



8/4/23 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Shreyas (@) Case Discussants: Rabih (@Rabihmgeha) and Prof Reza(@DxRxEdu)



CC: 31yo M presents with recurrent episodes of palpitations and occasional dull chest pain.

HPI: Recurrent palpitations for 8 months. 2 episodes of near-syncope. Intermittent chest pain. TFTs wnl.
Most episodes of near-syncope occur while taking a shower - similarly while eating; experiences proximal muscle weakness and decreased grip strength.

ROS: -ve GI symptoms

PMH:
HTN,
Appendectomy

Meds:
Nadolol
Verapamil

Fam Hx:
N/A

Soc Hx:
N/A

Health-Related Behaviors:
No smoking hx

Allergies:
N/A

Vitals: T: HR: 71 BP: 131/82 RR: 20 SpO2 100%

Exam:
Gen: NAD
CV, Pulm, Abd: wnl
Neuro: wnl
Extremities/skin: warm, well perfused

Notable Labs & Imaging:
Chemistry: Na: 139 K: 3.3 Cl:109 CO2: 22 BUN:25 Cr: 0.8 glucose: 100 Ca:8.9 Phos: 3.3 Mag:1.9

TFTs normal
VMA normal

Troponin normal
Stress test normal

Imaging:
EKG: normal sinus tachycardia
Echo normal
Head CT scan normal

Orthostatic vitals:
HR 68 sitting, stand 143 → orthostatic hypotension

Final dx - POTS, also known as Postural Orthostatic Tachycardia Syndrome

Problem Representation: 31yo M presenting with recurrent, intermittent palpitations triggered by meals or hot showers, proximal muscle weakness and decreased grip strength. Labs showed hypokalemia, otherwise unremarkable. Vitals showed a drastic increase in HR upon standing.

Teaching Points (Ayesha):

- Sequence of events/prioritize the events
- Bad luck, risky behaviour (illicit substances increasing chance of consequences), and Genetic (Supraventricular Tachycardia)
- Young age: consider drugs (methamphetamines), energy drinks.
- Episodic nature:** **1.** What happens before, between and after an event - what changes happen between episodes? - residual symptoms day to day **2.** (can pt identify the trigger? - hot showers), **3.** why does the episode stop by itself?
- Trigger: is it an incidental finding or a possible hypothesis?
- Heat - Mast cell mediated (from PV - check serum tryptase) or Vasovagal mediated?
- Cholinergic urticaria:** occurs due to an increase in body temp, abnormal connection between temp and vagus nerve = vasovagal syncope due to exogenous or endogenous heat. Assess for a vagal tone (high?)
- Food association: Insulinoma (food giving sensation of lightheadedness/palpitations - get glucose levels to test hypothesis).
- Potassium: **Hypokalemic periodic paralysis** - (southeast asia) happens after a large meal, due to a genetic defect causing the paralysis and thyroid hormone involvement.
- Vasodilation from heat may be causing syncope - possible hypothesis.
- Hormonal abnormality? - ACTH category
- Postural tachycardia syndrome:** (aka postural orthostatic tachy syndrome) normal BP is key. Sudden increase in HR.
- Might be associated with Ehler danlos
- Management: Rehydration, compression stockings, salt limiting foods.