12/18/20 Morning Report with @CPSolvers

***Case Presenter**: (Conan) **Case Discussants**: RLR: The Magician and the Mathematician (Thiago @mendesthiagob)*

CC: 27 y/o F w/ 4 days of nausea & vomiting

HPI: A 27 y/o F presents with 4 days of n/v. One week prior she had a sore throat and cold sms. Yellow to brown vomit. Worse with eating. Cough and SOB over the last week.
No fever chills but felt warm. Denies COVID exposure.

PMH: Gestational DM, HTN, vaginal delivery 6 months ago

Meds: None

Fam Hx: none

Soc Hx: Lives at home with 6 family members. No tobacco or alcohol or drugs

Sexually active with husband, LMP 1 month ago

Health-Related Behaviors: None

Allergies: None

Vitals: **T**: 36.9 C **HR**: 126 bpm **BP**: 137/97 **RR**: 20 **SpO_2**: 97
Exam:
Gen: BMI 31, no acute distress
HEENT: Nml, no palpable thyroid, NT
CV: Tachy, Reg, no murmurs
Pulm: CTAB
Abd: Sof NT NT
Neuro: Normal
Extremities/Skin: No edema

Notable Labs & Imaging:
Hematology:
WBC: 5.3 Hgb: 15.1 Plt: 226
Chemistry:
Na: 141 K: 3.9 Cl: 105 CO2: 22 BUN: 26 Cr: 0.72 glucose: 115 Ca: Phos: Mag:
AST: 201 ALT: 208 Alk-P: 43 T. Bili: 1.1 Albumin: 3.3
Dimer neg, trop neg, BNP normal
Upreg: negative
Imaging:
EKG: Sinus Tachycardia
CXR: Normal
TSH< 0.1 Free T4 4.69, COVID +, + TSH receptor ab 7.06, Thyroid peroxidase +, ANA -, Anti Smooth muscle ab -
US abd: Hepatomegaly, fatty liver (likely from NAFLD)
US thyroid: heterogeneous thyroid gland, no nodules,
ECHO: EF 55%
- After 1 L of fluids, HR into the 150s and repeat ECG AFib RVR, remained normotensive, - HR continued up, 180s, dilt 10mg and improved to 120s then back up.
Started on propanolol, methimazole, and steroids and improved and likely secondary to Graves disease

Problem Representation: A 27 y/o F w/ no sig PMH p/w 1 week h/o sore throat, cough, &SOB found to be afebrile, tachycardic & then Afib w/ RVR who was found to have a low TSH, elevated Free T4, and dx with Graves Dz

Teaching Points (Rafa):
- **APPROACHING YOUNG FEMALE PATIENT WITH N/V**
  Look for another more specific symptoms If there's not - focus on time course and severity!
  Constant (ACS) ? Waxing/waning? Any other associations like Postprandial (obstructive) Metabolic causes (hyponatremia, AI, toxins)
- **SOB :** SOB should be a priority - cardiopulmonary process
  There's an identifiable underlying cause / Few causes of idiopathic dyspnea
- **PHARYNGITIS + CHILLS:** Tempo is queen! Sequence of events is critical - make a timeline- it helps with the clinical reasoning! Causes: virus (transient course, EBV, CMV, HSV2), bacteria (Fusobacterium), fungal, parasitic
  Young patient: think of STD like syphilis, gonorrhea, HIV status
- **PE: TACHYCARDIA:** Normal PE - not always reassuring / Pathology can be far deeper than we see
- **ELEVATED AST ALT**
  Hepatocellular inflammation (infection like hepatitis, toxins, ischemia), extracellular causes (rhabdomyolysis, alcohol)
- **CHILLS BUT NO FEVER** - episodic febrile episode, environment, hypoglycemia, endocrinopathies (eg, menopause)
- **DISPROPORTIONATE TACHYCARDIA TO THE CLINICAL SYNDROME** - sympathetic toxicity - increased adrenergic tone - meds like albuterol, alcohol withdrawal, hyperthyroidism (Graves, adenoma, Hashimoto thyroiditis -tender gland, BhCG producing tumor) - can be a cause of Afib!
- **TSH RECEPTOR ANTIBODY, THYROID PEROXIDASE, LOW TSH**: Thyrotoxicosis and hyperthyroidism - Hyperglycemia (insulin resistance)
  Cause: postpartum thyroiditis - can occur up to a year, Graves (pregnancy can be a trigger)