

Cover page

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Date of original case: 2015-12-07

Date of most recent revision: 2015-12-07

Name of patient: Steve McQueen

Learner's level of expertise: MS1 – CC4

What kind of case is this? PE/Hx combination

Anticipated length of case in minutes: 15 minute history (MS1), 15 minute history/physical (MS2), 10 minute history/physical (CC3)

Patient's problem(s): Chest Pain

Case objectives: Focused cardiovascular exam, closed questioning techniques, generation of differential diagnosis, appreciation of life-threatening causes of chest pain

Key challenges: Patient in pain/discomfort, asking for pain medications, patient believes they are having indigestion, patient is a vague historian

Special casting requirements: None. Adult patient

Most likely diagnosis: Need to rule out Myocardial Infarction

Differential diagnosis: Myocardial Infarction, Pulmonary Embolism, Pneumothorax, Aortic Dissection, Esophageal Rupture, Pneumonia, Trauma, MSK, GERD

Examination room set-up: Patient sitting in on examination bed clutching chest

Data collection and marking notes:

- Simulated patient gives feedback (if not OSCE scenario)
- Examiner does marking, PEPs

STEM ASCM1:

You are an Emergency Physician at a large community hospital. It is 4 pm. You are about to see Mr. Michael Jordan, a 64 year-old male complaining of chest pain. Please perform a 10-minute history. Be prepared to answer post-exposure prompts regarding your differential diagnosis and proposed physical exam maneuvers.

STEM ASCM2:

You are an Emergency Physician at a large community hospital. It is 4 pm. You are about to see Mr. Michael Jordan, a 64 year-old male complaining of chest pain. Please perform a 10-minute history and focused physical exam.

STEM iOSCE:

You are an Emergency Physician at a large community hospital. It is 4 pm. You are about to see Mr. Michael Jordan, a 64 year-old male complaining of chest pain. Please perform a 10-minute history and focused physical exam. Be prepared to answer post-exposure prompts regarding your differential diagnosis and management plan.

Instructions for actor

Current problem(s): Chest pain

Communication challenge(s): You are in pain/discomfort, you repeatedly ask for pain medications, you believe you are having indigestion, you are vague in your recollection unless specifically asked

Age: 64

Setting: Emergency Department

Proximal biomedical perspective

- List of problems
 - Chest pain
 - Nausea
 - Vomiting
 - Diaphoresis
- Sequence of events (OPQRST, triggers, associated symptoms, why now?, etc...)
 - Two hours ago you were sitting down to lunch with your wife when you experienced sudden onset, crushing, 10/10 retrosternal chest pressure (“It’s not pain, it feels like there’s an elephant sitting on my chest.” The pain radiates to your jaw and right shoulder. It does not go to your back. The pain gets worse when you exert yourself (one flight of stairs, walking >2 blocks), and may get a little better with rest. The pain is not positional. It hurts when you push on your chest. You also began having nausea and diaphoresis. You had one episode of vomiting. The pain has been constant until now. Nothing makes the pain feel better. You feel that the pain must be indigestion, though you have no history of this. Any walking or activity makes the pain worse. Your wife forced you to come into the hospital. You did not call EMS and were not brought in by ambulance.
 - For the last four months you started having mild indigestion when walking up flights of stairs or doing physical activity. Four months ago you could do 4 flights of stairs before these symptoms of indigestion would start. It has been progressively getting worse. Last week you could only do 1 flight. The sensation is similar to what you are having today however you would rate the pressure only as 3/10. You didn’t think much of it. The pressure always went away with a few minutes of rest.
- Details of symptoms
 - Chest pain: Not pleuritic, no retching, no trauma, no neurologic symptoms, no ripping/tearing
- Related symptoms or issues
 - No back pain
 - No abdominal pain
 - No syncope
 - No DVT/PE risk factors: no recent surgery, no malignancy, no DVT symptoms, no hemoptysis
- Pertinent risk factors or protective factors
 - Hypertension
 - Hyperlipidemia
 - No known CAD
 - No previous MI/angina
 - No previous CHF
 - No history of stress tests or cardiac catheterizations or ECHO
 - No diabetes
 - No connective tissue disease
 - No recent surgery

Distal biomedical perspective

Past Medical History

- *No previous operations or hospitalizations*
- *"No previous illnesses or other problems with my health"*
- *"I'm a very healthy guy"*
- *"I don't have any medical conditions"*

Medications including over the counter, herbal, oral contraceptive, etc..

- Blood pressure medication, high cholesterol medication (unsure of when you started them, the names, and the doses)
- Your family doctor said you were healthy at your last visit 6 months ago

Medical Family History: Father had a heart attack at 60, Mother had a heart attack at 60. Otherwise they were healthy.

Smoking: None

EtOH: Recreational (1-2 drinks per week)

Proximal context

You are a 64 year old, married, heterosexual, retired school teacher. Your wife (Betty 64 years old) was the CEO of a large company. You have been happily married for 40 years. You have one child who is a physician in the States. You are well off financially and both you and your wife are living in your family home. You and your wife are independent for your ADLs and iADLs. You have a large support system and lots of friends and family living nearby. You live in an affluent neighborhood of the city. You and your wife are still driving.

Distal context

Community, culture, power relationships, discrimination, media, geography, socioeconomic, and historic factors of your history are not your main concern today. If asked these questions, appear agitated, question the importance of these factors at the present time, and redirect the examinee towards your pain experience.

Patient's perspective

- Ideas and thoughts
 - *This is probably indigestion, my family doctor said I was healthy. Much more healthy than my parents were when they had their heart attacks*
- Concerns
 - *Nothing, my wife forced me to come into the hospital*
- Expectations
 - *Maybe some Pepto Bismol or Zantac*
- Feelings
 - *I don't really need to be here*

For information-gathering station

How to present the symptom(s) or problem(s)

How to start the consultation:

- My wife made me come in to the Emergency Department. I am healthy, it's probably just indigestion. I'm not really in any pain.
- What to divulge to screening questions (e.g. 'So abdominal pain and fever — anything else?')
 - Nothing really. It's just indigestion like I told you.

- At the mid point in the interview say:
 - Doc, can I get some stomach pills so I can go home?

How to respond to specific types of questions or approaches: what to divulge spontaneously and what not to

- What patient says when asked subsequent open questions (e.g. 'Tell me what has been going on from the time this all first started to the present' or 'Tell me more about the pain ')
 - Answer with your symptoms, but be vague in terms of OPQRST details unless specifically asked these details
- What to divulge only to closed questions
 - Most details regarding your chest pain and other symptoms or aspects of the history
- How to respond to questions about patient ideas, concerns and expectations about the problems
 - Be dismissive regarding examinees concerns

Physical findings e.g. character can only bend knee to 45-degree angle, raise arms past shoulder level, cannot feel vibrations from tuning on toes, etc.

Physical Exam

Vitals (given when examinee states will perform): 110HR, 110/60BP (equal in both arms), Temp 37.9, 99% RA, 18RR

CVS: normal s1s2, no s3s4, no murmurs, JVP 3cm ASA, no leg swelling/edema, no calf pain, no asymmetric pulses

Resp: clear, equal air entry bilaterally, no adventitious sounds

Abdo: soft, non-tender; bowel sounds present in 4 quadrants, no palpable AAA

Laboratory findings

CBC/lytes/BUN/Cr, Coags: within normal limits

Trp/CK: elevated well above normal limit

CXR: within normal limits

ECG: Inferior STEMI. ST Elevation in leads II, III, and aVF. Reciprocal ST Depression and T wave inversion in aVL.

Props

None

Post Encounter Probe

ASCM1

What is your differential? What is your most likely diagnosis? Why?

ASCM2

What is your differential?

What investigations would you complete?

Please interpret this ECG

iOSCE

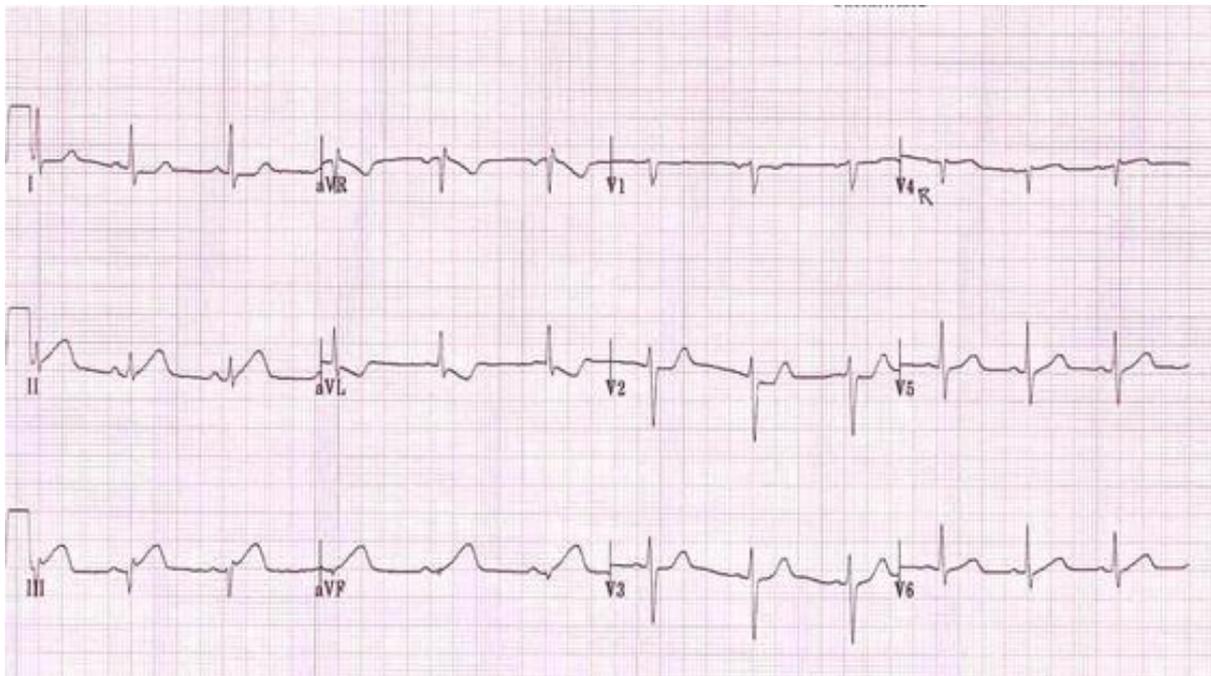
What is your differential?

Please interpret this ECG

What investigations?

What treatment?

- Immediate cath lab activation or transfer to cath capable facility
- ASA 325 PO chewed
- NTG 0.4mg sl q5min x3 total doses (avoid in posterior MI)
- Morphine
- Ondansetron
- IV: NS if hypotensive
- Anticoagulants: Plavix, Heparin



1. Kurtz S, Silverman J, Draper J. *Teaching and Learning Communications Skills in Medicine*. Vol Second Edi. London: Radcliffe Publishing; 2014.