06/19/21 Morning Report with @CPSolvers

***Case Presenter**: Rafael Medina **Case Discussants**: CPSolvers family*

CC: 39 year old male with chest pain

HPI: One episode of chest pain two days ago. Substernal, squeezing, and pressure like sensation. Occurred suddenly while exercising. Increased in seconds and of intensity 9/10. Subsided in one hour. Worse with recumbency (lying back), and improved by sitting up.

Past Medical History:
HTN

Meds:
Hydrochlorothiazide

Family History:

Social History:

Health Related Behaviours:

Allergies:

Vitals: **T**: N **HR**:68 **BP**:153/93 **RR**: **SpO_2**:100%
Exam:
Gen:Well, conversant, well-appearing
HEENT:
CV: JVP normal.
Pulm: normal
Abd: normal
Extremities/Skin: Symmetric strong peripheral pulses in both arms and legs

Notable Labs & Imaging:
Hematology:
WBC: Hgb: Plt:

Chemistry:
Na: K: Cl: CO2: BUN: Cr: glucose: Ca: Phos: Mag:
AST: ALT: Alk-P: T. Bili: Albumin: Trop- nl

Imaging:
EKG: ST elevation in V1, V2.
CXR:
Exercise stress test- Pain occurs at maximal exertion and persists after the end of test
CT- Aortic dissection extending from the ascending arch to descending aorta in the abdomen

Final dx- Aortic Dissection

Problem Representation: ENG: 39y w/ HTN p/w sudden onset chest pain which improved spontaneously after an hour. Has negative troponin, ST elevation in V1 and V2 and pain after an exercise stress test.
ESP: Hombre de 39 años con HTA se presenta con dolor torácico subesternal de inicio y desaparición súbita. Tiene troponinas negativas, un EKG con elevación del ST en V1 y V2 y dolor después de un stress test.
POR:Homem de 39 anos hipertenso com dor subesternal súbita que melhorou espontaneamente em 1h, troponina negativa, ECG com elevacao de ST em V1 e V2 e dor após teste de estresse.

Teaching Points (Gurleen):

- **CHEST PAIN:** Anatomic approach: MSK, skin, nervous, cardiac, pulmonary, aorta, esophagus, mediastinum, referred from GI
  -Prioritizing emergent causes: 4+2+2: ACS, aortic dissection, tamponade, Takotsubo, pneumothorax, PE, esophageal rupture/impaction
  -Characterizing the pain, Who is the patient (age, cardiac risk factors)?
  -If EKG/troponin not diagnostic of ACS → don't delay CT chest
- **Collecting clues:** Positional (worse lying back), pleuritic → consider pericarditis
  -Physical exam: tamponade, pneumothorax. Other causes can have nl PE
- **PERICARDITIS:** 2 of 4 criteria: 1) classic pain pattern 2) pericardial friction rub (only in 1./3 of pts) 3) EKG changes 4) new or worsening pericardial effusion
- **SCAD:** commonly affects women, predisposing: CTD, post-partum, FMD
- **Acute/sudden events:** tore (ex: vessel, bleb), block (plaque rupture), electric
- **BRUGADA SYNDROME:** mutation in Na channel. Type 1 - >2mm STE V1-V3 coved, associated w/ criteria incl syncope, family history of SCD. Type 2 - saddleback shape.
- **PRINZMETAL ANGINA:** vasospasm, risk factors: smoking
- **AORTIC DISSECTION:** prioritize when abrupt onset of symptoms, may not always present classically