Cover page

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Date of original case: 2015-12-10

Date of most recent revision: 2015-12-10

Name of patient: John Hancock

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): Shortness of Breath

Case objectives: Focused CVS/Resp history and exam, closed questioning (if , generation of differential diagnosis

Key challenges: Patient short of breath answering in short sentences, homelessness/low SES, patient pushing early in interaction for antibiotics

Special casting requirements: None. Adult patient

Most likely diagnosis: COPDE

Differential diagnosis:

Upper Airways: Obstruction, Burn, Dental/Neck Abscess, Foreign Body, Epiglottitis

Lower Airways: Bronchitis, Asthma, COPD, Bronchiolitis

Lungs: Pneumonia

Vascular: Pulmonary Embolism

Cardiac: CHF, Valvular Disorders, Arrhythmia, Pericarditis/effusion

External to Lungs: PTX, HTX, Pleural Effusion, Abdominal Process, Anemia, DKA, Toxins

Examination room set-up: Patient sitting wheezing, tripoding, visibly distressed

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 9 pm. You are about to see Mr. John Hancock, a 64 year-old male complaining of shortness of breath. Please perform a 10-minute history.

STEM ASCM2:

You are an Emergency Physician at a large community hospital. It is 9 pm. You are about to see Mr. John Hancock, a 64 year-old male complaining of shortness of breath. Please perform a 10-minute history and focused physical exam.

STEM iOSCE:

You are an Emergency Physician at a large community hospital. It is 9 pm. You are about to see Mr. John Hancock, a 64 year-old male complaining of shortness of breath. 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): Shortness of Breath

Communication challenge(s): You are short of breath, answering in short sentences and visibly distressed, you believe this is a bad “chest cold” and would like antibiotics and discharge back to your shelter

Age: 64

Setting: Emergency Department

Proximal biomedical perspective

- List of problems
  - Shortness of Breath
  - Wheezing
  - Cough
  - Tachypnea
- Sequence of events (OPQRST, triggers, associated symptoms, why now?, etc…)
  - You called EMS due to shortness of breath that is now unbearable. You were brought in by EMS and given puffers en route. Your puffers helped briefly. You have had cough/cold symptoms for about a week. Many people have been sick in the shelters you’ve been staying in. You have experienced gradual, progressive shortness of breath over the past two days. You have also noticed audible wheezing, increasing cough with lots of whitish/greenish sputum. You have not noticed a fever. You do not have any chest pain, but have some discomfort in your throat from coughing so much. Your symptoms are bad all the time and do not get any worse with changes in positions. You notice they do get worse with any amount of activity; in fact you begin to feel lightheaded/pre-syncopal with activity. You have a history of similar episodes and are on two puffers you are aware of. You have not heard the term COPD, but your previous episodes were much like this. You have never been intubated or in the ICU, you were treated in the ED for your past exacerbations, you have had 2-3 of these in the past. They gave you pills to take home during the last emergency room visit although you are uncertain what exactly they were. You are not on home O2 You have not had any recent changes in your medications. You have smoked for about 50 years, averaging one pack a day.
- Related symptoms or issues
  - No chest pain, nausea, vomiting, or diaphoresis
  - No lower extremity edema
  - No hemoptysis
  - No drooling, trismus, neck swelling, sore throat, hoarse voice
  - No abdominal pain
  - No chest or CNS trauma
  - You do not have any itching, rash, skin erythema/swelling
- Pertinent risk factors or protective factors
  - No cardiac history: no ACS/CAD, no CHF, no valvular diseases
  - Cardiac risk factors: HTN, high cholesterol, no DM, unsure of family history. You smoke.
  - No history of Asthma
  - No PE/DVT risk factors: no clinical signs of DVT, no immobilization, no recent surgery, no previous PE/DVT, no hemoptysis, no hormonals
  - Vaccines up to date
  - You are not on any blood thinners

Distal biomedical perspective

Past Medical History

- *No previous operations or admissions*

- *You have HTN and high cholesterol, otherwise you are healthy*

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

- You are on a blue and purple puffer which you only take when you get short of breath. Usually you use them both three times a day. For the last week you have been taking them ten times per day.
- Oral tablets for HTN and high cholesterol
- You are unaware of the dosages and names of the medications
- One of your puffers is daily and the other is as needed when you get short of breath

Medical Family History: Mother and Father died of "natural causes"; you are unaware of their health issues beyond this

Smoking: 50 years of smoking, on average 1 pack a day

EtOH: recreational, 1-2 drinks on weekends. You do not engage in illicit/IV drugs

Proximal context

You are a 64 year old single male, currently unemployed with no fixed address. You have never been married and never had a real intimate relationship. You consider yourself heterosexual. You do not have any children or dependents. You have engaged in odd jobs for the past 30-40 years. You left home due to physical abuse from both your parents at age 18. You have been living in shelters since then. You use public transportation when you can for transportation. You are sceptical of the health care community due to previous experiences and people dismissing your concerns and looking down on your lifestyle.

Distal context

You have been unemployed and living on the streets for most of your adult life, living between paychecks for odd jobs you've been able to secure temporarily. You have had poor experiences during past visits to the emergency department where you felt belittled. Medical professionals in the past have been dismissive of your concerns. You harbor ill feelings and reluctance towards the medical profession. You feel quite vulnerable in the power imbalance of the doctor-patient relationship. Your community (shelters, other homeless individuals) is often sick and symptoms such as yours are normalized especially in the winter time. You are generally unsatisfied with available government resources and blame government/authority/those in positions of power for your current misfortunes

Patient's perspective

- Ideas and thoughts
    - *You feel as though you must have caught some kind of infectious disease from the cohabitants of the shelters you live in*
    - *This must be a bad "chest cold"*
- Concerns
    - *You are concerned that you will not be able to go back to your shelter until you are "not infectious"*
    - *You are worried regarding where you will live*
    - *You are worried about how you will pay for your medical care; you would like to avoid admission because you do not have the money to pay for this*
    - *You are worried that you will not be able to afford drug prescriptions*
    - *You do not know how you will get home*
- Expectations
    - *You are hoping for expedient antibiotics and discharge back to your shelter*
- Feelings

    - *You are sceptical of the medical community and distrustful*
    - *You are feeling vulnerable and would like to end the interaction as soon as possible*

For information-gathering station

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

How to start the consultation:

- Patient's exact words in response to interviewer's first open-ended question
    - I am… very… short of… breath…
    - Can I… get something… to help… with this… before we… go on…?
    - How long… will this… take…?
- What to divulge to screening questions
    - Answer all questions freely, limiting answers to what is asked; only divulge associated symptoms/details/etc. if asked specifically
    - Answer in short sentences, taking breaths every 2-3 words

Physical Exam

Vital Signs: HR 96bpm, BP 120/80, RR 26, SpO2 94% NRB, Temp 37.9C

Work of Breathing: Accessory muscle use, tripoding, wheezing, pursed lip breathing, pallor, unable to talk in full sentences

HEENT: unremarkable

CVS: unremarkable

Lungs: wheezes throughout, equal air entry bilaterally, crackles in right lung base

Abdo: unremarkable

Extremities: no lower extremity edema, no calf tenderness

Laboratory findings

ECG: unremarkable

CXR: signs of COPD

CBC/lytes/BUN/Cr: normal

Trp/CK: normal

VBG: CO2 retention

Post Encounter Probe

ASCM1

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

ASCM2

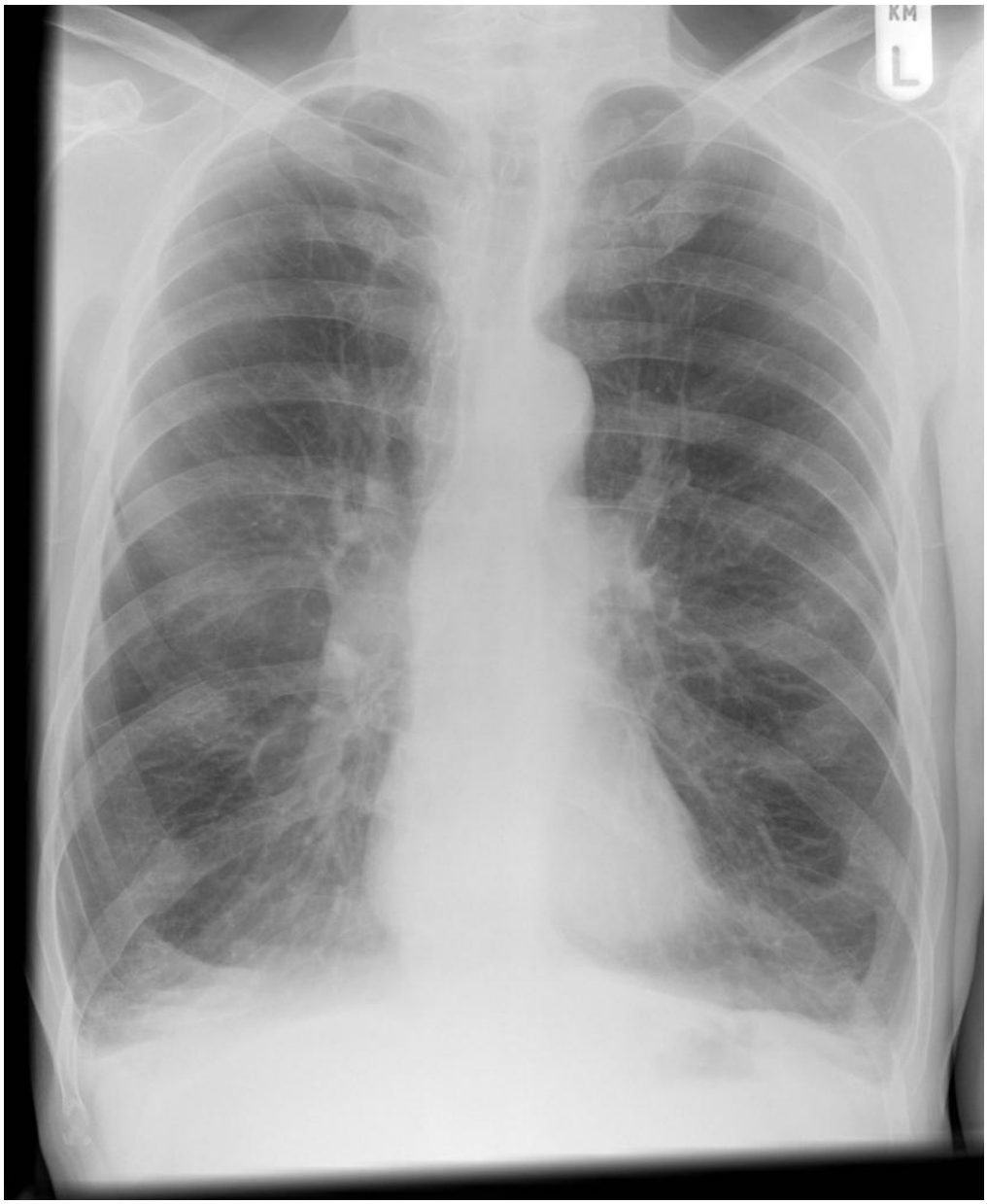
What is your differential? What is your most likely diagnosis?

Please interpret the following X-Ray

Case courtesy of Dr Jeremy Jones, Radiopaedia.org, rID: 6410

Hyperinflation: flattened hemidiaphragms, small heart

Barrel chest: widened anterior-posterior diameter on lateral



iOSCE

What is the most likely diagnosis?

What investigations?

What treatment? (Once stated, please explain your rationale for prescribing antibiotics and steroids)

- Consider CPAP/BiPAP
- Beta Agonist: Salbutamol (Ventolin)
- Anticholinergic: Atrovent (Ipratropium)
- Steroids: Prednisone, Prednisolone

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- Antibiotics: Levofloxacin (Levaquin)
- Disposition: Admission or Discharge depending on clinical course

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