

A 30 years old male came to clinic with c/o ankle pain

Patient Data Sheet

- Patient Name: Mr. Kalra
- Clinical Settings: Medicine Office
- CC: A 30 years old male presents with pain in his left ankle.

▶Vital Signs:

- Blood Pressure: 118/68 mm Hg
- Respirations: 12 per minute
- Temperature: 98.4 °F
- **Pulse** : 68 bpm
- Height: 69 inches
- **Weight** : 154 lbs.
- **BMI** : 22.7 kg/m2

Differential Diagnosis

Orthopedic causes

- Ankle sprain
- Fracture

Medical causes

- Chronic gouty arthritis
- Pseudogout
- Osteoarthritis
- Rheumatoid arthritis
- Septic arthritis

Key points to remember

- Door information.
- Differential diagnoses.
- Medical causes of ankle pain, esp. chronic gouty arthritis must be kept in mind.
- Ankle is a frequent site for secondary osteoarthritis. Previous history of fracture, injury to ankle must be elicited.

Subjective

- Good morning Mr. Kalra, my name is Dr. Jones. I am a physician in this hospital. I will take care of you today. What brings you to my office this morning?
- Hello doctor. My left ankle hurts for 3 days now. Its becoming hard for me to walk. I had to take a day off from work.
- I see. You must really be in lot of pain. I would like to know more about it.

Contd...

• Doc, this just started 3 days ago. My ankle felt stiff. I have an implant in that ankle, I had an injury on the football ground in college. They had to fix it. So it usually gets stiff, in winters specially. I thought it must be the same, so I applied some hot pads, did some exercise. The first day I ignored it. Next day it still hurt. I popped 3 Tylenols. Didn't help. Then it was so bad I woke up in pain this morning. I took the day off and came in.



- That is truly a lot of pain. Thank you for the detailed history Mr. Kalra. Let me ask you few more questions.
- · How bad would you say is the pain?
- It was a 3 or 4 when it started 3 days ago. Today its about a 7. Tylenols don't do much.
- I see. So its gotten worse then?
- · Yes doc, it has.

- What makes it worse?
- Walking, standing. I can barely stand on this foot since this morning.
- Oh that's a lot of pain. I am sorry to hear that.
- Yes doc it is.
- Does it move anywhere or just the left ankle?
- Its just the ankle doc.

- Do any other joints also hurt?
- My left big toe also hurts.
- I see. Did it also start the same time?
- Well its been sore since yesterday, this morning it was worse.
- I see. What would you say brings about the pain?
- I don't know doctor.

- Okay. Do you have a fever?
- I feel a bit warm but I haven't recorded my temperature.
- I see. Do you have any body soreness?
- No doc.
- Any belly pain ?
- No.

PAM HUGS FOSS

- Okay. Lets go over your medical history, medication list and habits.
- Sure doc.
- Do you have any medical problems that you are aware of ?
- Just mild asthma doc, gets worse with exercise. I have to use the inhaler only in winters.
- I see. Do you take any other medications apart from that ? Including over the counters and herbals ?
- No doc.

Contd...

- Okay great. Are you allergic to any medication or other substance?
- Not really.
- Have you been hospitalized in the past?
- Only when I broke my ankle about 10 yrs back.
- I see. What kind of surgery did you have then?
- They fixed the fracture, had to put some implants to hold it in place.

- I see. Have you had any other surgeries?
- *No.*
- You said your ankle hurts every winter since?
- Well as winter comes, it gets a little stiff. Sometimes it hurts. But its never this bad. I can take a Tylenol and forget about it
- I see. So, does this feel different?.
- Yes, absolutely. Its much worse, the pain is different.

- Okay. Lets talk about your social habits now.
- Do you smoke?
- *No.*
- Do you drink alcohol?
- Only socially.
- · When was the last time you drank?
- 4 days ago, with my friends. We were having a party on the weekend. I had a bit too much. Do you think that could cause it?

- It might. But lets get done with seeing you first, then we'll talk about what possibilities are there.
- Sure doc.
- Do you use recreational drugs?
- *No.*
- Any trouble with your bowels?
- *No.*
- How about your bladder?
- Its fine.

- Great. Do you know of any medical problems in your family?
- My father is hypertensive. My mother has diabetes. Other than that none.
- I see. What work do you do, Mr. Kalra?
- I am a rep for a drug company. I have to go to clinics to sell our products every day.
- I see. No wonder you know so well about your medical issues?
- · Yes doc. I am into health care, you can say.
- Great. Let me wash my hands and see you now.

Physical Examination

- Wash your hands.
- Drape the patient.
- Do a good general and HEENT exam. Look for tophi in ear and nasal cartilage, finger pulps.
- Examine the left ankle for swelling, redness, warmth, range of movements, tenderness, effusion. Compare it with Rt. ankle. Check peripheral pulses and sensation.
- 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

- Thank you for your cooperation, Mr. Kalra. Lets talk about what possibilities I am considering now.
- Sure doc.
- So the first possibility in your case is arthritis, secondary arthritis that is. Since you had a fracture there, which has of course, healed now, its prone to early arthritic changes.

Contd...

- What you described happening every winter is a sign of that. So that would be the first thing even I would think of. And you were right in thinking that when it started. I would still consider it high on my list.
- Sure doc. What else?
- Yes, what else? Since you said its worse and the character of pain is different, it could be something else.

- I am considering gout. It is a condition where urate crystals get deposited in your joint. The body tries to get rid of this, and there are white blood cells which come to that area. This develops swelling, like in any inflammation. One of the features is pain. Most commonly it affects the big toe. Sometimes other joints of foot too.
- You said you drank a bit too much before this started. That is very common with gout attacks.

- So it can be gout? But I don't have family history of gout.
- I understand. But it still could be gout. We need to find out if it really is.
- I see. So what else could it be?
- Well it could be something else, like a sprain. May be one of the ligaments inside your ankle tore. And that's why raw nerve ends are getting irritated and it hurts.

- I see. What else doc?
- I would also consider pseudogout, which behaves like gout. But the type of crystals are different.
- I see. What else?
- I would also consider septic arthritis, that is some kind of infection going on in your ankle. Since its warm and tender and you also felt warm.

- I see. So doc how would you find out what it is ? Any tests?
- Yes, we are getting there. I would like to run a couple of basic blood tests.
- I would also like you to get an X-ray of your ankle, to be sure you didn't break anything again or snipped one of the ligaments.
- I see. What about gout and other things that you said.

• Well for that, I would need to draw some fluid from your joint space. There's some lubricating fluid, we call it synovial fluid. It helps to keep the joint surfaces gliding smoothly. We can draw a small amount by poking a needle, under local anesthesia, of course. We can then examine that fluid under the microscope and find out what crystals or cells it shows. That would tell us if you have gout, pseudogout or anything of the sort.

- I see. How long does that take, doc?
- The synovial fluid aspiration, as a procedure doesn't take more than half an hour. We will inject the area with local anesthetic, then draw the fluid. We wont make your pain worse, be sure of that.
- Thank you doc. Will I get anything for the pain, meanwhile?
- Sure, I will give you some pain meds. We will also give you an ace wrap.

- Great.
- We will let you keep your ankle elevated and rested.
- Sure doc. Can I take time off from work?
- Sure, I can call your employer if you need.
- That would be great doc.
- Is there any thing else you want me to answer at this point?
- No doc I am all set.
- I will see you again in three days to see how you are doing.
- Thank you doctor.

Assessment and Plan

> Assessment:

- 1. Secondary osteoarthritis
- 2. Orthopedic injury e.g. fracture, sprain
- 3. Gout
- 4. Pseudogout
- 5. Septic arthritis

▶ Plan:

- 1. Ibuprofen 400 mg three times daily, RICE (Rest, Ice, Compression and Elevation)
- 2. Performs OMM if indicated (no HVLA)
- 3. CBC with differential, CMP, X-ray Lt. ankle- AP and lateral Views
- 4. Synovial fluid for microscopy and cells, Culture and Sensitivity
- 5. Alcohol Drinking modification
- 6. Follow up after 3 days

Happy Reading