



SNS COLLEGE OF PHYSIOTHERAPY

Affiliated by the Tamil Nadu Dr. M. G. R. Medical University, Chennai.
Saravanampatti Post, Coimbatore – 641 035, T.N

Orthopaedics Case-Based Scenarios for BPT Students

Unit 1: Introduction to Orthopaedics

A. Introduction to Orthopaedics

1. Orthopedic Terminology

A 25-year-old male patient arrives at the physiotherapy clinic with a referral note stating "post-traumatic elbow stiffness." Priya, a third-year BPT student, must interpret the orthopedic terminology to assess the condition accurately. The patient reports limited elbow movement after a fall six weeks ago. Priya is unsure whether "stiffness" implies a contracture, adhesion, or another issue, and she must decide how to proceed with the assessment.

Challenge: How should Priya clarify the terminology and structure her initial assessment?

Possible Solutions:

1. Review the referral note and medical records for specific terms (e.g., contracture, ankylosis) and confirm with the referring physician.
2. Conduct a focused history-taking session to identify the injury mechanism and symptoms, correlating with terminology.



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3. Perform a physical examination to assess range of motion (ROM) and document findings using precise orthopedic terms.
4. Consult the supervising physiotherapist to clarify terminology and ensure accurate documentation.

2. Clinical Examination

During a clinical rotation, Priya is tasked with examining a 40-year-old female with shoulder pain. The patient describes pain during overhead activities. Priya must choose an appropriate clinical examination protocol to differentiate between rotator cuff injury, impingement, or another condition.

Challenge: Which clinical tests should Priya prioritize to identify the cause of shoulder pain?

Possible Solutions:

1. Perform Neer's and Hawkins-Kennedy tests to assess for impingement syndrome.
2. Conduct the empty can test and external rotation strength test to evaluate rotator cuff integrity.
3. Assess active and passive ROM to identify restrictions or pain triggers.
4. Use a combination of tests and refer to imaging if findings are inconclusive.

3. Common Investigations

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A 30-year-old male presents with knee pain after a sports injury. Priya is asked to recommend investigations to guide the diagnosis. The patient has swelling and limited ROM, but Priya is unsure whether to suggest X-ray, MRI, or ultrasound.

Challenge: Which investigation should Priya recommend to the supervising physician?

Possible Solutions:

1. Recommend an X-ray to rule out fractures or bony abnormalities.
2. Suggest an MRI to assess soft tissue structures like ligaments or menisci.
3. Propose an ultrasound to evaluate swelling or effusion in the knee.
4. Discuss with the supervisor to prioritize based on clinical findings.

4. Principles of Management

A 50-year-old patient with chronic ankle sprain is referred for physiotherapy. Priya must decide whether to focus on conservative management or escalate to a surgical consultation, given the patient's recurrent instability.

Challenge: How should Priya approach the management plan?

Possible Solutions:



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1. Initiate conservative management with strengthening and proprioception exercises.
2. Recommend a brace and monitor progress over 4 weeks.
3. Refer to an orthopedic surgeon for evaluation of surgical options.
4. Combine conservative therapy with a referral for imaging to assess ligament damage.