Ambulatory Medicine - H&P 2

Chief Complaint: “chest pain” x 2hrs

HPI

48y/o M w/ no known PMHx presents to clinic c/o sudden onset of chest pain since 2 PM today. Pt reports that he was exercising at the gym during that time, doing chest flies when the pain first started. He states that the pain is located in the left sternal area of his chest and feels tight and pressure-like, as if something is “sitting on him”. He says that after he felt the pain, he stopped exercising and walked home, thinking it was a muscle strain and the pain would go away. Pt states that the pain has improved with rest but remains persistent at presentation. He denies any prior episodes of similar chest pain, and the pain does not radiate anywhere. Pt rated the pain at onset of about 7/10, and now a 4-5/10 on presentation. Pt denies any shortness of breath, palpitations, diaphoresis, nausea, heartburn, vomiting, lightheadedness, or feeling like passing out. Pt denies any worsening of the pain when walking and denies taking any medications so far for symptom relief. Pt also denies any hx of HTN, HLD, smoking, illicit drug use, recent travels, recent illnesses, or family history of cardiac issues.

PMHx

- No known medical history, states that he has not seen a PCP in about 5 years.

PSHx

- No known surgical history

Medications

- Creatine Supplements for muscle growth
- States that he is not taking any OTC or prescription meds

Allergies

- No known drug, food, or environmental allergies.

FHx:

- Grandparents → unknown medical history
- Mother → unknown medical history
- Father → prostate cancer
- No known heart attacks or cardiovascular history in the family

SHx

- 48y/o M who works in construction and frequently goes to the gym.
- Habits → admits to alcohol consumption on occasions. denies tobacco smoking, vaping, or illicit drug use.
- Diet → high protein diet with red meats. doesn’t eat much spicy or fatty foods

ROS

General – Denies fever, chills, lightheadedness.

Skin – Denies diaphoresis.

HEENT – Denies headaches, sore throat. Denies vision changes or blurry vision. Denies jaw pain.

Neck – Denies any neck pain.

Chest/Cardiovascular – Admits to chest pain. Denies palpitations, radiation of pain.

Pulmonary – Denies shortness of breath, coughs, wheezing, or hemoptysis.

Gastrointestinal – Denies vomiting, diarrhea, nausea, abdominal pain, constipation

Genitourinary – Denies changes in urination

MSK – Denies upper extremity pain.

Vital Signs
BP: Seated 110/90 mmHg

P: 94 bpm

RR: 16

T (oral): 98.7 F

O2 Sat: 98% on room air

Height: 70 in | **Weight:** 182 lbs | **BMI:** 26.1

Physical Exam

General: alert, in no acute distress, pt does not appear to be anxious, non-toxic appearing, speaking in full sentences

Skin: No signs of diaphoresis or pallor. Normal skin turgor without tenting, cap refill of upper extremities nailbeds <2s.

HEENT: PERRLA b/l, EOMs intact without pain, conjunctiva clear, sclera is white, oropharynx is non-erythematous without tonsillar exudates. No lesions seen on the oral mucosa. Moist mucosal membranes.

Neck: no lymphadenopathy or tenderness to palpation, neck is supple

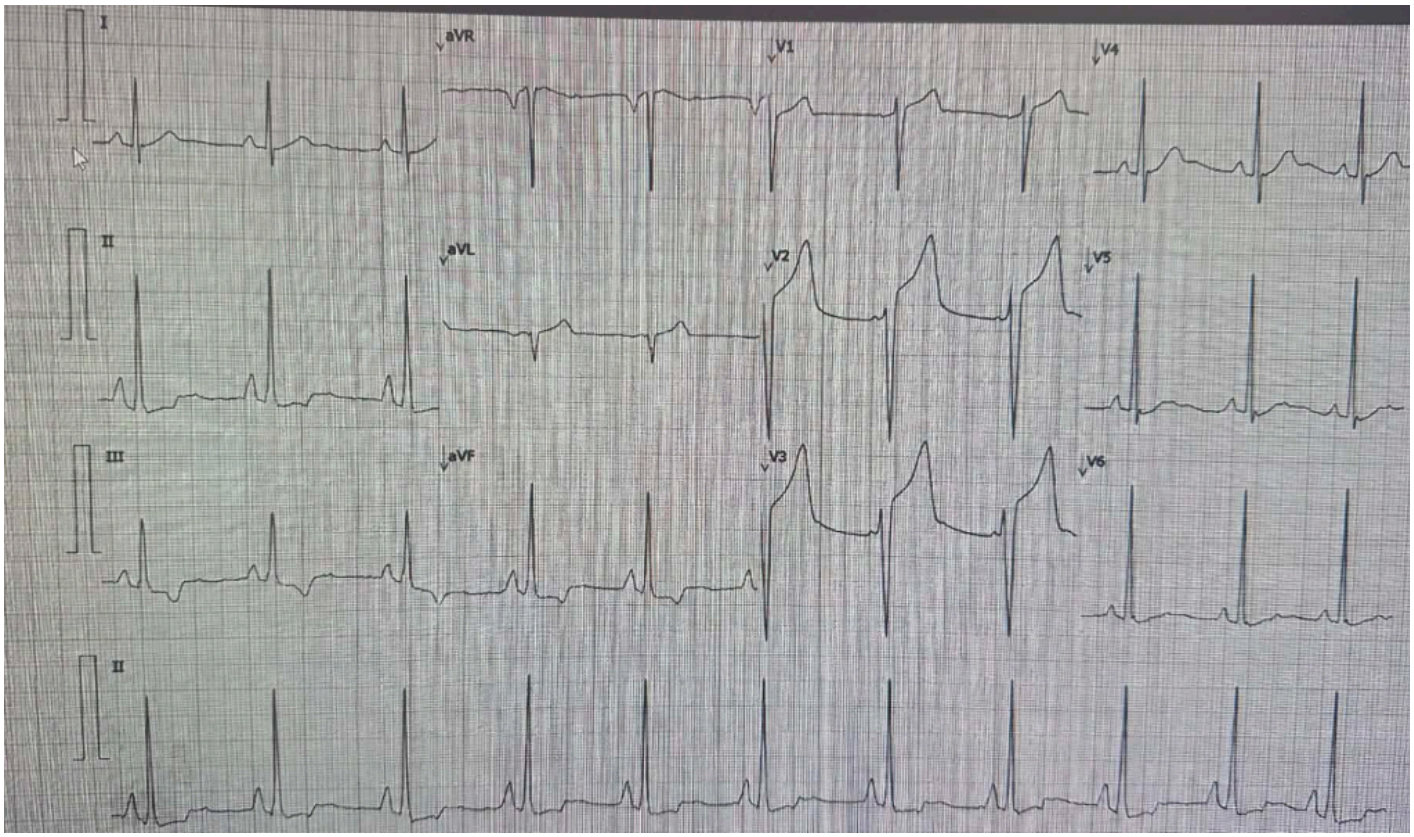
Cardiac: mildly elevated rate on auscultation with regular rhythm, S1 and S2 audible. No murmurs, rubs, or gallops heard.

Chest: ribs and sternum non-tender to palpation. No reproducible chest pain. No Levine's sign.

Lungs: Lung sounds are clear bilaterally without rales, rhonchi, or wheezing. No pleuritic chest pain.

Abdomen: Normoactive bowel sounds. soft, nondistended, nontender throughout. (-) Murphy's, (-) McBurney's, (-) CVA tenderness.

Labs/Imaging
EKG



V2, V3: ST-T segment changes – elevations
V5, V6: ST-T segment changes – depressions
II, II, aVF: ST-T segment changes, possible reciprocal T-wave inversions

Assessment

48y/o male with no known PMHx presents with sudden-onset substernal chest pain that began approximately 2 hours ago at the gym. Pain is described as pressure-like and tight, initially rated 7/10 and currently 4–5/10. Physical exam is unremarkable, patient is currently hemodynamically stable. EKG shows ST elevations in V2-V3 with reciprocal ST-T wave inversions in II, III, aVF, V5, and V6, concerning acute anterior STEMI.

D/Dx [most to least likely]

1. Anterior Myocardial Infarction
    a. Rationale: Pt presents with acute left sternal pressure-like chest pain that began during exertion in the gym and still persists. EKG is concerning for acute anterior STEMI. ACS can occur in pts without known risk factors and must be ruled out first as it's a life-threatening condition.
2. Prinzmetal Angina
    a. Rationale: Vasospastic angina can cause chest pain with transient ST elevations due to vasospasm. It can mimic STEMI, however, the symptoms typically occur at rest, and EKG changes resolve when vasospasm subsides. Reciprocal changes are more suggestive of myocardial infarction than coronary vasospasm. This pt's pain has been ongoing for 2 hours and persisted, making an MI more likely.
3. Unstable Angina (ACS)
    a. Rationale: Pt presents w/ acute pressure-like chest pain developed during exertion consistent with ACS, and symptoms have persisted despite rest. EKG findings for unstable angina include ST depression and T-wave inversions but not ST elevations.
4. Myocarditis

a. Rationale: Myocarditis can present with chest pain and ST elevations due to inflammation of the myocardium. However, myocarditis usually happens after a preceding viral illness. This pt denies any recent illnesses, fever, chills, or other symptoms, making it less likely. EKG with reciprocal changes are more consistent with a coronary occlusion than diffuse myocardial inflammation.

5. Costochondritis
    a. Rationale: Pt's chest pain began while exercising, which can suggest an MSK etiology. However, there is no reproducible chest pain on physical exam, and costochondritis would not explain the EKG findings.
6. GERD
    a. Rationale: GERD can cause substernal chest discomfort that may be described as pressure-like that worsens when lying flat and usually after eating spicy, fatty, fried foods. Pt denies any heartburn, regurgitation, nausea, or abdominal pain, and the EKG findings would not be indicative of GERD.

Problem Lists, Plan, Disposition

#Suspected Acute Anterior STEMI

- Transfer to ED for emergent evaluation as chest pain is concerning due to location, duration of pain, and concerning findings on EKG pointing to a cardiac event. Pt was advised that he requires another EKG in the ED and blood work (cardiac enzymes) for further evaluation and to be done ASAP. Pt verbalized understanding and agreed with the plan.
- EMS transport was offered and strongly recommended due to concern for acute MI and risk of sudden cardiac arrhythmias, hemodynamic collapses such as syncope, and death.
- The patient declined EMS transport and decided to use his own car to go to the ED. Pt was informed of the risks, verbalized understanding, and wished to go on his own. Pt was AxO3, able to ambulate freely in the clinic in NAD.
- Administered 4 ASA 81mg to chew immediately
- Did not administer SL nitroglycerin due to concern for potential hemodynamic changes and concerns during pt's self-transport to the ED like symptomatic hypotension/syncope.
- Keep NPO, avoid further physical exertion, monitor for worsening chest pain, dyspnea, diaphoresis, syncope, palpitations