# COMLEX Level 2 PE Exam

Melena

## **Patient Data Sheet:**

- Patient Name : James Barrett
- Clinical Settings: Emergency Room
- CC: A 46 year old male presents melena.

#### **Vital Signs:**

- Blood Pressure: 98/60 mm Hg
- Respirations: 12 per minute
- Temperature: 98.2 °F
- Pulse: 120 bpm, regular
- Height: 71 inches
- Weight: 151.8 lbs.
- **BMI**: 21.2 kg/m2

## **DD: Melena**

## I. <u>Upper GI bleed</u>

More common than LGIB, tho' Melena can occur even up to Rt colonic bleed:

- Erosive Esophagitis
- Variceal Bleed
- Mallory-Weiss Tear
- Gastritis
- Bleeding Peptic Ulcer
- Vascular Malformation

#### **DD: Melena**

## II. Medication induced blood loss

## III. Lower GI Bleed:

- Diverticular bleed
- Angiodysplasia
- Colitis

#### **DD: Melena**

## IV. Infective causes:

- Shigella
- Salmonella (rare)
- Campylobacter jejunii
- Giardiasis (rare)

# Key points to remember:

- Door information.
- Patient's age group: More likely to have Peptic ulcer, MW tear, Gastritis/ Esophagitis than Diverticular bleed or CA associated bleed.
- Remember to ask for detailed Etoh consumption history, variceal bleeds can present with massive melena.
- Look for signs of Etoh abuse and withdrawal, signs of hepatic failure.
- Patients may often lie about their drinking.

- Hi Mr. Barrett, my name is Dr. Lockman. I am a physician here in this hospital. I will take care of you today. What brings you to the hospital?
- Doctor I passed out in the bathroom.
- Oh I see. Could you tell me more about it?
- Yes doc, I had this large bowel movement, I felt dizzy after that, I tried to get up from the toilet seat but I slumped back down. My wife heard the noise and came and saw me passed out. She called 911 and they brought me here.

- I see. What was the color of the bowel movement?
- It was black, very greasy and it smelled.
- I see. Did you notice any blood in the beginning or on the tissue?
- No doc.
- How big was the movement would you say?
- It was a full pot, doctor. I had hard time flushing it, it stuck to the toilet.

- I see. So after you had the big bowel movement, you passed out
  ?
- Yes doc, I felt dizzy, I tried to catch hold of the wall and get up, but I felt so weak that I had to sit down again. Then I called for my wife and told her I needed help getting up from the seat. She tried but couldn't lift me. Then I slumped back and she told me I had passed out. She called 911 and they brought me here.

- Oh that must have been frightening. I hope you didn't hurt yourself anywhere when you slumped.
- No doc, I don't think so. Though my thighs still hurt but I don't think I broke any bones.
- Okay. Did your belly hurt at all before or after this?
- No doc.

- How have your bowels been lately?
- Doc I have a movement every day. I am not constipated. But yesterday my son bought this hot dog, it was sitting on the kitchen counter all night. I ate that for breakfast without warming it. Do you think I have some bug in my stomach that did this?
- Well it could be a bug, but until I ask you all relevant questions and examine you, I cant be sure.

- Okay doc.
- So you ate this hot dog, which had been lying outside for the night.
- · Yes doc.
- Did anyone else in your home eat such food from yesterday?
- No doc, he got only one hot dog for me.
- I see.

- Do you have any burning sensation in your belly or behind your chest after eating?
- No doc.
- Can you tolerate spicy foods?
- Yes doc, I can.
- Are you on any big doses of pain meds?
- · No doc.
- Are you on big doses of steroids?
- No doc.

- Okay Mr. Barrett. Lets go over your medical history, medication list, habits and family history.
- Sure doc.
- So what medical problems do you have ?
- Doc I have this liver thing. I don't know what they call it but its shrinking. And my belly is growing bigger, there's water in my belly.
   The last time I was here they took out some water. Then they put me on pills to keep the water away, but I am just as big.

- I see. So you seem to have cirrhosis.
- Yes that's the word I was looking for doctor, thank you. That's what I have. And the water in my belly.
- Yes, that is ascites.
- Yes, that one doc.
- How long ago was this diagnosed?
- Doc, it was last year. My belly just started swelling and my clothes wouldn't fit. Then I came in and they poked me and got some blood and then they said my liver was shrinking. And they kept me here for 3 days, pulled some water out of my belly and they put me on these bunch of meds.

- I see. Have you been hospitalized for ascites after that too?
- No doc, I take my pills, though I had had to come in to see a couple of docs after that.
- Okay. Do you have any other medical problems, Mr. Barrett?
- Yes I have blood pressure. And I have neuropathy for which I take Neurontin. And I have depression. I go to rehab for my drinking, the docs said my liver thing is because of the alcohol.

- I see. Yes alcohol is the biggest cause in liver diseases, especially cirrhosis which you seem to have.
- What medications are you on?
- I don't know the names, but I take 2 pills for this belly water, one of which also takes care of my blood pressure. Then I take 3 neurontins every day. And I take a pill for depression. You can call my wife she has everything written down neatly. She knows when I have to take which one. I couldn't work without her.

- Okay I will call her and get the full list when I am done seeing you.
- Are you allergic to any medication or other substance?
- Just penicillin. I had a rash once.
- I see. Have you been hospitalized in past apart from this ascites?
- Yes doc, once I had a bad accident after which I was in the hospital for 2 months. I had broken a lot of bones here and there and I had many surgeries.
- Oh I am sorry to hear that.
- Yeah doc, I was out of work for a year. A tractor trailer hit my car on the freeway.

- I am sorry. How long ago was that ?
- It was about 15 years ago. After that I never came to the hospital until last year when my belly started growing.
- I see. Have you had any surgeries apart from the ones you had when you met with the accident?
- Thank god, no!
- Yes thank god, indeed.
- Okay Mr. Barrett now let me ask you about your social habits.
- · Sure doc.

- Do you smoke ?
- Yes doc, about half a pack a day. I have cut down a lot. I smoked like a couple packs a day for many years. Then I started cutting down, cigarettes are not cheap now.
- I see. I would suggest that you try to quit completely. Apart from the costs, cigarettes affect your health in many ways.
- Yes doc, I know all that good stuff. I tried to quit 3 or 4 times but just took a puff. Gave into my temptations. But now I don't smoke that much.

- Sure, I understand its very difficult to stay quit. There are nicotine patches, gums and medications available to help you.
   We also have counselors to help you. We have a support group in the hospital, where you can make buddies and share your experiences.
- I know doc I have been to one such, I will definitely think if I want to quit in future.
- Okay, please do let me know in future, we will be glad to help you quit.
- Sure doc.

- You said you are in a drinking rehab program. How much did you drink?
- I drank about 2 or 3 glasses a day for years. Then last year docs said
  I had to quit. I tried but I couldn't. they put me in this rehab. At first I
  was hung over almost all days. Then I started cutting down. Now I m
  clean for 2 months.
- Congratulations. I am glad you have stayed clean for 2 months. I know it is difficult. I would encourage you to keep it up and keep yourself motivated and stay away from it. It will really help you.
- Sure doc.

- Do you use any recreational drugs Mr. Barrett?
- No doc, I don't use them.
- · Okay.
- What kind of work do you do?
- I am a handy man. I used to double up in a car factory but now I am getting old, I cant do two jobs.
- I see.
- Are you sexually active Mr. Barrett?
- Yes with my wife only.
- Do you use any kind of contraception ?
- We use condoms.

- Okay now let me ask you about your family's health.
- Does anyone in your family have medical problems?
- Yes doc, lots of them. My father had the same liver problem, later they said he had cancer and he died of it. He also had blood pressure, looks like he passed all of those things on to me. My mother has diabetes and she has these headaches I don't know from what.
- I am sorry to hear that Mr. Barrett. Some of it can certainly be genetic, or like you said passed on to children. A lot of things can be from our own lifestyle and habits too.
- Yeah doc I have been a bad kid. I knew wine did all this to my dad and I still drank.

- How has your bowel movements been ?
- Not too bad. I go every day.
- How about your bladder ?
- No problems with that doc.
- Any problems sleeping?
- No not really.
- Okay Mr. Barrett. I will now wash my hands and examine you.
   Then we will go over what are the possibilities and how to approach them.
- Sure doc.

# Objective:

- Wash your hands.
- Drape the patient.
- Do a good general and HEENT exam.
- Expose only the abdomen, preserve patients modesty while checking for fluid thrill, shifting dullness etc.
- Do a thorough Abdo exam.
- Look for signs of hepatic failure like distended veins, porto-systemic anastamoses, palmar erythema, gynecomastia, clubbing, subungual hemorrhages, ascites, icterus, peripheral edema.
- Elicit asterixis.
- Do not do a PR examination, it is not allowed in exam.
- Explains, offers and performs OMM if indicated.

# Closure: Assessment and Plan discussion:

- So, Mr. Barrett. Lets discuss what I think. See, there are a number of possibilities. The first one being you bled inside your GI tract, somewhere higher up like your food pipe or stomach, and that blood got mixed with your stools. Or you have been losing small amounts of blood over time and today you lost a bigger amount because some blood vessel bursted. And so you felt dizzy after losing this blood.
- All these are possible with your liver disease. So I have to consider this as number one possibility.

- Yes doc, they told me to watch out for blood in my stools or on the tissue. I never had it though.
- Good to hear that. But even blood mixed with stools is possible. Like a black sticky smelly bowel movement, which we call melena. When blood gets mixed with the stools, it gives the black color and the smell. So you could have had that.
- I see. But doc this is first time I had this black stool.
- · Okay.

- Another possibility is that there might be some bug, like you asked me. Because of the hot dog that you ate. So you might have a bug called Shigella, which is the commonest cause of bleeding in your gut. It can also give you diarrhea, which can explain why you had a big bowel movement.
- I would keep that as number 2 possibility.
- · Okay doc.

• There are many other causes of bleeding inside your GI tract, some small vessel bleeding, some other causes. But those cannot be found on examination like this. We need to take a scope with a camera at one end and go down your throat and up your rear end, to see if there is any bleeding point. Those are special tests called EGD and colonoscopy respectively. With those you can say for sure in most cases where the blood came from. Many times we are even able to stop the bleeder.

I see doc.

- I had the rear one last year when they diagnosed the liver thing. I
  have to have the EGD, but I haven't scheduled it.
- I see. I will look into your medical chart and see your colonoscopy results. I would also talk to the doctor who did your colonoscopy. If need be, he can do it again this time and we can schedule your EGD with him, while you are here.
- Sure doc, that would be great. Otherwise I keep forgetting.

- Okay, I will look into that.
- We need some blood tests and a stool test to confirm our diagnosis. We will need an EGD for sure, we may or may not need another colonoscopy. I would let the GI doc decide that.
- Sure doc, I have my GI doc right here in this hospital.
- Okay then I will let them know you are here, so they can stop by and see you and we can get working on the EGD.

- Sure doc. That would be great. I love dr. Cohen, it would be nice to see him.
- Sure I will touch bases with him.
- Doc will I need blood?
- You may, Mr. Barrett. Your BP is really low at this point, and your palms are all sweaty and your heart is racing. I will check first what your blood counts look like. For now, we are giving your fluids, but if need be you may need blood transfusion. We will let you know and it will be with your permission only. We need to admit you in the ICU for further treatment.
- Sure doc, if you have to give it, I wont stop you.
- Okay.

- So doc, how long do you think I will be in the hospital this time?
- Its hard to say Mr. Barrett. It really depends on how well you
  do tonight and what the GI doc thinks. You will be here for
  sure until tomorrow, because the till the GI doc sees you, we
  stabilize you a bit more and get you ready for the EGD it will
  be until tomorrow. After that we will see how you do and if you
  need anything else. We will keep discussing everything at
  every step.
- Sure doc, that would be great.

- Do you have any other questions or concerns at this time, Mr. Barrett?
- No doc, I think I am all set.
- Okay then, Mr. Barrett. Thank you. Take care for now. We will meet again when we have the labs back and I will go over the results and their meaning with you. We will also discuss the further plan. Does that sound right?
- Yes doc, thank you. Nice to see you.
- · Sure. You take care, I will see you again.
- Shake hands and leave.

## **Assessment and Plan:**

- Assessment:
- 1. Variceal bleeding
- 2. Bleeding PUD
- 3. Vascular malformation, Angiodysplasia
- 4. Shigellosis
- Plan:
- 1. Admit to ICU, IV hydration, Blood transfusion
- 2. Pantoprazole 80 mg IV bolus and 8 mg/hr iv drip, hold BP meds
- 3. CBC with differential, H&H q 6 hrs initially, CMP, PT, INR, aPTT, X-ray KUB (for free air)
- 4. Consult Gastroenterologist and EGD
- 5. Smoking cessation
- 6. Counseling and education of patient

