

# SNS COLLEGE OF PHYSIOTHERAPY COIMBATORE-35

COURSE NAME : BPT., Physiotherapy IV Year

**SUBJECT** : Rehabilitation

UNIT : I

**TOPIC** : Joint Mobilisation

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### Definitions



- •Passive manual therapy technique applying graded forces to joints.
- •Aims: reduce pain, restore accessory motion, improve function.
- •Distinguish: mobilisation (graded, oscillatory/ sustained) vs manipulation (high-velocity, low-amplitude thrust).

### What is Mobilization?



Mobilization is a manual therapy
technique commonly used in
physiotherapy to restore normal
movement in joints, muscles, and soft
tissues. It involves skilled, passive
movements applied by a
physiotherapist to a joint or soft tissue
structure in graded, controlled motions.

#### **Benefits of Mobilization**

- Increases flexibility and range of motion
- Reduces pain and muscle guarding
- · Enhances joint lubrication and circulation
- Promotes better alignment and posture
- · Speeds up healing and function



### Definitions

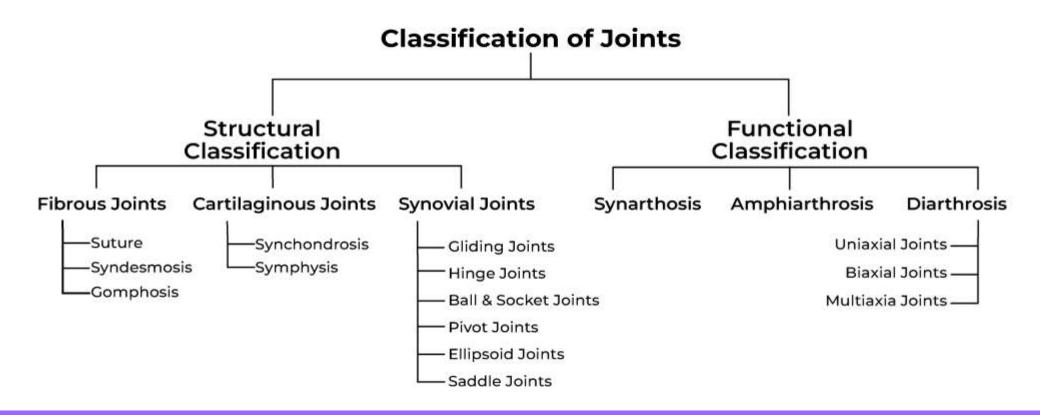




### Basic Biomechanics & Kinematics

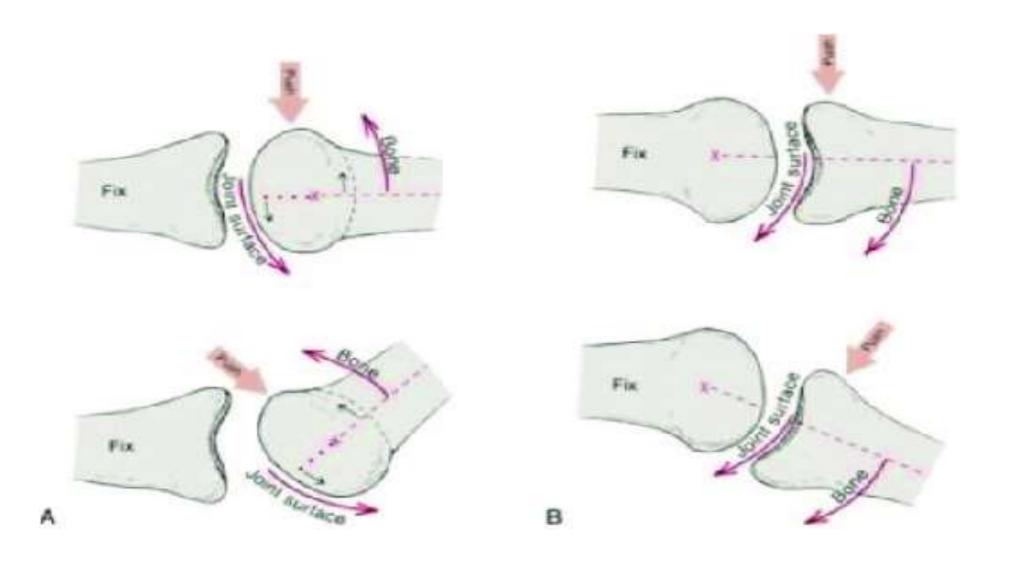


- •Accessory (joint) vs physiological movements.
- •Convex—concave rule (general concept) direction of glide relative to slide.
- •Role of joint capsule, ligaments, synovium in motion limitation.



# CONCAVE CONVEX Rule





### Indications & Contraindications



#### **INDICATIONS**

- •Pain reduction (acute & subacute) where movement is painful.
- •Hypomobility and joint stiffness.
- •Pre- or post-therapeutic mobilising to prepare tissue for exercise.
- •Facilitate joint nutrition and synovial fluid movement.

#### **CONTRA INDICATIONS**

Fracture

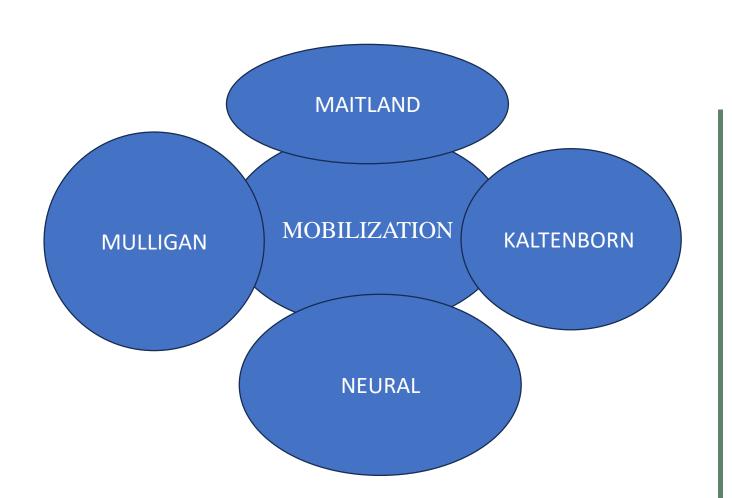
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- Dislocation
- Malignancy in region
- Active infection
- Inflammatory arthritis flare (severe)
- Uncontrolled neurological signs.

# Classification: By Goal & Method



- Pain-reliefmobilisations
- Mobility-restoring mobilisations
- Neural mobilisation (sliders vs tensioners)
- •Sustained vs oscillatory techniques



### Maitland Grades (I–V)



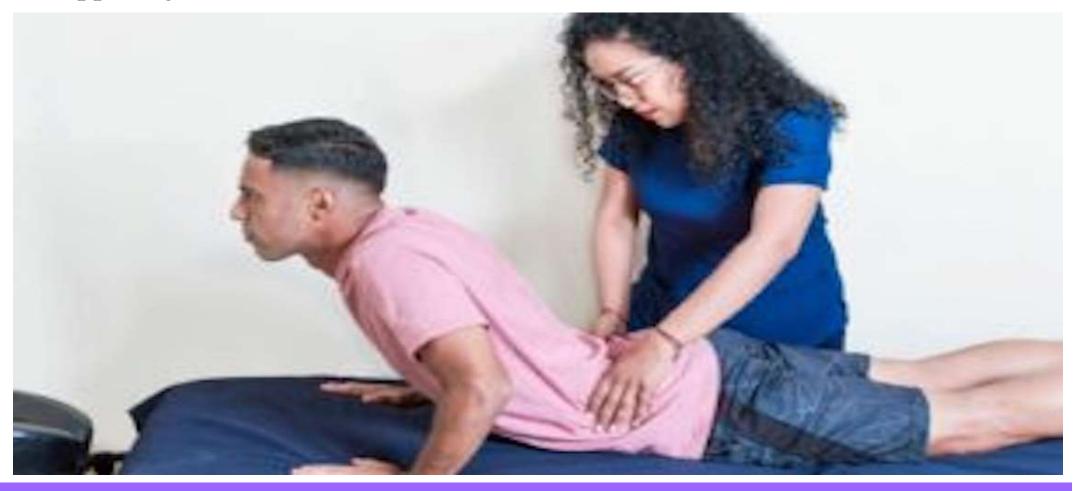
- •Grade I: small amplitude, beginning of range pain relief.
- •Grade II: large amplitude within range pain relief and assessment.
- •Grade III: large amplitude up to limit increase mobility.
- •Grade IV: small amplitude at limit stretch capsular restrictions.
- •Grade V (manipulation): HVLA thrust not a mobilisation.



# Mulligan Concept (SNAGs & MWMs)



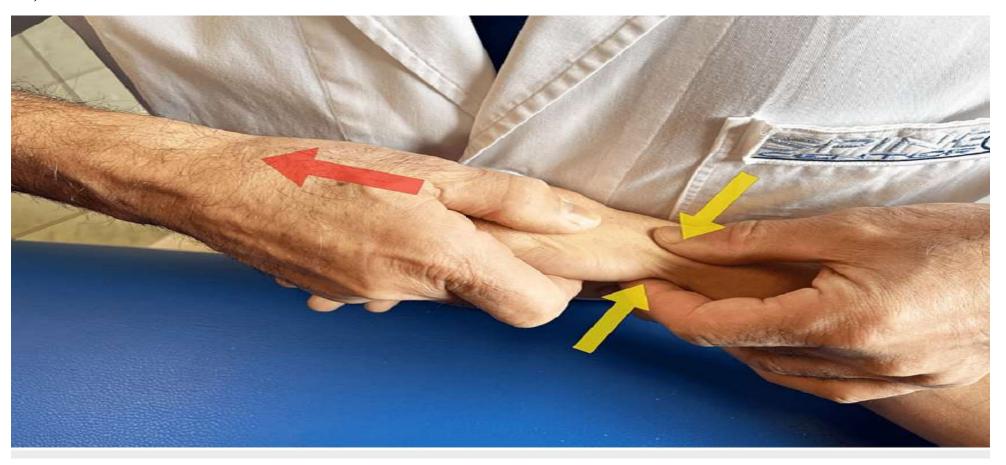
- •Sustained natural apophyseal glides (SNAGs) for spine.
- •Mobilisation with movement (MWM) for peripheral joints patient actively moves while PT applies glide.



# Kaltenborn Concept



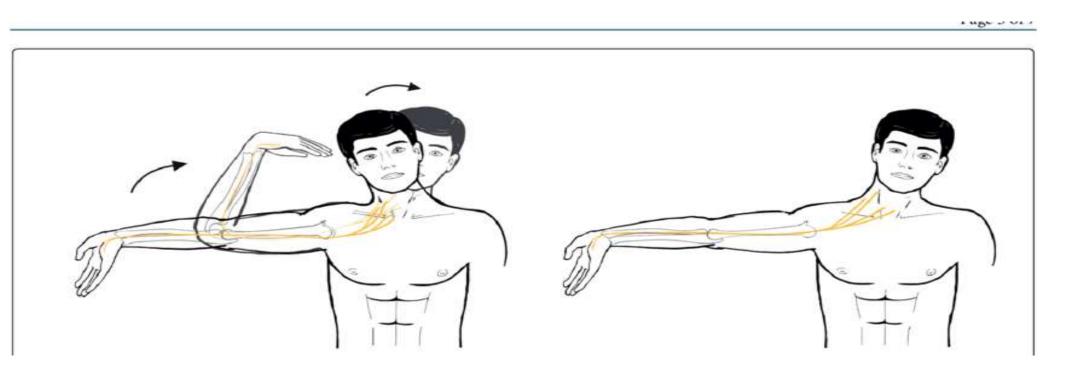
- •Focus on sustained translational glides (traction & glides).
- •Three grades of traction: 1 (neutralize joint compression), 2 (take up slack), 3 (stretch).



### **Neural Mobilisation**



- •Neurodynamics: sliders (glide) vs tensioners (stretch).
- •Indications: neural mechanosensitivity, radiating pain with movement.
- •Example: Median nerve slider for carpal tunnel/neck-related arm pain.



### Case Example Adhesive Capsulitis (Shoulder)



- •Presentation: painful stiff shoulder, limited abduction and external rotation.
- •Treatment plan: pain-relief glides (inferior/ posterior), ROM exercises, scapular control, home program.
- •Expected timeline: gradual improvement over weeks—months; set realistic goals.

## **Short MCQ**



- •Maitland grade used primarily for pain relief is: (A) I (B) III (C) IV
- •The convex—concave rule helps determine: (A) Muscle length (B) Glide direction (C) Strength
- •A Mulligan technique commonly called: (A) SNAG (B) PA glide (C) Traction