



# Principles of Palpation Tehniques

**By**  
**Sallam Ali S. Sallam, PT, M.Sc., PhD, CST**  
Lecturer of physical therapy,  
South Valley University

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ  
مَنْ لَمْ يَرْحَمْ لَمْ يَرْحَمْ  
مَنْ لَمْ يَرْحَمْ لَمْ يَرْحَمْ

# Objectives:

- ▶ The students should be able to understand that:
  - ▶ what is palpation techniques
  - ▶ Palpation process
  - ▶ Prerequisites for palpation
  - ▶ How to apply this on the patients and there ethical Considerations.



# Manual therapy

A comprehensive system of diagnosing and treating neuromusculoskeletal disorders involving specific skills, including

*assessment, mobilization, manipulation and education*, in conjunction with *exercise*, to restore optimal motion, function and/or reduce pain.

- Encompasses a broad array of treatments provided by several different professional disciplines.
- manual therapy: the use of **hands-on techniques** to evaluate, treat, and improve the status of neuro-musculoskeletal conditions
  - Soft Tissue Techniques
  - Joint Techniques



# *Palpation*

***Palpation* is the identification of level and position of a structure by touch.**

Commonly used for examination of the body surface **by touch.**

Palpation is performed **to assess bony and soft tissue contours, soft tissue consistency, and skin temperature and texture.**

Visual observation and palpation are used to “visualize” the deep anatomy. Palpation is an essential skill to assess and treat patients.



**"You must be relaxed to have  
a good tactile sense."**

**(A. Vleeming, Berlin, 2003)**

# The precise palpation of structures in the musculoskeletal system is used in three important areas:

1. As a **component in the assessment** of a joint or section of the spine.
2. For orientation **before the application of special assessment and treatment techniques** (e.g., tests of joint play, palpation of blood vessels).
3. As **the basis for local treatment** of tendons, bursae, etc. (e.g., electrotherapy or manual transverse friction).



# Palpation process

Defining  
objectives

Preparation

Localization

Reliable  
findings

“ Precise palpation always requires the appropriate technique.”

“ There is a specific technique especially suited to each structure.”

# Prerequisites

## 1) Anatomical Background

"You cannot feel what you do not know."

## 2) Experience

Experience is ultimately the deciding factor in obtaining the necessary confidence.

# The Danger of Relying on Experience Alone !!

“making the same mistakes with increasing confidence over an impressive number of years.”

*M. O'Donnell. A Skeptic's Medical Dictionary*

Is that 25-years of experience or 1-year of experience repeated 25-times?



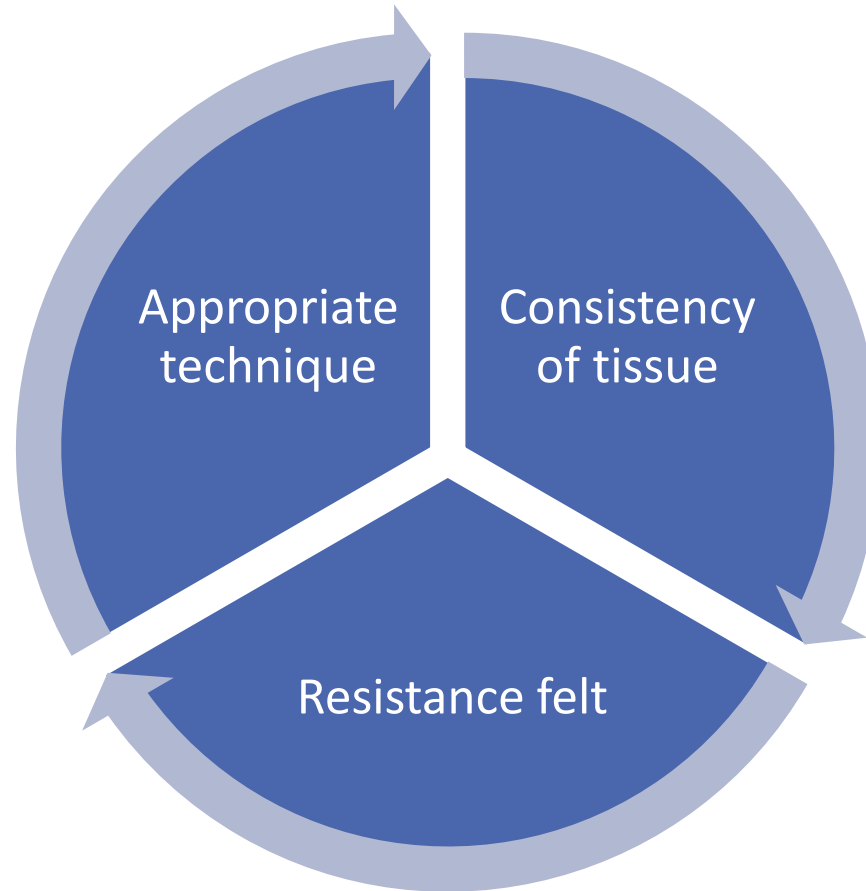


# Palpation Techniques

Empirical formula:  
Topography x Technique x Experience



## Central Aspects of the Procedure





## **Central Aspects of the Procedure**

**Soft, elastic tissue is examined slowly to perceive the elasticity.**

**Hard tissue is examined with a quick movement to feel the hardness.**

**In general, the amount of pressure applied should be as much as necessary and as little as possible.**



# Palpatory Techniques

## 1. Palpating the Skin

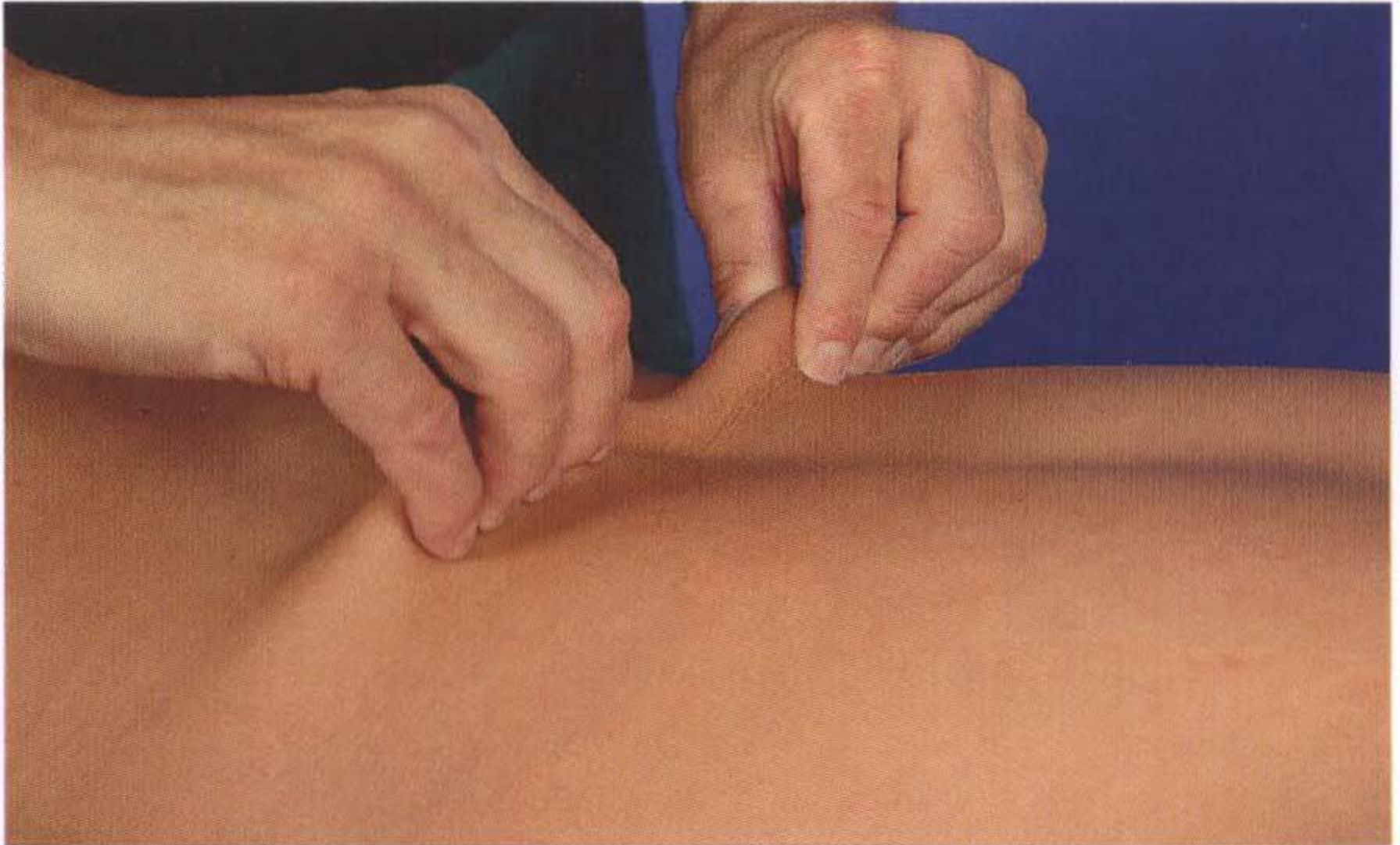
- **Skin quality:** the palm of the hand strokes the skin.
- **Skin temperature:** the back of the hand strokes the skin.
- **Skin consistency:** displacement test, skin lifting test, skin rolling.

**The examination of skin consistency does not provide therapists with information on changes in muscle tension.**

## 2. Palpating Bony Edges



# Assessing the skin consistency with the lifting test.

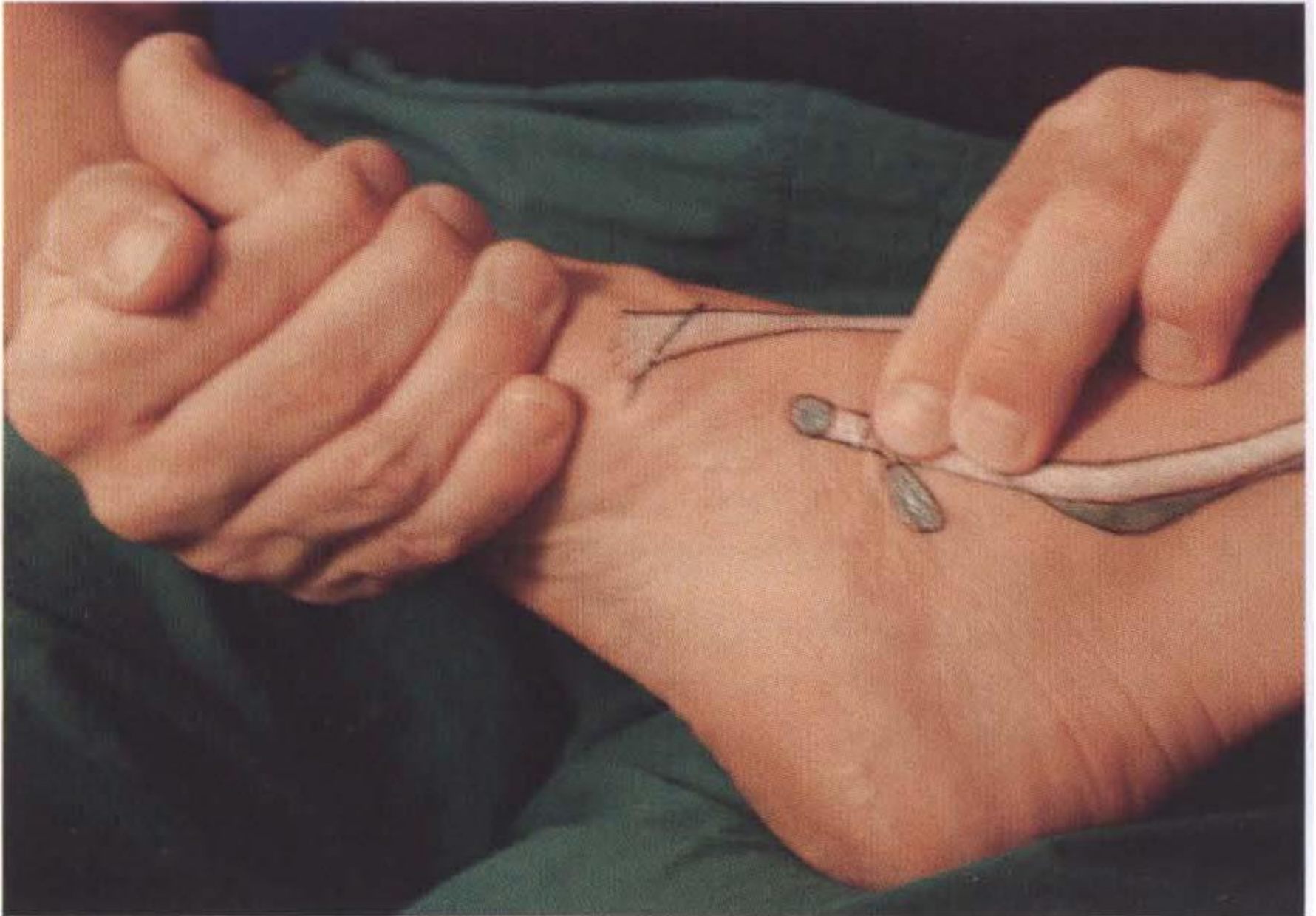




# Palpatory Techniques

- **Muscle**
- **Tendons**
- **Nerves**
- **Ligaments**
- **Capsule**
- **Bursae**
- **Bl vessels**

**Palpating tendons, the tibialis posterior tendon.**





# Palpation Aids

## 1. Guiding Structures

- The tendon of the SCM guides to the sternoclavicular (SC) joint space and guide the palpation to the mastoid process.
  - o The tendon of the palmaris longus reveals the position of the median nerve
  - o The scaphoid can be found in the anatomical snuffbox.
  - o The distal radioulnar joint space lies immediately beneath the tendon of the extensor digiti minimi.
- The tip of the patella is found at the same level of knee joint space
  - o The common peroneal nerve in the popliteal fossa, parallel to the biceps femoris, 1 cm away from it.
  - o The 12th rib and the T12 transverse process are found at the same level as the T11 spinous process



# Palpation Aids

## 2. Connecting lines

- The line connecting the two posterior superior iliac spines is found at the same level as the S2 spinous process
- The sciatic nerve is found halfway along the line connecting the ischial tuberosity and the tip of the greater trochanter.

## 3. Supporting Measures for Confirming a Palpation

- o cervical facet joint gap is best confirmed by passively moving one side of the joint.
- o intervertebral space is best confirmed by passively moving one of the vertebrae involved
- o The insertions of a muscle by tensing the muscle tension
- o peripheral nerve, change position the joints
- o Palpable ligaments tighten the ligament by movement



سبحانك اللهم وبحمدك  
أشهد أن لا إله إلا أنت  
استغفرك واتوب إليك



Thank  
You