Lab Breakout: Manual Therapy Techniques of the Shoulder Complex
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Glenohumeral Posterior Glide/Stretch into Internal Rotation:

- **Purpose:** Stretch posterior capsule. Improve glenohumeral motion.

**Method 1**

- **Patient position:** Supine with arm abducted to 90° with arm in internal rotation
- **Therapist position:** Standing next to patient with foot on stool. Patient’s arm supported on knee or supported by non-treatment hand. Hypothenar eminence of treatment hand over the anterior humeral head. Elbow in line with the direction of the force
- **Procedure:** Provide a posterior directed force in a *posterior-lateral* direction (in plane of the glenoid fossa). Move patient into further internal rotation to provide a greater stretch to the capsule.
- **Alternative method:** Perform a hold-relax technique at end motion

**Method 2**

- **Patient position:** Prone with arm in maximal internal rotation (arm behind back if possible).
- **Therapist position:** Standing next to patient with treatment hand over medial border of the scapula. Other hand controlling the wrist. (if patient is unable to get their hand behind their back, place it between the ASIS and the table)
- **Procedure:** Provide an anterior directed force to the inferior angle of the scapula. Move patient into more internal rotation as progresses.
Glenohumeral Anterior Glide/Stretch into External Rotation

- **Purpose:** Stretch anterior capsule. Improve glenohumeral motion.

**Method 1**
- **Patient position:** Supine in hooklying position with arm abducted to 90° with arm in external rotation
- **Therapist position:** Standing perpendicular to arm. With both hands, grasp proximal to the glenohumeral joint with patient’s forearm supported by therapist’s arm
- **Procedure:** Provide a distraction force to the joint while providing an anterior directed force to the glenohumeral joint. May move patient into further external rotation to provide a greater stretch to the capsule. (2nd figure)
- **Alternative method:** At the maximal stretch into external rotation, ask patient to rotate knees away from therapist (3rd figure)

**Method 2**
- **Patient position:** Prone with arm supported in 90° of abduction with arm in external rotation
- **Therapist position:** Standing next to patient with foot on stool. Patient’s arm supported on knee or supported by non-treatment hand. Hypothenar eminence of treatment hand over the posterior humeral head. Elbow in line with the direction of the force.
- **Procedure:** Provide an anterior directed force. Move patient into further external rotation to provide a greater stretch to the capsule.
**Inferior/Posterior-Inferior Glide/Stretch into Abduction/Flexion**

- **Purpose:** Stretch inferior and posterior-inferior capsule. Improve glenohumeral motion.
- **Patient position:** Supine in hooklying with arm into end range of abduction or flexion
- **Therapist position:** Standing at the head of the patient. Patient’s arm supported by non-treatment hand, hand in contact with upper arm and forearm between therapist upper arm and rib cage. Web space of treatment hand over the superior humeral head. Elbow in line with the direction of the force
- **Procedure:** Provide a distraction force with the non-treatment arm. Provide an inferior directed force with the treatment hand if patient in abduction. Provide a posterior-inferior directed force with the treatment hand if patient in flexion. Move patient into further end motion to provide a greater stretch to the capsule.

- **Alternative method:** At the maximal stretch into end motion, ask patient to rotate knees away from therapist

- **Alternative method:** At the maximal stretch into end motion, provide pressure over lateral border of scapula
**Thoracic Mobilization/Manipulation**

- **Purpose**: Increase thoracic mobility. Possibly enhance lower trapezius activation.

**Method 1: Posterior/Anterior (PA) Mobilization/Manipulation in Prone**

- **Patient Position**: Prone lying with feet off edge of table and cervical spine in neutral.
- **Therapist Position**: Standing on patient’s left side. Left hand, pointed away. Right hand, pointed cranially. (switch if standing on the other side) Hypothenar eminence of each hand over transverse process of spinal level to be mobilized.
- **Mobilization Procedure**: With equal pressure through both hands, apply a gentle skin twist (to take up slack in the soft tissue) and then apply a PA pressure to the spine. Pressure is applied gradually to achieve end range motion.
- **Manipulation Procedure**: To provide a manipulation, take up the slack with a PA force (as described above). As patient exhales, take up slack to end range or until a barrier is reached. Apply a high velocity, low amplitude thrust technique by shifting body weight in PA a direction

![Image of mobilization in prone position]

**Method 2: Anterior/Posterior Manipulation in Supine**

- **Patient Position**: Supine with hand to opposite shoulder OR hands to opposite thorax (“hugging themselves”)
- **Therapist Position**: Standing next to patient, wrap manipulative hand across the patient’s body and place it at the level of the segment to be treated. Then roll patient back over your hand

![Image of manipulation in supine position]
- **Procedure**: With use of body and opposite hand (opposite hand in your deltopectoral interval), apply a downward force through the patient’s upper body taking up the slack in extension, rotation and sidebending. Perform a high velocity, low amplitude thrust and end range.

**Glenohumeral and Thoracic Stretch over Exercise Ball**

- **Purpose**: Increase thoracic mobility and shoulder elevation
- **Patient position**: Patient supine over an exercise ball with head supported. Arms elevated to available range
- **Therapist position**: Sitting at patients head, grasp patient’s wrist.
- **Procedure**: While grasping patient’s wrists, patient is asked to roll away from therapist as therapist gradually stretches into greater elevation.
- **Patient self stretch #1**: Patient supine over exercise ball as stated above. Patient grasps onto heavy piece of furniture as they roll away from the furniture.
THORACIC SPINE/SHOULDER HOME EXERCISE PROGRAM

Shoulder ROM/ Mobility

1. Cane exercise  
   a. Flexion
   
   b. External Rotation
      i. At side
      ii. At 90/90
   
   c. Extension/Internal Rotation

2. Self range of motion  
   a. Flexion
   b. Scaption
c. External rotation
d. Internal rotation

Thoracic ROM/Mobility

Patient self stretch #1: Towel roll stretch
- Patient supine with rolled towel, tennis balls in a sock or foam roll parallel or perpendicular to the spine at the level to be treated.

Patient self stretch #2: Extension stretch, supine over physioball or foam roll
- Patient sitting, hands clasped behind neck, with ball behind thoracic spine. Patient extends over the ball
  (Holding onto heavy object)

Patient self stretch #3: Thoracic extension over edge of table
- Patient supine, edge of table at the thoracic level to be treated. Extend back over the edge of the table
Patient self stretch #4: Thoracic extension over edge of chair

- Patient sitting with hands behind head. Extend over the edge of a chair or over a ball

(Over chair)  
+(With use of ball)