12/06/24 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Kuchal Agadi (@AgadiKuchal) Case Discussants: Rabih (@rabihmgeha) and Reza (@DxRxEdu)

CC: presented to ED due to fall on the outstretched hand

HPI: the neighbors called 911 following the fall. She was a 64 yo F, normal 3 months ago. She felt progressively weak and she reports decreased need to sleep. Prior to the fall she had occasional palpitation. She fell despite outstretched hand and complains of a headache, 2-3 in intensity. More at the site of impact temple.

Further course: mirtazapine, propranolol, thiamine, folic acid, D5, LR methimazole was given.

PMH:
Appendectomy 30 y ago
Admitted and treated for anorexia twice during her 20s
C-section 35 years ago
No medical check up for the past 17 uears

Has been out of care for 17 years

Meds: none

Fam Hx:
Unknown
Soc Hx:
Dog died 8 months ago
Health-Related Behaviors: 20 pack years, 1-2 glasses of wine on friday evenings for 40+ years

Allergies:
Penicillin

Vitals: T: **BP:** 150/65 (150/80) **RR:** 32 **HR**: 135 **Sat:** 97% **BMI:** 12 (38kg, 60 kg two years ago)
Exam:
Gen: alert, awake, oriented, emotional liability
Neck: diffusely enlarged thyroid, bruit present, not tender, no lymphadenopathy
CV: tachycardia, irregular, no murmurs
Pulm: decreased breath sounds on right base
Abd: scaphoid, bony prominence
MSK: Multiple skin bruises

Notable Labs & Imaging:
Hematology:
WBC: 10 Hgb: 11.4 -> 9 Plt: 93/70/60 Hct: 35.5%
PTT/INR nl
Chemistry
Na: 137 K: 3.8 Cr:1.5 BUN: 17 > 18 > 27 > 40 Ca: Ph:3 Mg:1.6 Glu: Cl: HCO3:
Procal elevated, AG 17 Lactate 4.6 Trop neg
eGFR 25, 14
TSH reflex: 0.002 -> 0.000 free T4: 2.9
Cystatin C:
Urine: turbid, ph 6, glucose 100, protein 100, urobilinogen > 8
Urine leuko est: positive, WBC: 5-10, RBC: 4-5, amorphous urate 2+
Urine culture: Klebsiella pneumoniae +
Imaging:
EKG: Afib
ECHO: moderate AI, moderate to sever MR, moderate to severe L//R atrial dilatation, EF, severely elevated pulmonary pressures
CXR: small R pleural effusion and aortic calcific atherosclerosis

Dx: Graves disease with thyrotoxic cardiomyopathy. Chronic AF with RVR. With AKI on CKD and anorexia nervosa

Problem Representation: 64 y/o F presented with FOOSH. She felt progressive weakness for 3 months & decreased need to sleep. She's tachycardia and hypertensive, with an enlarged thyroid and thyroid bruit. TSH i slow and urine culture showed klebsiella

Teaching Points (Masah):
Fall: Why? Did the patient lose consciousness
FOOSH: patient is able to protect themself with reflexive mechanism
Weakness: is it a true weakness? Neurologic weakness or fatigue/asthenia?
Anatomically: CNS (brain, sp cord), PNS (Ant horn cells, peripheral nerves), NMJ, Muscles.
Meds affecting muscle strength?

Dysfunction in relation to how long the patient has felt discomfort indicates whether this is a neurologic issue.

Tachycardia → EKG to determine if it is sinus?
Increase COP to protect from current or impending hypoT
Morbid causes of dramatic onset of sympathetic tone is an abrupt syndrome (eg. abrupt aortic dissection)

Ongoing sympathetic toxicity that is diffuse in nature → hyperthyroid

Hyperthyroid on exam: Graves specific: Eyes (exophthalmos) , Skin(myxedema), Clubbing, Thyroid bruit
Elevated thyroid state: vitals, tachycardia, HTN with wide PP, tremor, diaphoresis, lid lag
Sudden onset:
Rupture (aortic dissection, bowel perforation) or Obstruction (ACS, Stroke) or Substance (something they're taking or making)

Thyroid function tests: Thyroid gland stores T4, T4→T3 in periphery
If thyroiditis → T4:T3 ratio increases
Graves is T3 predominant so → T4:T3 ratio decreases