# Learning Objectives:

#### **Cognitive Domain:**

✓ Done

- 1. Analyze: Identify and interpret the clinical signs of <u>clubbing</u> and their possible causes.
- 2. **Evaluate:** Correlate the findings of finger <u>clubbing</u> with underlying systemic diseases such as cardiopulmonary or gastrointestinal disorders.
- 3. Synthesize: Formulate a differential diagnosis based on the presence of <u>clubbing</u> and associated clinical features.

#### **Psychomotor Domain:**

- 1. Examine: Perform a detailed physical examination to detect and grade the severity of finger clubbing.
- 2. **Detect:** Recognize the presence of other clinical signs that might point towards the underlying pathology (e.g., cyanosis, respiratory signs, abdominal examination).

#### Affective Domain:

- 1. **Respond:** Approach the patient with empathy, ensure their comfort during the examination, and explain the steps in layman's terms.
- 2. Value: Acknowledge the importance of early recognition of systemic diseases indicated by the presence of <u>clubbing</u> and the need for further investigation.

+,\* Summarise

## **Station Duration:**

5-8 minutes

## Case Scenario for the Student:

You are a final-year medical student in the outpatient department. A 55-year-old male patient presents with complaints of chronic cough and fatigue. Upon initial inspection, you observe that the patient has digital <u>clubbing</u>. Perform a clinical examination to assess the presence and grade of <u>clubbing</u> and suggest possible underlying causes.

## Instructions for the Student:

- Perform a focused examination to detect and grade finger <u>clubbing</u>.
- Identify the presence of other clinical signs that may provide clues to the underlying cause of the clubbing.
- Correlate your findings with the patient's history of chronic cough and fatigue.
- Summarize your findings and suggest further investigations.

## **Examiner Guidelines and Marking Schema:**

#### 1. General Approach

- Proper hand hygiene and patient introduction (1 mark)
- Establish rapport with the patient (1 mark)
- Explain the purpose of the examination in clear terms (1 mark)

#### 2. Inspection for <u>Clubbing</u>

- Inspect the patient's hands for <u>clubbing</u> (1 mark)
- Check for the following signs of <u>clubbing</u>:
  - Schamroth's window test (loss of diamond-shaped space between nails) (2 marks)
  - Increased nail curvature (convexity of the nail bed) (1 mark)
  - Fluctuation of the nail bed (softening of the nail bed) (2 marks)
  - Drumstick appearance of the distal phalanges (1 mark)

#### 3. Grading of Clubbing

• Correctly grade the severity of <u>clubbing</u> (1 mark)

#### 4. Further Examination and Associated Signs

- Look for signs of systemic diseases (2 marks):
  - Cyanosis
  - Respiratory distress or abnormal breath sounds (e.g., crackles suggestive of interstitial lung disease)
  - Abdominal examination for hepatomegaly (liver disease)
  - Signs of heart failure (jugular venous distension, peripheral edema)

#### 5. Differential Diagnosis

- Respiratory causes (e.g., chronic lung disease, lung cancer, bronchiectasis) (2 marks)
- Cardiac causes (e.g., cyanotic congenital heart disease, infective endocarditis) (2 marks)
- Gastrointestinal causes (e.g., inflammatory bowel disease, cirrhosis) (2 marks)
- Other causes (e.g., familial and idiopathic <u>clubbing</u>) (1 mark)

#### 6. Suggested Investigations

- Chest X-ray or CT scan (1 mark)
- Pulmonary function tests (1 mark)
- Echocardiogram (1 mark)
- Blood tests (liver function, inflammatory markers, etc.) (1 mark)

#### 7. Communication Skills

- Summarizes findings clearly (2 marks)
- Explains the need for further investigations to the patient (2 marks)
- Professional demeanor and patient interaction (1 mark)

#### Total Marks: 25

### **Examiner Notes:**

- The student should be thorough in their clinical examination, recognizing not only <u>clubbing</u> but also any other systemic signs that might give clues about the underlying pathology.
- The student should appropriately prioritize differential diagnoses based on their clinical findings.
- Effective communication and professionalism are essential, particularly when discussing the implications of <u>clubbing</u> and the need for further investigations.

## Patient Script (Simulated Patient Role):

- The patient is a 55-year-old male with a chronic cough lasting for 6 months.
- If asked, the patient reports some fatigue but denies chest pain or weight loss.
- The patient is cooperative but concerned about the possibility of a serious illness.
- The patient's hands show obvious clubbing, and if asked, the patient does not recall when it started.