11/03/23 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Ashutosh (@asutos720)* ***Case Discussants****: Rabih (@rabihmgeha) and Reza (@DxRxEdu)*

CC: 34 YO F w/ chest pain

HPI: Chest pain began 4 days prior, left sided, on and off, lasting up to 10 min, related to SOB, not positional, no clear exacerbation with exertion, no palpitations

Facial swelling 3 days prior (starting with the left lip), gradually, progressed to their cheeks, now also progressed to the left side of their face

No stridor, abdominal pain, diarrhea, new detergents. No recent infection, no systemic symptoms.

PMH:
Generalised anxiety disorder
IBS
Previous episodes of facial swelling (no intubation required, mild SOB)

Meds:
Epipen

Fam Hx: Mother with similar episodes of facial swelling and SOB

Soc Hx: Lives alone, hairdresser

Health-Related Behaviors:
Casual alcohol, no smoking

Allergies:
Peanuts
Latex
Penicillin
Pollen

Vitals: T: afebrile **HR:** 110 **BP:** 130/70 **RR:** 24 Spo2 96%
Exam: mildly anxious, no accessory muscle
Gen: nl
HEENT: swelling of the lips, cheeks of the left side of the face, no rashes, cheeks no urticaria, pemberton sign negative
CV: no murmur, JVP normal, chest wall nontender
Pulm: no stridor
Abd: nontender, nondistended
Neuro: nl
Extremities/skin: nl

Notable Labs & Imaging:
Hematology:
WBC: 9k (*mildly elevated eosinophils*) Hgb: Plt: 160.000
Chemistry:
Na: 134 K: 3.4 Cl:100 BUN: 15 Cr: 1.1 glucose: 108 Ca: 8.6 Mag: 1.6
AST: normal ALT: 42 (mildly elevated) Alk-P: , Total bili 1.1
CRP 20 (<10), Albumin: 4
C3/C4 normal
C1 inhibitor activity: normal
GFR
Troponin: range of 300, normal <15
Imaging:
EKG: ST elevation in II, III, and aVF
CXR: normal
Echocardiogram: normal
Cath: non obstructive CAD
Cardiac MRI: no evidence of myocarditis or pericarditis
Tryptase: High (20), normal <5. Repeat Tryptase: 11.6

Dx: Idiopathic anaphylaxis with Kounis-Syndrome in the context of hereditary a-Tryptasemia (HaT), TPSAB1 positive

Problem Representation: 34 YO F w/ recurrent chest pain, SOB, and facial swelling is found to have ST segment elevations on EKG and patent coronaries on cath and is eventually diagnosed w/ Kounis syndrome

Teaching Points (Mario): **1) Acute chest pain:** rule out sinister causes first: ACS, AAS, PE (even though prevalence is low, M/M is high!) ACS in young patients: SCAD, Vasospasm, Embolism. **2) Facial swelling:** Prior picture for basal status (PE equivalent of prior CXR/ Cr). DDx: Angioedema, SVC, Renal (Nephrotic syndrome). SVC: look for timing (SVC worse in mornings) and PE: Pemberton sign. Episodic facial swelling: prioritize angioedema **3) (+) Family history:** Infections, same exposures (i.e allergens), genetic **4) Angioedema:** Primary eval: Rule out airway compromise, Med list (ACEi, OCP's,). *Histamine mediated vs bradykinin vs leukotriene*. *Histamine:* abrupt, urticaria (+) > (-). Allergic reaction: Requires prior sensitization. Pseudoallergic: direct mast cell degranulation (opioids, contrast). *Bradykinin* (brady= slow): insidious, urticaria (-). Acquired vs hereditary deficiencies in bradykinin degradation. C1q/ esterase dysfunction (quantitative or qualitative): non regulation of classical pathway: C4 > C3 consumption. **5) ST elevation:** ACS, PE, Takotsubo, myopericarditis, Brugada syndrome, Secondary repol. Abn, Early repol, hyperkalemia **6) NOMI:** Vasospasm: Cocaine, Meds, Histamine. **7) Allergic angina/ Kounis syndrome:** Histamine mediated coronary vasospasm +- Takotsubo. (ATAK complex: Adrenaline, Takotsubo, Anaphylaxis, KS) **8) Hereditary alpha-tryptasemia:** AD hereditary disease characterized by recurrent angioedema/ anaphylaxis and high tryptase. Look also for common disease manifestations like GAD, IBS, POTS, autonomic dysfunction