

COMLEX Level 2 PE Exam

A 26 years old man came to ER from work because he complained of excruciating chest pain.



Patient Data Sheet

- **Patient Name** : Mr. Fafa Carson
- **Clinical Settings** : Emergency Room
- **CC** : A 26 years old male presents with chest pain.

➤ **Vital Signs** :

- **Blood Pressure** : 130/90 mm Hg
- **Respirations** : 16 per minute
- **Temperature** : 99.4 °F
- **Pulse** : 90 bpm
- **Height** : 72 inches
- **Weight** : 163.7 lbs.
- **BMI** : 22.2 kg/m²

Differential Diagnosis:

- Sickle cell crisis (Vaso-occlusive crisis)
- Acute MI
- Peptic ulcer perforation
- Aortic dissection??
- Costochondritis

Key points to remember

- Patient's name.
- Ethnicity (may have a bearing on the DD).
- Chief complaint, Vitals.
- DD for acute onset chest pain in young black male.
- History of Sick cell in patient/ family.
- Previous sickling episodes.
- Precipitants of sickling episode (current and in past).
- Is patient on pain meds ? Hydroxurea ? Folate ?
- Could this be a pain med seeking behavior ?
- Be quick and efficient in examination.

Opening scenario

- A young slender black male lying on his side, looks fatigued and somewhat distressed, has sweat on his body.
- He is tachypneic and somewhat hyperpneic.
- Moaning with pain occasionally. Looks disinterested in surroundings.
- His lips and skin look extremely dry and parched, eyes look sunken.

Subjective

- **Hello Mr. Carson, my name is Dr. Smith. I am going to take care of you today. How are you feeling now ?**
- *Not so good doc, it still hurts.*
- **I understand Mr. Carson. I would like to sit down and ask you a few questions and then examine you. Would that be ok?**
- *Sure doc.*
- **Thank you. I will be quick so we can find out what is going on and get you something for your pain as I am done seeing you.**
- *Ok doc.*

Subjective (Contd...)

- **So how did this all start?**

- *Well doc I was working since morning and I felt really dehydrated. I was afraid this was coming. I have had a sickling crisis not so long ago and was here for 3 days. I should have known better.*

- **I see, so you think this is a sickling crisis ?**

- *Yes doc, I had a couple in the past. This feels exactly like that.*

- **Okay. Can you show me where it hurts you?**

- *Right here doc (points all over his chest especially laterally).*

- **What is the quality of the pain?**

- *It was like someone stabbing me in the morning. Now it just hurts doc, I don't know what kind.*

Subjective (Contd...)

- **I see. How bad is the pain on a scale of 1 to 10, with 10 being the worst ?**
- *Its a 4 or 5 right now. I was a 10 this morning, I just couldnt breathe. They thought at work I gonna die.*
- **I am sorry to hear you were in such bad shape. Its good the pain is less now. Does it stay at one place or move?**
- *It's all over the place doc.*
- **What makes it worse?**
- *Deep breathing, any movement.*

Subjective (Contd...)

- **Anything makes it better?**
- *Well morphine just took the edge off. I didn't have my meds on me when this came on this morning. I feel better lying down this way.*
- **I see. You said you were dehydrated since morning?**
- *Yes doc. I haven't drunk a whole lot of fluids since yesterday. I was working in heat since morning. It was the same last time, I should have known.*
- **Does any other part of your body hurt ?**
- *No.*
- **Do you have a painful erection?**
- *Not this time. I had it last time.*

Subjective (Contd...)

- **Do you have a fever ?**
 - *No I don't think so.*
- **Do you have a cough?**
 - *No doc.*
- **Do you have a runny nose?**
 - *No doc.*
- **Were you short of breath when this started?**
 - *Yes doc, but more from the pain, I guess.*

PAM HUGS FOSS

- **Ok Mr. Carson, I would like to ask you about your medical history, medications, social habits and family history.**
- *Ok doc.*
- **So you said you suffer from sickle cell anemia. How long have you suffered from it ?**
- *Well they told my folks I had it as a kid. I have been getting this crisis for many years.*
- **I see. do you have any other medical problems?**
- *No.*
- **Does anyone else in your family also have sickle cell disease?**
- *Yes doc, my father has the disease. My half brother also has sickle. They both keep getting crises.*

PAM HUGS FOSS (Contd...)

- **Any other medical problems in the family?**
- *None that I know of.*
- **Are you allergic to any medication or other substance?**
- *No.*
- **What medications are you currently on?**
- *I take a MS-Contin 5 mg as needed every 4 to 6 hrs. I haven't taken a whole lot last month. So I still have about 20 or so left at home. I take a folic acid every day and also Hydroxy urea doc. That's pretty much it.*
- **When were you started on MS-Contin?**
- *About a year ago. I have been on this dose since.*

PAM HUGS FOSS (Contd...)

- **So you said you had a sickling crisis 6 months ago. How often do you get these crises?**
- *Not a whole lot. The first one was 5 years ago. Then I had one 3 yrs ago. And the one 6 months ago. I take good care of myself doc. The last time doc started me on folate.*
- **I see. And how many times have you been hospitalized?**
- *Just twice. The first crises and the last one. Once I was just given some pain meds in the ER and felt better so I walked back home after some hours.*
- **Any surgeries in the past?**
- *No.*

PAM HUGS FOSS (Contd...)

- **What work do you do?**
- *I am into construction.*
- **Ok, I would like to ask you about your habits now. Do you smoke?**
- *No I have never smoked. As a kid doc told me never to smoke.*
- **Good to hear that. It saves you a lot of trouble. Do you drink alcohol?**
- *Not a whole lot, once or twice a week may be.*
- **Do you do any drugs?**
- *No.*
- **Are you sexually active?**
- *Yes only with my wife.*

PAM HUGS FOSS (Contd...)

- **Ok do you use contraception?**
- *Yes we use protection.*
- **Do you have children?**
- *Yes. I have a son. He doesn't have sickle though.*
- **Have you taken your yearly flu shot?**
- *Yes doc, I have.*
- **Any one at home or someone you work around smokes?**
- *No doc no one smokes around me. I stay away from smokers too.*

Physical Examination

- **Ok Mr. Carson, thank you for all that information. I would now like to examine you. Before that let me wash my hands.**
- Do a good general exam : note pallor, icterus, cyanosis, edema, peripheral pulses, lymphadenopathy.
- **HEENT:** Do a quick HEENT, especially sclerae and conjunctivae.
- Look for any signs of upper respiratory tract infection.
- **Chest** : Auscultation : Listen for rales, air entry, breath sounds.
- **CVS:** Auscultation, Palpation (check blood pressure on both upper extremities if you suspect Aortic Dissection).
- **Abdomen:** auscultation, palpation (tenderness), organomegaly.
- Explains, offers and performs OMM if indicated.

Closure: Assessment and Plan discussion

- **Thanks Mr. Carson. I am done seeing you. Let me go over what my impression of your problem.**
- **Like you said, it might be a sickling crisis. That is the number one thing on my mind, as well. But there are other possibilities which always need to be ruled out.**
- **Like a swelling of the rib cartilages, any organ bursting in there, or may be even a heart attack.**
- *I see. So how do we find out.*
- **Well, the diagnosis is pretty much clinical, from what you told me and what I found on examining you . But to be absolutely sure, I would like to run some tests. Only then we can say with certainty what it is.**

Closure: Assessment and Plan discussion (Contd...)

- *I understand doc.*
- **Good. We will run some blood tests and take an X-ray of your chest to see if there is anything in there.**
- *I had my X-ray taken doc when they wheeled me in. And she just drew blood.*
- **Great. Then let me go pull up the X-ray. As soon as labs are back, I will be here and we will talk again.**
- **Till then we will keep hydrating you, I will like you to drink as much water as you can.**

Closure: Assessment and Plan discussion (Contd...)

- **We will give you some by the vein too. I will also get some pain medications ordered. So you will have to ask for it whenever you feel the pain. I also think that you should be admitted.**
- *That is fine with me.*
- **Do you have any other questions or concerns at this time?**
- *No doc, I am all set.*
- **Great, I will see you later then Mr. Carson. You take care.**
- *Thank you doc.*
- **Shake hands and exit.**

SOAP Note

- A 26 years old African-American male, with known Sickle cell anemia since early childhood presents with acute onset chest pain. The pain is central and bilateral, 10/10 sharp when it started, and now dull aching 4-5/10 after 4 mg morphine in the ER. Patient reports the pain to be similar to previous sickling crises. He reports having consumed very little fluids since the day prior to admission. He denies fever, cold, cough, runny nose, smoking, exposure to 2nd hand smoke, pain elsewhere or painful erections. He denies being short of breath prior to onset of this pain.
- The pain is worsened with deep inspiration and movements and partly relieved with morphine and rest. He feels better since being brought to the hospital.
- He has had 3 such crises in past, 2 of which necessitated hospital admission. He reports history of SCA in father and half-brother. He is a construction worker. Denies smoking and illicit drug use and reports Etoh consumption 1-2 times a week.

Objective

- Young slim AA male, in some distress from pain, sweating, lying on his side, breathing over a nasal canula.
- **General:** Conjunctivae and mucosae are pale looking. Lips and skin are dry and parched. No cyanosis or icterus noted.
- **HEENT** : Sclera- no icterus, conjunctivae pale, mucus membranes pale and dry, skin turgor poor. No lymphadenopathy.
- **Chest:** Hyperpneic. Bi-basilar rales heard. Good air movement bilaterally.
- **CVS:** S1, S2, tachycardic, regular, no murmurs, rubs or gallops.
- **Abdomen:** soft, non tender , non distended. No organomegaly.
- **Extremities:** no cyanosis or edema noted. Good peripheral pulses in upper and lower extremities.

Assessment & Plan

➤ **Assessment:**

1. Acute sickling crisis
2. Rib fracture
3. Pleurisy
4. Pneumo thorax
5. Costochondritis

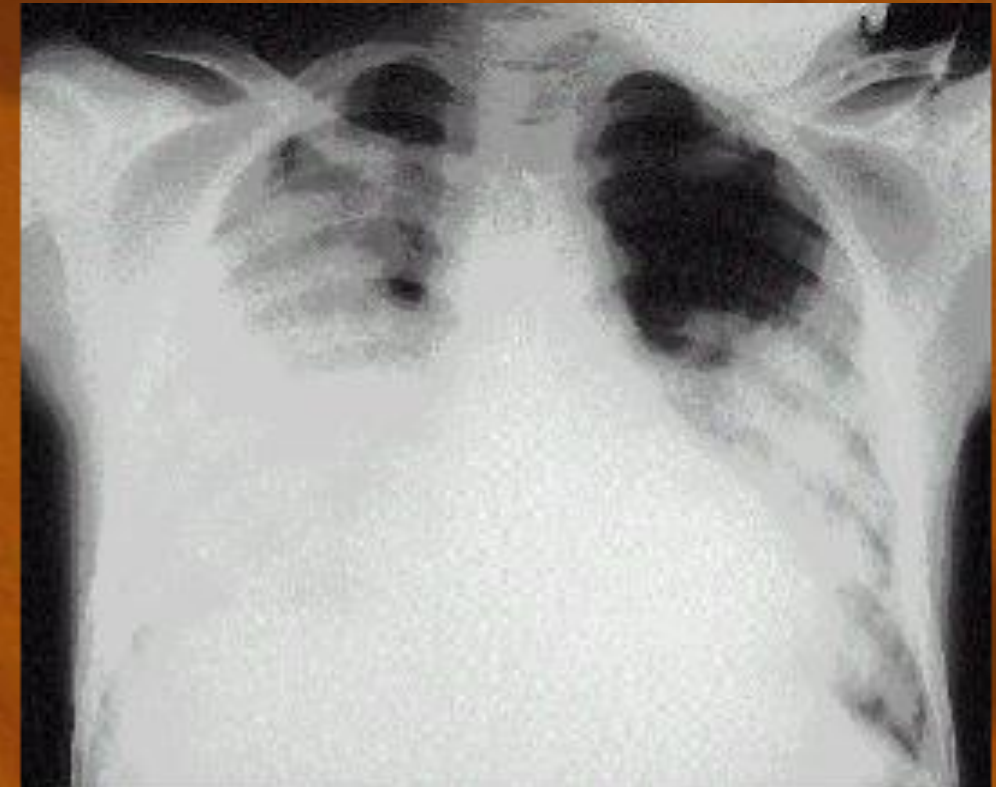
➤ **Plan:**

1. Admission to medicine Unit
2. Hydromorphone 1.5 mg IV every 3 hours and 2 mg s/c every 4 hours PRN, Continue Folic acid and Hydroxy Urea
3. Normal Saline IV 125 cc/hour
4. CBC with differential, CMP, Reticulocyte Count, Serum LDH
5. Chest X-ray PA-Lateral view, X-ray-Rib series
6. Follow up with Hematologist upon discharge

Check list: Specific points to this case

- Asked for precipitating and relieving factors.
- Asked complete history of Sickle cell, family history of SCA.
- Asked about current pain meds, dose, duration, efficacy.
- Asked about previous sickling episodes, hospitalizations.
- Asked about priapism events.
- Asked about symptoms of URTI, hypoxia such as smoking, 2nd hand smoke exposure, fever, infection as a precipitating factor.
- Did a good general exam including sclerae and conjunctivae.
- Checked for organomegaly during abdo exam.

Some images related to SCA





Happy Reading