1/14/26 Morning Report with @CPSolvers

"One life, so many dreams" **Case Presenter**: Dr. Rajalakshmi Govalan **Case Discussants**: Dr. Elliot Tapper & Kuchal

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

Scribing (Gillian)

CC: 20 yr old female w/ elevated liver enzymes and tonic-clonic seizures.

HPI:

Depression & suicidal ideations who was transferred from an outside hospital after tonic-clonic seizures

Mom said she had been sleeping entire day, found down by mother yesterday. Seizure lasted 3 min EMS witnessed another episode of seizures followed by post ictal state **Found to have low O2 saturation and was intubated**

PMH:
Depression (w/suicidal ideation, TCA od)
Seizures
Obesity (BMI 40)

Meds:
Lamotrigine
fluoxetine

Fam Hx:
nc

Social Hx:
Moved in w/ parents yesterday, multiple psychosocial issues

Health-Related Behaviors: -

Allergies: none

Vitals: T: afebrile **HR**: 115 **BP**: 110/87 **RR**: **Sat**: 80s **BMI**: 40

Exam: Gen: intubated and sedated; remainder of the exam is unremarkable

Notable Labs & Imaging:

Hematology:
WBC: 4.1k→3.1 Hgb: 8.1 Plt: 135 MCV: 96

Chemistry:
Na: 144 K:4.2 Cl: 106 HCO3: 18 Cr: 0.5 (years ago)→2→4.6 BUN: 44 Glucose:106
AST: 2500→4098→6000 ALT: 600→800→900 Alk-P:258 Bili: 0.7 Albumin: 2.4 Total
LDH: 10,800 INR: 1 pH: 7, lactate: 12
Started on CRRT, treated with NAC, fomepizole, activated charcoal

Further labs:
CK: 1254, Factor V: 123%, Ammonia: nl
Toxicology: neg (UDS, tylenol, salicylate, peth)
Other liver disease: viral (A, B, C, EBV, CMV), autoimmune (ANA, ASMA, AMA, immunoglobulins), ceruloplasmin, ferritin, vasc liver disorder (US with doppler) all neg

Imaging:
UA: blood 250 u/micoL, RBC: 0-2, WBC: 3-5; specific gravity 1.023
CT chest: PNA and A/P unremarkable (done due to fever on second day)

Hospital Course: escalating AST & ALT, pt requiring pressors, black tarry stool (initially thought it was charcoal), OG tube blood output. Patient was weaned off pressors after multiple transfusions.
Urgent endoscopy difficult to visualize
EGD: punched out esophageal ulceration and gastric ulcerations w/ heaped up margins.

Further infectious workup: HIV, fungal, respiratory viral panel neg, resp culture positive for stenotrophomonas; HSV igG neg; PCR: undetectably high (10^7 copies+)
ID want MRI brain for concern for HSV: unremarkable, LP unable to obtain
Empiric IV acyclovir began

Immunology workup: SAMHD1 deficiency causing susceptibility to virus
Patients liver enzymes returned to 50.

Dx: Disseminated HSV causing hepatitis & esophagitis, and encephalitis (and seizures) in patient with occult SAMHD1 deficiency.

Problem Representation: 20 yr female w/ recurrent seizure, severe metabolic acidosis, acute renal failure requiring CRRT, and extreme AST-predominant transaminase elevations with preserved bilirubin & INR. Course c/b GIB with punch out, heaped esophageal and gastric ulcers

Teaching Points (Magnus):

Young patient + elevated liver enzymes + seizure:
-Toxins (paracetamol)
-Rhabdo from seizures
-Primary liver dx vs. secondary liver injury
-DILI (antibiotics, antituberculous, antiepileptics)

AST and ALT elevation
-Alc hep does not cause AST elevation to 4000
-INR and bili normal -> not acute liver failure
-DDx for ALT and AST ↑↑↑ (ischemic, stone, DILI, viral)
-For very high ALT and AST, the ratio is not useful
-Context should guide the workup (ie hemochromatosis does not cause acute liver failure)
-Sick + high lactate + AST -> think of lymphoma and consider biopsy

Bloody output from OG tube
-Severe disease can cause microvascular dysfunction of stomach and duodenum
-PPI and endoscopy
-CMV and HSV can cause hepatitis, encephalitis, and ulceration