

Case 4:

Background: Michael is a 50-year-old male who works as a high school physical education teacher. He maintains an active lifestyle, regularly participating in various sports with his students and jogging three times a week. Michael is married with one adult child and lives in a suburban house.

Suffering: Michael's primary complaint is right knee pain, which has been gradually worsening over the past year. He rates the pain as 5/10 on the Numeric Rating Scale (NRS) during daily activities, increasing to 8/10 during and after sports activities. The pain is localized to the medial aspect of his right knee.

Reports: Michael reports difficulty squatting, kneeling, and climbing stairs. He experiences increased pain and swelling after prolonged standing or participating in impact sports. The pain has begun to affect his ability to demonstrate exercises to his students and has forced him to reduce his jogging frequency.

Report Details: The pain is described as a dull ache that becomes sharp with certain movements, particularly pivoting or changing direction quickly. Michael notes that the pain worsens with impact activities, prolonged standing, and at the end of the day. He finds some relief through rest, ice application, and over-the-counter anti-inflammatory medication. Michael mentions occasional "clicking" sensations in his knee and feelings of instability.

Historical Data: Michael has a history of a right ankle sprain from his college basketball days, which healed without complications. He underwent arthroscopic surgery on his left knee for a meniscal tear 10 years ago, with good recovery. Michael has mild hypertension controlled with medication. He is a non-smoker and drinks alcohol occasionally.

Correct Approach: A comprehensive assessment should begin with a detailed subjective examination, followed by an objective examination. This should include knee and hip range of motion testing, strength testing of the lower extremity muscles, and special tests for meniscal and ligamentous pathologies. The physiotherapist should perform palpation of the knee joint and surrounding structures, conduct a gait analysis, and carry out functional movement screening. Assessment of the lumbar spine and hip should also be included to rule out referred pain.

Diagnosis: The primary diagnosis based on the presented information is likely osteoarthritis of the right knee, particularly affecting the medial compartment. Secondary diagnoses to consider include medial meniscus degeneration and patellofemoral pain syndrome. These diagnoses would need to be confirmed through the physical examination and possibly imaging studies if deemed necessary.