

COMLEX Level 2 PE Exam

A 32 years old lady came to clinic with pain in her right heel.



Patient Data Sheet

- **Patient Name:** Ms. Murray
- **Clinical Settings:** Medicine Office
- **CC:** A 32 years old female presents with pain in her right heel.

Vital Signs:

- **Blood pressure :** 112/68 mm Hg
- **Respirations :** 14 per minute
- **Temperature :** 99.0 °F
- **Pulse :** 72 bpm
- **Height :** 66 inches
- **Weight :** 143 lbs.
- **BMI :** 23.1 kg/m²



Differential Diagnosis: What is going in your mind as you enter the room to see the patient?

- Heel pain is a symptomatic "working diagnosis". There may be a number of etiologies responsible for it.

FOOT PAINS :

- Fat atrophy / Foreign body
- Osteoarthritis (rare cause)
- Osteoporosis (rare cause)
- Trauma
- Plantar fasciitis (most common cause)
- Arthritides like RA, Reactive arthritis, etc. (rare causes).



Contd...

DD: What is going in your mind as you enter the room to see the patient? (Contd...)

- Ischemia (Peripheral vascular disease).
- Nerve entrapment / Morton's disease / Tarsal tunnel syndrome.
- Sprain, Strain, Stress #, Spur (calcaneal).



Key information

- Patient's name.
- Chief complaint.
- Age and occupation in this case (more common in ballerinas, secretaries who wear high heeled shoes, atheletes, aerobics instructors or sports women).
- Mnemonic for heel pain.
- Good local exam is necessary.
- Cursory general exam must also be done.



Opening Scenario

- A pleasant , extremely well dressed young female sitting up on the examination table. Not in any obvious distress.
- She is wearing sneakers below her formal work wear.



Subjective

- **Hello Ms. Murray. My name is Dr. Gomes. How are you today?**
- Hi doc. I am doing ok. You can call me Holly.
- **Ok Holly. What brings you to the hospital today ?**
- This foot pain doc. My right foot hurts like hell. I cant wear my regular work shoes, I had had to wear sneakers to work can you imagine that ?
- **I am sorry to hear that Holly. How long has this been going on ?**
- About couple of weeks, doc. I tried to ignore it but now its keeping me awake at night.



Subjective (Contd...)

- **I am sorry to hear that Holly. Let me ask you a few questions and then I will examine you. Then we will talk about what I think is going on.**
- Ok doc.
- **So Holly, can you show me the exact area of pain?**
- Right here doc (points to the longitudinal arch of the right foot)
- **I see. Does your left foot hurt too ?**
- Not really. Well I guess sometimes, but its the right that bothers me more.
- **How bad is the pain Holly, on a scale of 1 to 10, with 10 being the max?**
- About a 5 or 6 most days, doc.



Subjective (Contd...)

- **Does the pain stay in one area or does it move ?**
- No it doesn't move.
- **Where does it start ?**
- Its just the foot doc. Starts kinda in the middle of my foot on the inner side and then moves to the outer. but just the middle of the foot.
- **Is there anything particular that brings about the pain?**
- No doc its almost always there



Subjective (Contd...)

- **Does anything make it worse ?**
- I guess standing does. And so do wedges and pencil heels. That's why I had to wear sneakers doc.
- **I see. Is there anything that takes the pain off ?**
- Well couple of tylenols do take the edge off, but its still there doc.
- **I see. Did you recently injure yourself in that area Holly?**
- No doc.



Subjective (Contd...)

- **Have you had such pains before ?**
- No doc. I have done just fine with high heeled shoes too.
- **Do you have aches and pains anywhere else in your body?**
- No doc.
- **Does any part of your body feel stiff when you wake up and it takes time to become flexible?**
- Not really.



Subjective (Contd...)

- **Have you recently lost a lot of weight ?**
- Well I would hope I did but I haven't.
- **Since you are a secretary, I assume your job involves lot of standing, being on your feet, walking. Is that right ?**
- Yes doc, its right. I have to be on my toes, quite literally all day.
- **Have you recently been involved in any vigorous exercise or physical training ?**
- No doc. I work out regularly but I don't run marathons or anything.
- **Do you feel your bath water same with both your feet ?**
- I guess.



Subjective (Contd...)

- **Have you ever felt one foot was colder or warmer than the other?**
- No doc.
- **Are you always able to feel your shoes under your feet ?**
- Yes.
- **Have you ever bumped your foot and not felt the pain?**
- No doc.
- **Have you ever cut your nails too deep and not felt the pain?**
- No, I can feel everything normally with my feet.



Pam Hugs Foss

- **Ok Holly lets go over your medical problems, medications and other history.**
- Sure doc.
- **Do you have any medical problems ?**
- None that I know of doc.
- **Do you take any medications ?**
- I take a tylenol occasionally for headache or backache. Some vitamin supplements, cod liver oil. That is it.
- **Have you been taking anything for this pain ?**
- A couple of tylenols. I tried motrin the other day, it seemed to work better, but all of that just takes the edge off. I still feel an ache.

Contd...



Pam Hugs Foss (Contd...)

- **I see. Are you allergic to any substance or medicine Holly?**
- **None.**
- **Have you been hospitalized in the past ?**
- **Only when I had my 3 yrs old son, doc.**
- **Did you have any surgeries in the past ?**
- **No, my delivery was a normal one.**



Pam Hugs Foss (Contd...)

- **Have you ever sprained your ankle or hurt your foot ?**
- I must have stubbed my toe into the table like everyone does sometimes I guess, but nothing major.



Pam Hugs Foss (Contd...)

- **Are there any medical problems in your family ?**
- My mom is an asthmatic and my dad had a heart attack last year.
- **Any history of rheumatoid or other arthritis in the family?**
- None that I am aware of doctor.
- **How have your bowel movements been ?**
- Pretty ok.
- **Any problems peeing at all?**
- No doc.



Pam Hugs Foss (Contd...)

- **Great. I have to ask you a few details about your menstrual and sexual history. This will be confidential. Is that ok ?**
- Go ahead doc.
- **Are your periods regular?**
- Yes. I get them every 28-30 days.
- **How long does each period last ?**
- 3 to 4 days.
- **How is the flow ?**
- Its the max on day 2 and 3 and lesser on the first and last day.



Pam Hugs Foss (Contd...)

- **Ok. Any other problems during your periods ? Like pain in the lower tummy ?**
- No doc. never had any such thing.
- **Are you sexually active right now ?**
- Yes, only with my husband.
- **Do you use contraception ?**
- We use protection doc.
- **That's good for you. And is your son your only child so far?**
- Yes doc, only one so far.
- **I would like to ask about your habits now.**
- Ok.



Pam Hugs Foss (Contd...)

- **Do you smoke Holly ?**
- I used to but I left when i conceived my son.
- **That is good. how long ago did you quit?**
- About 4 yrs now.
- **And how long did you smoke for before that ?**
- I would say about 10 years, but it was only like a couple to three cigarettes a day.
- **That is very good that you quit. I am sure it must not have been easy, but you did a good job. Keep it up.**
- Thanks doc.



Pam Hugs Foss (Contd...)

- **Do you drink alcohol ?**
- Only when I have to, like in office parties. Not at home, doc.
- **Ok. Do you do any drugs at all Holly ?**
- No doc what are you talking about ?
- **I am sorry, please don't be upset, it is a part of routine to ask this to everyone, just so we know.**
- Ok doc.
- **Ok Holly I am done interviewing you. I would now like to examine your foot. Then we will go over my impression and the plan.**
- Ok doc.



Physical Examination

- Examine both feet first.
- Look for any deformities of the foot like hallux varus or valgus.
- Any corns (tight ill fitted shoes), any spurs on the plantar surface, any thickening of nerves in foot, lower side of leg.
- Look for any signs of ischemia such as cold, blue feet, absent or feeble pulses, shiny feet, loss of hair (this may not be as obvious in a young female because they shave or wax), loss of sensation.
- Check for vibratory sense with a reflex hammer. Loss of it is an early sign of neuropathy, esp. secondary to metabolic cause.



Physical Examination (Contd...)

- Check for monofilament sensation. (May not be able to check for temperature in exam) Check for pressure and pain sensation.
- Check range of motion and compare both feet. Check for gait. check for toe and heel gait.
- finally check for reflexes.
- Do a quick auscultation of heart and lungs. Do a quick general exam too.
- Explains, offers and performs OMM if indicated.



Osteopathic Musculoskeletal Examination

- **Inspection:** Any skin changes, swelling.
- **Range of Motions:** Active range of motions of bilateral involved joint and passive range of motions if limitation to active range of motion detected.
- **Palpation:**
 - i. Any tenderness, tissue texture changes.
 - ii. Chapman points, viscerosomatic reflexes.
 - iii. Somatic dysfunction.



Closure: Assessment and Plan discussion

- **Okay Holly. Great. Thank you for your cooperation. I am done seeing you. You can put your socks and shoes back. And lets go over what I think.**
- **See Holly, at this point I have a few possibilities in mind.**
- **Because of your work and probably because of the kind of shoes you wear, you might be tiring your feet. They don't get enough support and rub against ill fitted shoes. That creates a little swelling in the soft tissues of your heel, something we call plantar fasciitis , that's why they hurt. This is the most common cause, in a lady of your age.**



- **I see.**

Contd...

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

- **But, I would also like to be sure that there is no injury which we are missing. If there is some small hair line fracture, or injury to soft tissue, we want to treat that. Because otherwise it will only get worse.**
- **Right doc, that makes sense.**
- **From your exam, I don't feel you might have any other reason behind the pain. You are an otherwise healthy young person, with clean habits.**



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

- **You are not overweight, you don't have a particular family history which might contribute to your problem. So arthritis would not seem to be a likely cause in your case Holly.**
- I would think so too doc.



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

- **I would like to run a couple of basic blood tests and I would like to see an X-ray of your foot, just to be sure we are not missing anything subtle. Do you agree ?**
- **Whatever you say doc. I am ready.**
- **Good. For now I will start you on pain medications, such as Ibuprofen, to help you. Once I see the tests and X-ray, I will be more reassured it is not something else.**
- **Great. I really want something to take care of this pain doc.**
- **Sure Holly, we will get you something for the pain.**



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

- **Meanwhile, Holly, my advice would be to avoid wearing heels. I know it is painful, and most dress shoes have a bit of heels. May be you could try danskos or more comfortable shoes, something well padded. Something that supports your feet better.**
- **You can also try to prop your feet up on a little support under your table when you can, at work. You could prop them up at home. You could use warm soaks to keep the pain away. All that helps.**
- Thanks doc, I have been doing some of that. I will make sure my feet get enough rest.



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

- **Do you need any kind of letter for your job?**
- Yes doc, I think that will help me to get some rest.
- **Definitely, I will write it for you.**
- Thank you.
- **I would also like to see you after a week to see how you are doing.**
- Sure, doc.



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

- **Is there any other question I can answer for you at this time?**
- Doc would it help to get one of those splints or something like a bandage from a pharmacy ?
- **That would definitely help Holly. You can wear them at night, so your feet get support at night and the swelling doesn't stretch it. They would hurt less and wont disturb your sleep. So it is a good idea.**
- Good doc, I think I am all set now.
- **Great, it was nice to meet you Holly. Take care. Bye now.**
- Bye doc.



SOAP Note

- A 32 year old G1P1A0L1 White female presents with a 2 week history of pain in her right mid and fore foot. The pain is localized to this region and is present through out the day. It gets worse on standing and wearing heeled shoes. Tylenol, rest and supportive measures offer some relief. Patient has had to wear sneakers to work as her pain just wouldn't go away.
- She denies any recent trauma, vigorous physical activity, loss of sensation/temperature. Denies pain or stiffness in any other part of the body. No other significant medical or family history. Takes occasional tylenols, daily vitamins supplement and cod liver oil. Past smoker, quit 4 yrs ago.
- **Physical examination:** As per your findings.



Assessment and Plan:

- **Assessment:**

1. Plantar fasciitis
2. Sprain
3. Bony spur (calcaneal)
4. Fat atrophy
5. Stress fracture / hair line fracture

- **Plan:**

1. Ibuprofen 600 mg three times a day PRN.
2. OMM: explains and performs.
3. CBC with differential, BMP,ESR,ANA, RF and CRP.
4. X-ray foot- 3 views- AP, lateral and oblique- both sides.
5. Advised on stretching exercises and a letter to employer.
6. Follow up after a week.





Happy Reading

