmgeha)

CC: Unresponsiveness

HPI: 63 y/o M, brought by EMR, found on the street by bystanders. Initially verbal but mental status continues to wax and wane. Bilateral knee pain, fentanyl and alcohol use prior to presentation. O2 Sat: 85% before BiPAP, 98% after BiPAP.

Prior history of fall and frontal skull fracture and right orbital fracture.

PMH: COPD (not on O2)
HTN
Polysubstance use disorder
Anxiety
MDD

Meds:
albuterol
amlodipine
lisinopril
paroxetine
gabapentin
thiamine
magnesium oxide

Fam Hx:
Soc Hx: Experiencing homelessness

Health-Related Behaviors: Smoking, heroin use.

Allergies: NSAID

Vitals: T: 38 **HR: BP:** 97 **RR:** 16; O2 Saturation: 98% on BiPAP.
Exam:
Gen: Confused, agitated, redirectable, yellowish skin, poor hygiene
HEENT: Icteric sclera, poor dentition, right pupil - traumatic mydriasis
CV: --
Pulm: Crackles (Diffuse Bilaterally)
Abd: Soft non distended and non tender
Neuro: Confused, strength preserved, CN 2-12: grossly intact; no focal deficits.
Extremities/skin: Reticular blue discoloration in BL LE.

Notable Labs & Imaging:

Hematology:
WBC: 12.88; Hgb: 9.8; Plt: 13K; Hct 29.6; MCV- 87.8; LDH - 1003 (repeat - N); Fibrinogen - N; D dimer - 1.92; Haptoglobin - normal; CPK - 2192

Chemistry:
Na: 139; K: 3.5; Cl: 107; BUN: 124; Cr: 4.33; Glucose: 197; Ca: 8 Mag:
AST:277; ALT: 218; Alk-P: 134 Albumin: 2.4; T.protein: 4.4; Total Bili: 5.3; Direct bilirubin: 4.4; GGT: 86; Lipase: 161; INR -1 ; VBG- pH - 7.46 ; PCO2- 36

UA: Turbid ; 2+ heme; 1+ protein ; 2+ glucose ; Leuk Esterase - 250, RBC - 8 ; WBC - 26
Urine culture, blood culture, sputum culture - negative ; MRSA - negative - Utox - positive for methadone and PCP (only)
PBS: negative for schistocytes; ferritin - 292; TIBC - 205; Transferrin Sat - 7; Vit B12- 584; ANA, c/pANCA, anti GBM - negative ; direct antiglobulin test - positive; EBV IgG - positive ; EBV IgM - negative ; HIV, syphilis, hepatitis B - neg; HCV - positive (viral load - 25 million) ; CMV IgG - positive

Imaging:
CT: Emphysema and infiltrates in BL lungs
Abd US: Sludge in the gallbladder ; no cholelithiasis ; mildly enlarged liver
CT head: Negative for acute intracranial pathology ; chronic involution of brain and chronic encephalomalacia ; old fracture in orbital rim
CT abdomen: No abnormalities
Admitted to ICU : hypoxic respiratory failure ; ID was consulted ; Leptospira IgM- positive (doxycycline and ceftriaxone started ; urine PCR - Leptospirosis positive)
Dx: **Leptospirosis**

Problem Representation: **63M with substance use disorder p/w unresponsiveness and fever, found to have hypoxemic respiratory failure with BL lung infiltrates and emphysema, thrombocytopenia, AKI, direct hyperbilirubinemia with new diagnosis of HCV, ultimately diagnosed with leptospirosis.**

Teaching Points (Tansu):
Unresponsiveness = AMS? ABCDE survey, red flags, correct the correctables (hypoglycemia, pinpoint pupils & decreased RR 2/2 opioids). Neurologic or CV (**priority**) catastrophe → Check if patient perfusing & breathing → spontaneous breathing → likely they have a pulse. If not, code blue.
Hypoxemia → if related to COPD exacerbation, **r/o pne-thorax** (POCUS can be helpful); Fentanyl, alcohol use → aspiration risk. Naloxone → pulmonary edema. Polysubstance use → Substance on/off: Both can be lethal. Withdrawal: time to death in hours-days. Intoxication: lethal in secs-mins. First r/o substance on. **Long list of problems: list the problems, prioritize & make info digestible.**
Core problems: AKI (BUN + Cr → **intrinsic** bc no correction w/ fluids, pyuria, K-wasting), Liver (direct bili, jaundice → intrahepatic), Hemato (anemia + thrombocytopenia+ high LDH but normal hapto and high CK?). → to see the qualitative aspects of heme process PBS can be helpful.+ lung disease.
Unusual fingerprint: Kidney + Liver+ deep **thrombocytopenia** + Fever
Base rate: immobilization, liver disease 2/2 alcohol use disorder, IVDU hx.
Infection + Deep Thrombocytopenia DDx: **Viral** (mononucleosis, arboviruses, hantavirus, measles, HCV), **bacterial** (rickettsia, -ellas, leptospirosis), **parasites** (babesia, malaria). Treat the treatibles w/ abx.
Extrahepatic manifestations of HCV (reticular blue discoloration of skin): Cryo testing is imperfect, we need to send it directly to the lab, 40% of HCV + pts can have cryos for no reason. Check complements [low C4, + RF], skin bx to see cryoprecipitates.
Leptospira IgM +, urine PCR +, tx- doxy, ceftriaxone. Leptospirosis can be complicated by a hemorrhagic diathesis.