Learner Instructions

Patient's Name: Tyler Miller
Age: 43 year-old male
Setting: Emergency Department
Primary vs. Sign-Out Patient: Sign-out

Initial Chief Complaint on arrival to the ED:
Chest pain

Patient Information Presented at Sign-Out:
43-year-old male with a PMH significant for HTN and HLD, who was admitted from the ED to the emergency department for an episode of chest pain while climbing-up a flight of stairs. His symptoms resolved upon arrival to the ED.

His vital signs and physical exam over the course of the evaluation are as follows:

Vital signs:

Initial Triage Vitals:	HR 70 BP 120/70 mmHg RR 18 Sat 100% RA T 98.8 F (oral)
Current Vitals:	HR 68 BP 116/68 mmHg RR 16 Sat 100% RA T 98.6 F (oral)

Exam (abnormal findings bolded):

General: Well-developed, well-nourished male resting comfortably in no acute distress.
HEENT: Normocephalic, atraumatic, no conjunctival injection or pallor, sclera non-icteric, PERRLA, nasal mucosa pink, moist mucous membranes, oropharynx without evidence of erythema, tonsillar enlargement or exudates.
Neck: No cervical lymphadenopathy, no thyromegaly, or mass.
Cardiovascular: No jugular venous distension, regular rhythm, normal S1 and S2, no murmurs, rubs, or gallops. Radial and DP pulses 2+ bilaterally. No edema.
Pulmonary: Thorax is symmetric without increase in anteroposterior diameter. Lungs clear to auscultation, no rales, wheezes, rhonchi, or rubs.
Abdomen: Flat, no hepatosplenomegaly, soft, non-tender to palpation in all quadrants.
Musculoskeletal: full range of motion in al joints, no evidence of swelling or deformity.
Neuro: Alert and oriented x 3. CNs II – XII symmetric, sensation to light touch grossly intact, 5/5 strength in all extremities. Gait steady without evidence of ataxia.
Psych: Affect full range. Speech is fluent, no SI or HI.

The results of his initial diagnostic work-up are indicated here (results outside reference range are bolded):

CBC			**CHEMISTRY**		
WBC	7.4	(3.5-10.5)	SODIUM	139	(135-148)
RBC	5.01	(4.2-5.8)	POTASSIUM	3.4	(3.5-5)
HEMOGLOBIN	13.4	(13.0-17.5)	CHLORIDE	108	(95-108)
HCT	40.2	(38.0-50)	BICARB	24	(24-32)
MCV	88	(80-99)	BUN	18	(0-20)
MCH	30	(27-34)	CREATININE	0.8	(0-1.7)
MCHC	34.2	(33-35.5)	GLUCOSE	89	(65-110)
RDW	14.8	(11-15)	CALCIUM	9.2	(8.5-10.5)
PLATELET	192	(140-390)			
			TROPONIN	0.01	(0.00-0.03)
			D-DIMER	<150	(0-243)

ECG: NORMAL SINUS RHYTHM. NORMAL ECG

CXR: THERE ARE NO CARDIOPULMONARY ABNORMALITIES. NORMAL CXR

He was given 324 mg of aspirin and is awaiting a coronary CT.

His repeat troponin is 0.01

The coronary CT results are included on the following page.

The sign-out plan from the initial team was to discharge the patient if there were no noted abnormalities on the coronary CT and if he continued to be chest pain free.

CT and repeat troponins were performed, and the results are included. The patient had no outstanding issues overnight, and is ready to leave the hospital.

Your Task:

1. Reassess and the update
2. Discharge the patient from the emergency department.

3. This simulation is focused on communication. This case is not an assessment of your medical decision making. You do not need to order additional emergency department tests or admit this patient.

   * When you are finished, you can tell him that the nurse will be in shortly to give him his paperwork and take out his IV

Coronary CT Angiography with calcium score

Name of Patient: Tyler Miller
Age: 43
Physician: Dr. Lopez

EXAM: Coronary CT Angiography with calcium score
REASON FOR STUDY: chest pain
CLINICAL HISTORY: HTN, HLD
COMPARISON: None

TECHNIQUE: Using a 64-slice CT scanner, a preliminary scout study was obtained, followed by coronary artery calcium protocol. Following administration of intravenous contrast, 0.5mm collimated images were obtained through the coronary arteries. Data were transferred off-line for 3D reconstructions including Curved MPR and multi-planar imaging.

ACQUISITION: Prospective ECG triggering was used. Heart rate at the time of acquisition was approximately 60 bpm.

MEDICATIONS: 100g of oral metoprolol was administered prior to scanning. 0.4mg sublingual was administered immediately prior to scanning.

TECHNICAL QUALITY: Excellent, with no artifacts.

FINDINGS:
The total calcium score is zero, indicating absence of calcified plaques in the coronary tree.
The coronary arteries arise in normal position. There is left coronary artery dominance
Left main: the left main coronary artery is medium size vessel and bifurcates in LA and LCX. It is patent with no evidence of plaque or stenosis.
LAD: the left anterior descending artery is patent with no evidence of plaque or stenosis.
LCX: the left circumflex artery is patent with no evidence of plaque or stenosis.
RCA: the right coronary artery is patent with no evidence of plaque or stenosis. It gives off a patent posterior descending artery and a patent posterior left ventricular branch.
Cardiac valves: there is no thickening or calcification in the aortic and mitral valves.
Pericardium: the pericardial contour is preserved with no effusion, thickening or calcifications.
Extra-cardiac findings: there are no significant extra-cardiac findings in the available limited views of the lungs and mediastinum.

IMPRESSIONS:
1 – Total calcium score of zero
2 – No evidence of coronary stenosis or plaque by Coronary CT Angiography.