Anannya Dey
York College – Physician Assistant Program
Family Medicine H&P # 1

Chief complaint: **"**LT knee hurts" x 2 months

HPI:

56 y/o female with a past medical history of HLD and HTN complaining of left knee pain for the past 2 months. The patient states she experienced a sudden onset of pain when she was going up the stairs at work one day. The pain has gotten worse since it started 2 months ago. Describes the pain as aching, constant when walking, located on the sides of her knee and a 6/10. She relies on a cane for walking and has difficulty climbing stairs. Pain becomes better with rest. The patient reports that she works at the airport as an aircraft cleaner and that it requires a lot of walking. She started this job a year ago and states that she had never worked outside the home before that. The pain has prevented her from working since it began. She has visited the emergency room twice in the past two months due to not having a primary care provider. She was advised to take Ibuprofen, but reports that it has not alleviated her pain. Currently not taking any medication. Reports using a flexible knee brace with some relief. Denies experiencing fever, knee swelling, twisting of knee, recent trauma, shortness of breath, or chest pain.

Past medical history:
Hypertension
Hyperlipidemia

Medications:
Amplodipine Besylate 5mg oral once a day for hypertension
Hyzaar (combined Losartan /Hydrochlorothiazide) 50-12.5 mg oral dose once a day for hypertension
Omega 3 fish oil 1000 mg 1 tablet every 12 hours

Allergies:
No known drug allergies

Surgical history:
RT wrist surgery due to ligament sprain, in Guyana (2020), no complications
B/L salpingectomy for unknown reason, in Guyana (about 10 years ago), no complications

Immunizations:
Requires shingrix vaccine

Family history:
Mother deceased at 56, history of HTN
Father deceased at 72, history of HTN
2 sons, no significant past medical history
No known history of cancer in the family

OB/GYN history:
G4 (2022)
Menopause at 52,
Never had a pap smear done

Social History:

Pt recently moved from Guyana to the U.S. one year ago. She is employed as an aircraft cleaner. She lives at home with her husband and 2 sons. Pt does not smoke, drink or do any illicit drugs. Since the last 2 months, the patient has not exercised due to the pain in her knee. Currently sexually active, does not use any contraceptives.

Review of systems:
General – Denies fever, fatigue, recent weight loss or gain and loss of appetite
Skin, hair and nails – Denies changes in texture, excessive dryness or sweating, pruritus, or changes in hair distribution.
Head – Denies headache, head trauma, dizziness and vertigo.
Eyes – Denies blurring, lacrimation and pruritus.
Ears – Denies deafness, pain, discharge or use of hearing aids.
Nose/Sinuses – Denies congestion, obstruction or bleeding.
Mouth and throat – Denies sore throat, voice changes and use of dentures.
Neck – Denies localized swelling/lumps or stiffness/decreased range of motion. Denies decreased range of motion
Pulmonary System – Denies cough, dyspnea and wheezing
Cardiovascular System – Denies chest pain, palpitations, syncope, feet or ankle edema and known heart murmur.
Gastrointestinal System – Denies loss of appetite, abdominal pain, constipation, diarrhea, nausea and vomiting
Genitourinary System – Denies urinary frequency, urgency and dysuria
Musculoskeletal System – **(+) Pain in LT knee.** Denies trauma, bleeding, deformities or swelling.

PE:
Vitals:
BP: 155/94

R: 18/min, unlabored
P: 83 beats/min, regular
T: 98.1 degrees F (oral)
O2 Sat: 97% Room Air
Weight: 166 lbs.
Height: 62 inches
BMI: 30.4

Physical:
General: Pt is sitting in a chair. Appears mildly uncomfortable but not in acute distress. Dressed appropriately and well groomed.
Cardiovascular: Regular rate and rhythm (RRR). S1 and S2 are distinct, no murmurs, S3 or S4.
Lung: Breath sounds are clear bilaterally, no wheezing, rhonchi or rales. Chest expansion and diaphragmatic expansion are symmetrical.
Extremities:
LT knee: Active range of movement restricted with flexion and extension of knee. Crepitus noted with passive range of motion. Tenderness at the medial and lateral joint line and superior pole of patella. Positive apley's compression test. Pt unable to squat due to pain. 2+ popliteal, posterior tibial and dorsalis pedis pulses. No swelling, bleeding, obvious deformity, varicose veins, muscle atrophy or edema.
RT leg: ROM normal. 2+ popliteal, posterior tibial and dorsalis pedis pulses. No swelling, varicose veins, obvious deformities, muscle atrophy or edema.
Neuro: Alert and oriented x3. Pleasant and cooperative.

Differential diagnosis:

- **Meniscal tear:** Pt reported sudden onset of knee pain while going up the stairs which may mean she tore her meniscus. The pain is aching and constant and located in the side of the knee where the meniscus is located. When it comes to the PE, there is tenderness along the medial and lateral joint line and restricted range of motion. This restriction can be due to a torn meniscus obstructing the joint movement or causing pain during movement. Positive apley's compression test indicated a meniscus tear as well. Pain can increase with squatting. Although a meniscus tear typically occurs due to a twisting motion, in older patients, the cartilage can weaken and thin over time and become more susceptible to tearing. We would order an MRI to confirm the diagnosis and assess the extent of the tear.
- **Ligament injury:** A ligament injury can be caused by a sudden twisting motion when the feet stay in one direction while the knees turn in the opposite direction. This type of injury is usually seen in people who play sports and is less common in older patients. Although ligament injuries of the knee can have similar symptoms to a meniscus tear,

there are some differences. Ligament injuries are generally more severe, causing a feeling of looseness in the joint, inability to put weight on the joint and knee swelling, However, this patient can put some weight on the knee. An MRI can be done to check for ligament injury.

- **Osteoarthritis:** The patient's age and occupation are risk factors. Working at the airport involves significant walking and physical activity, which can contribute to wear and tear on the knee joint over time. She also experiences aching pain that is constant when walking. Osteoarthritis typically causes chronic, aching pain that worsens with activity and improves with rest. Her active range of motion is limited in both flexion and extension. It often leads to stiffness and reduced range of motion due to joint degeneration. Additionally, crepitus is seen in osteoarthritis due to rough cartilage surfaces rubbing against each other.
  Main rule out: Osteoarthritis typically develops gradually over time and does not usually present with a sudden onset of pain. We can order an x-ray to confirm osteoarthritis, with presence of joint space narrowing and osteophytes.
- **Patellofemoral pain syndrome:** This condition can cause a dull, aching pain in the front of the knee when walking up or down stairs. Tenderness above the patella and difficulty squatting can indicate patellofemoral pain syndrome. However, patellofemoral pain syndrome is typically seen in teens and young adults. Tenderness at the medial and lateral joint lines, along with a positive Apley's compression test is more indicative of a meniscal injury. This condition normally does not require imaging and can be diagnosed clinically.
- **Bursitis:** This can also cause knee pain and tenderness due to irritation and friction of the bursae, but it is usually caused by frequent kneeling on hard surfaces. Also, the symptoms tend to develop gradually and worsen over time. This condition is low on the differential diagnosis list because we would expect to see swelling, edema, and warmth in the knee. Additionally, the patient does not engage in activities that typically lead to this condition.

Assessment:

56 y/o female with a past medical history of hyperlipidemia and hypertension complaining of left knee pain for the past 2 months. The pain began suddenly while climbing stairs at work, worsened with walking and squatting and was not relieved by Ibuprofen. Vitals unremarkable. Physical exam reveals restricted range of active and passive movement, tenderness at the medial and lateral joint line and superior pole of patella and positive apley's compression test. Consistent with possible meniscus tear.

Plan:

- **Diagnosis: Pain of LT knee**
    - Schedule MRI of LT knee to check for meniscus tear

    - Diclofenac sodium 50 mg tablet delayed release 1 tablet oral every 12 hours
    - Lidocaine 5% external cream, apply 3 times a day
    - Continue using knee brace and keep weight off knee
- **Routine blood work:** CBC, Hemoglobin A1c, urinalysis, microalbumin, thyroid panel, lipid screen, CMP and vitamin D level
- **Dietary counseling:**
    - Patient advanced to avoid foods with high saturated fat, sugary foods and food with added sodium
    - Advised to try whole grain food more often
    - Advised to do 30 mins of exercise a day