Reduction maneuvers of Anterior shoulder dislocation

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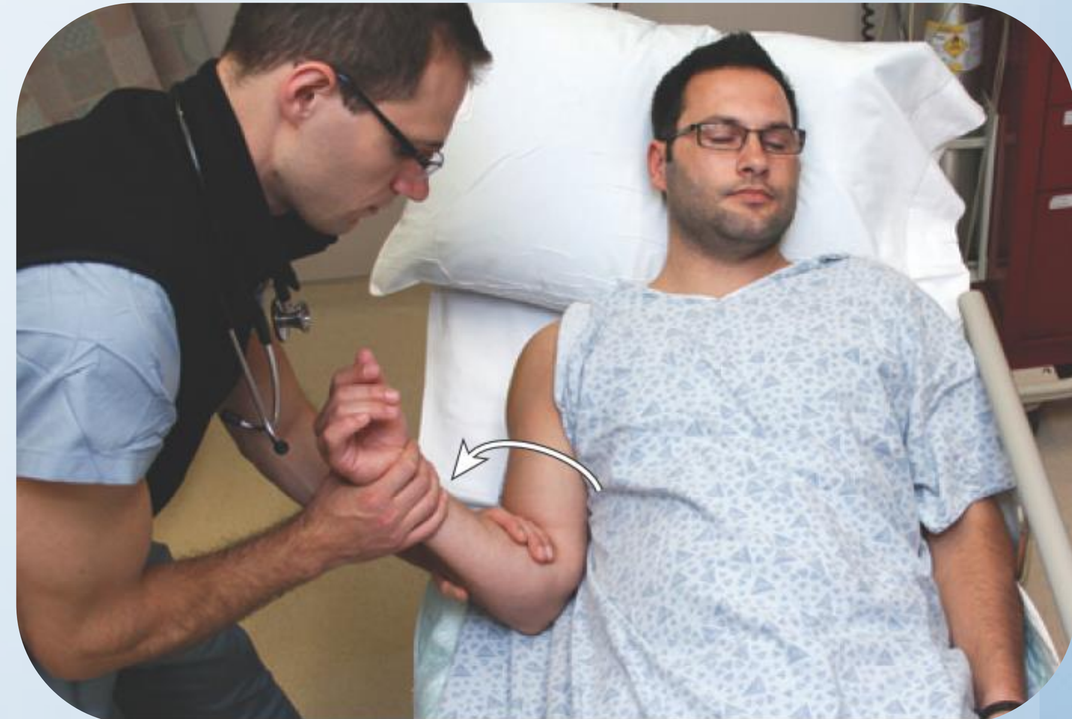
Reduction techniques

1. External Rotation
2. Kocher Technique
3. Fares Technique
4. Milch Technique
5. Spaso Technique
6. Traction-Countertraction Method
7. Scapular Manipulation
8. Stimson Maneuver
9. Best of Both (BOB) Technique
10. Eskimo Method
11. Hippocratic method
12. Chair method
13. Self Reduction Technique
14. Cunningham technique

1.External Rotation Technique

1.Fully **adduct** the arm and **flex the elbow to 90 degrees**
2.Hold the patient's wrist and guide the arm into slow and gently **external Rotation**

3.Continue the rotation until the **forearm is laying on the bed**
No traction is applied



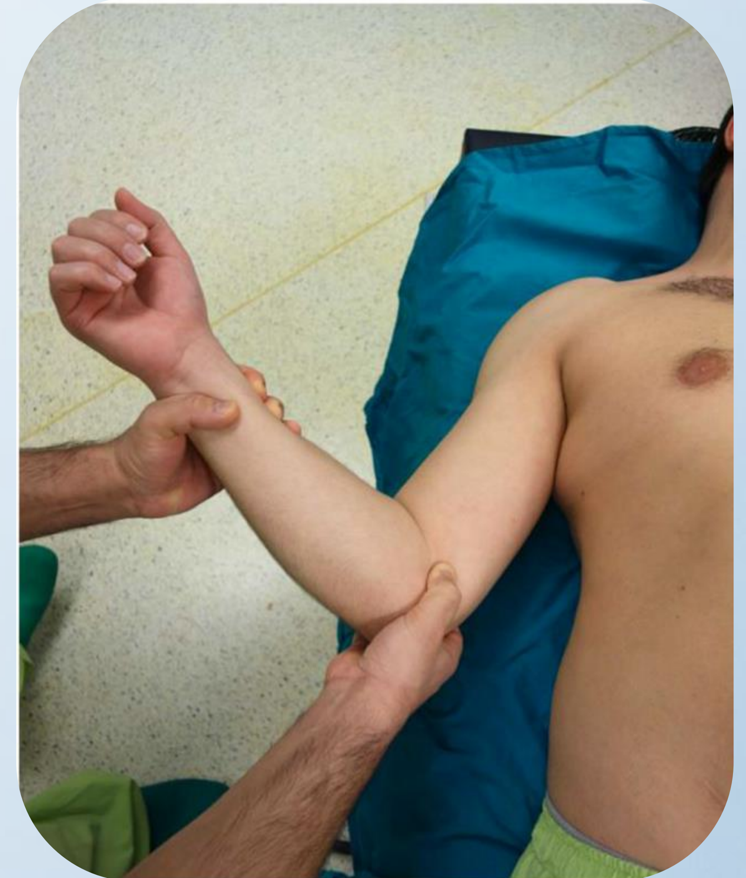
2.Kocher Technique

1.The patient bends the affected arm at **90°** at the elbow and **adducts** it against the body

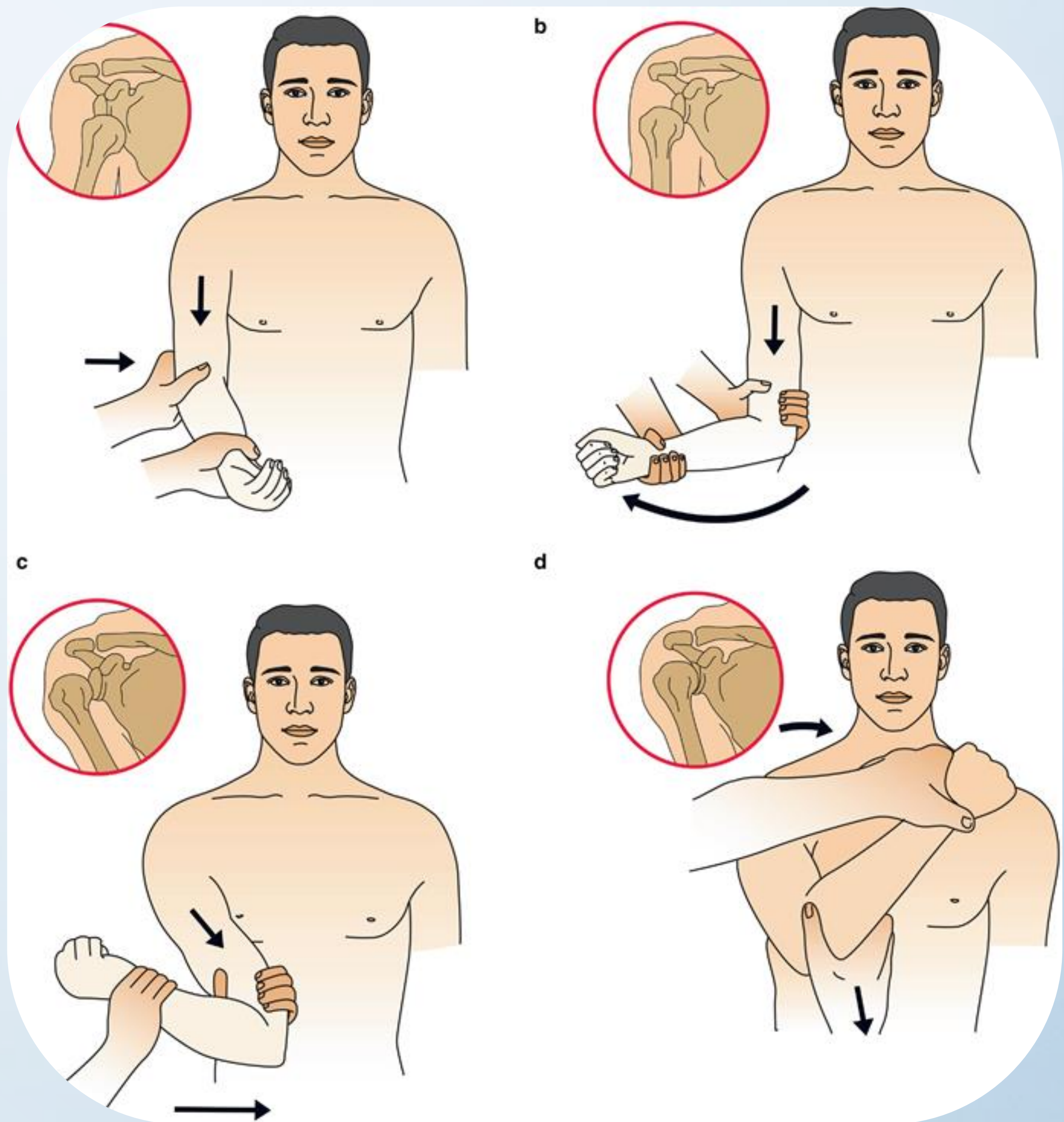
2.The shoulder is **slowly rotated externally** between 70° and 85° until resistance is felt

3.The externally rotated upper arm is lifted in the sagittal plane as forward as possible

4. the shoulder is **internally rotated** to bring the patient' s hand towards the opposite shoulder.



2.Kocher Technique

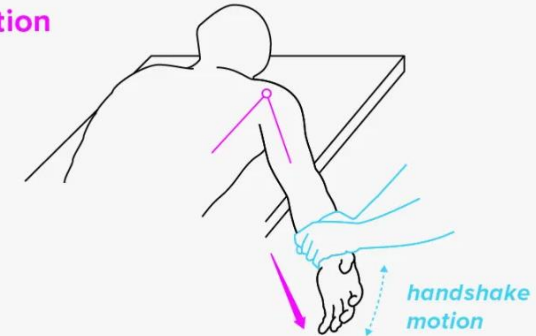


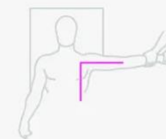
3. Fares Technique

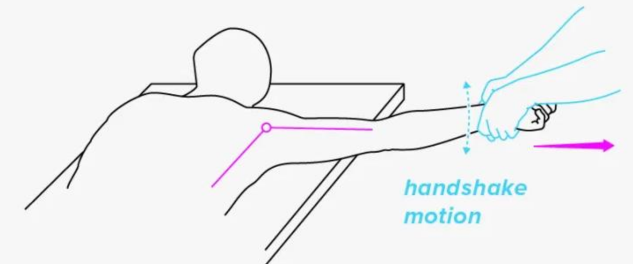
1.While maintaining **traction**, apply **vertical oscillation** at a rate of 2-3 hertz with a distance of 5 cm above and below the horizontal plane

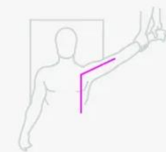
2. Strat slowly **abducting the arm**, at 90 abduction add **external rotation of arm**, continue to slowly abduct the arm, Reduction typically occurs at 120°

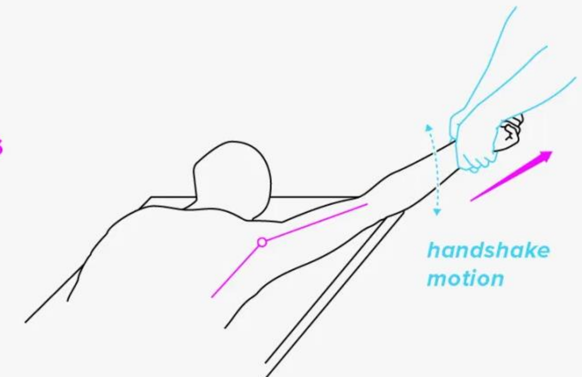
3.Maintain the traction and oscillation if reduction does not occur immediately



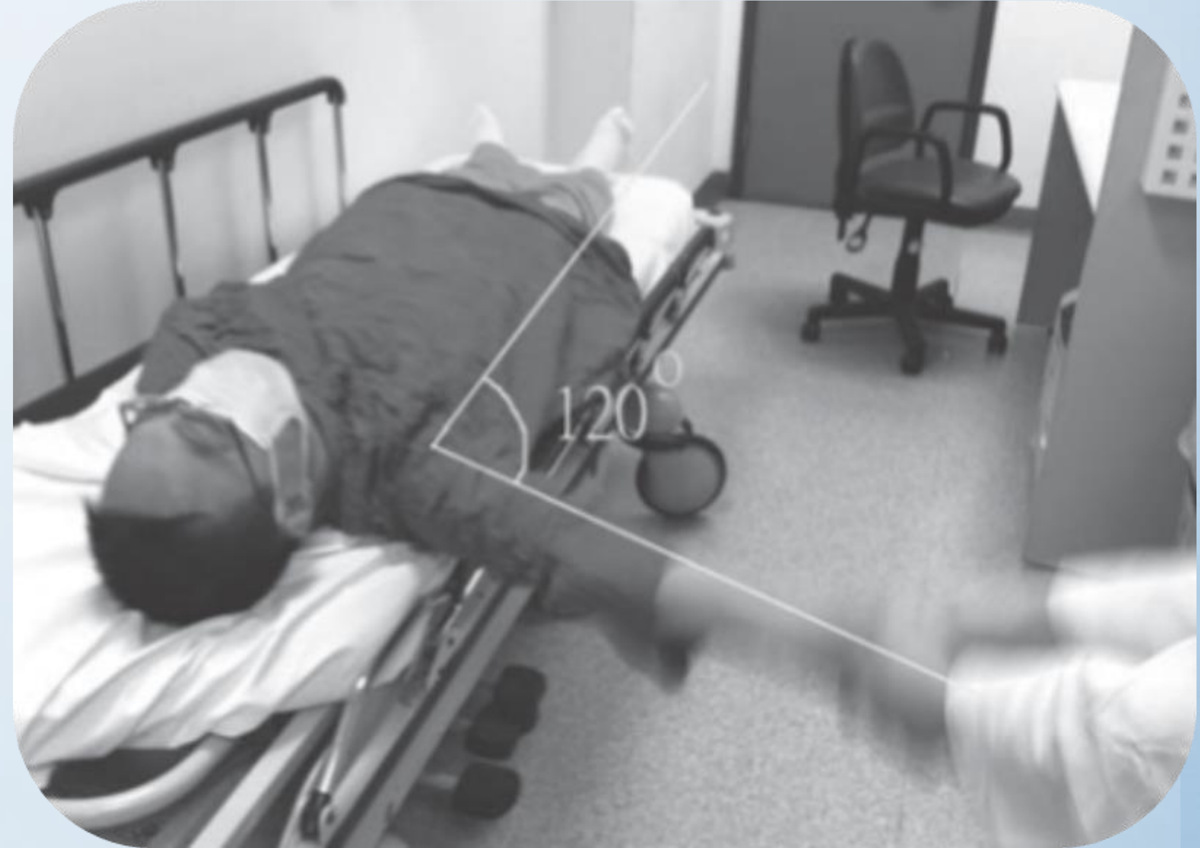








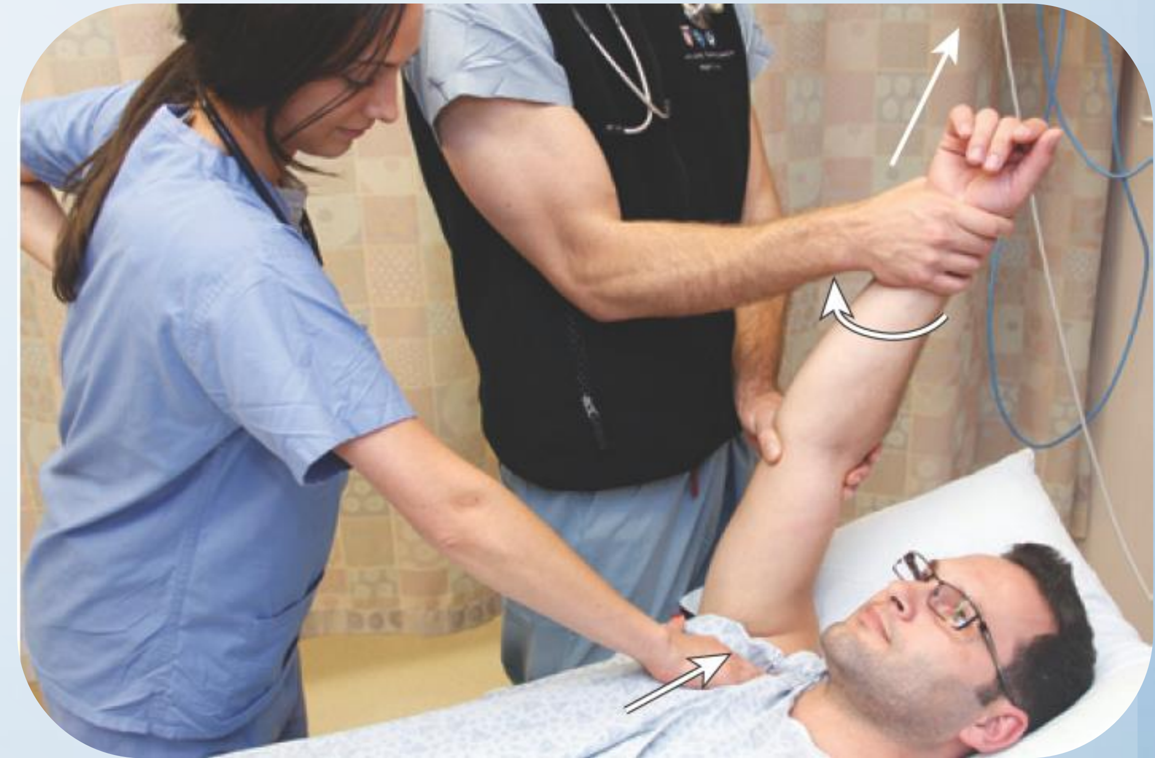
3. Fares Technique



4. Milch Technique

1. **Abduct** the arm to an **overhead position** by grasping the patient's arm at the elbow or wrist.
2. Once fully abducted, apply gentle **longitudinal traction** with **slight external rotation.**

If reduction does not occur quickly, **push the humeral head upward into the glenoid fossa**

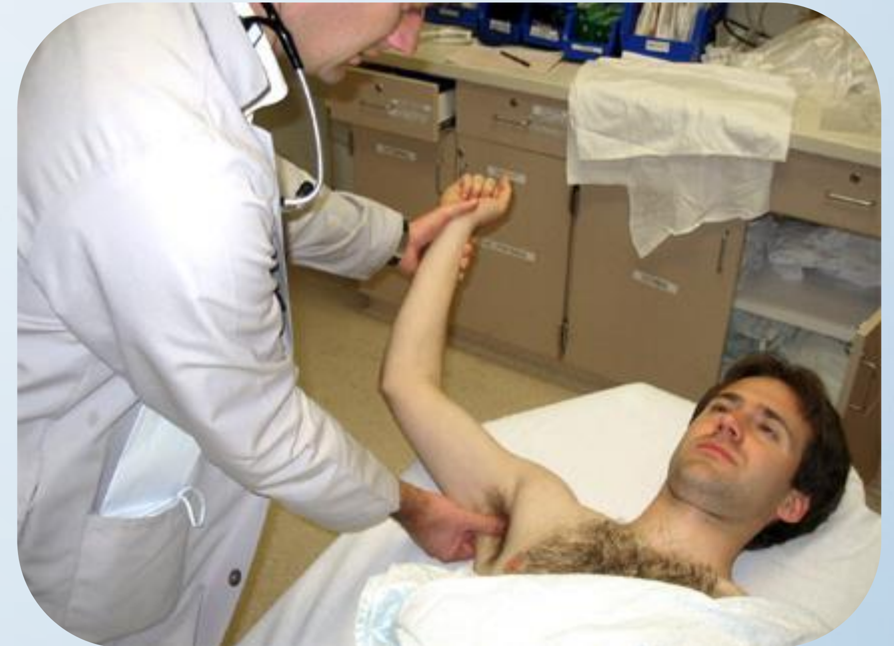


4. Milch Technique

1.Holds the patient's arm at the wrist **abducting** it to an **overhead position**

2. **Externally rotating it to 90**

3. Subsequently, the humeral head is pushed into a superior lateral position.



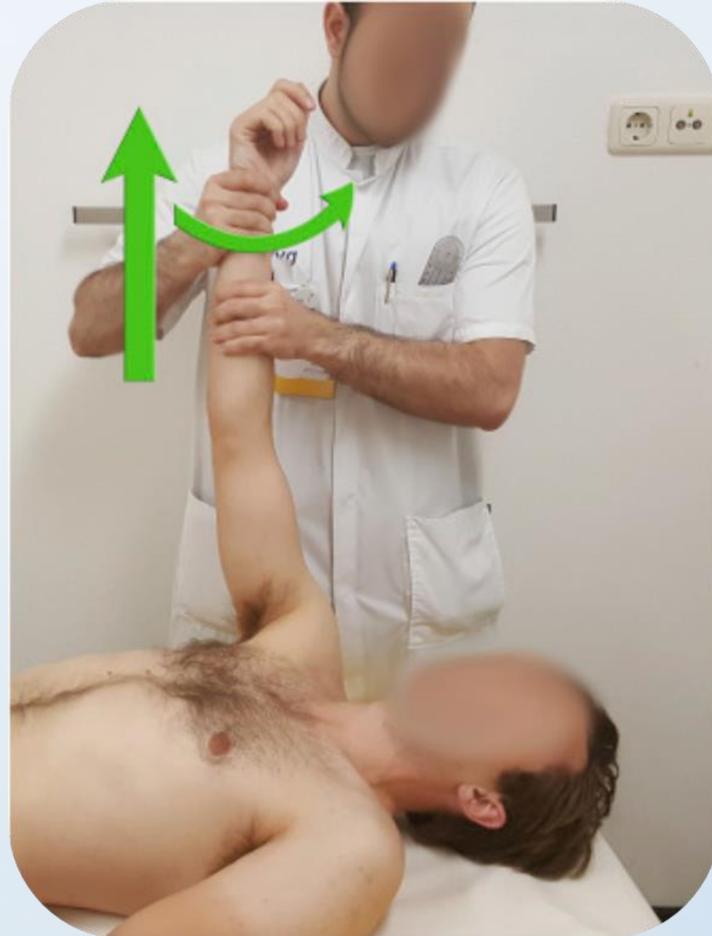
Progressing from **external rotation** to the **Milch technique**

While **traction is maintained**, the **patient's arm is slowly taken** through a wide arc, from the patient's side, into a **fully overhead position**

5. Spaso Technique

1.With the patient supine, gently **lift the arm toward the ceiling** while applying gentle **vertical traction**
2. Instruct an assistant to apply Countertraction
3. Apply gentle **external rotation** during the procedure

Spaso Technique

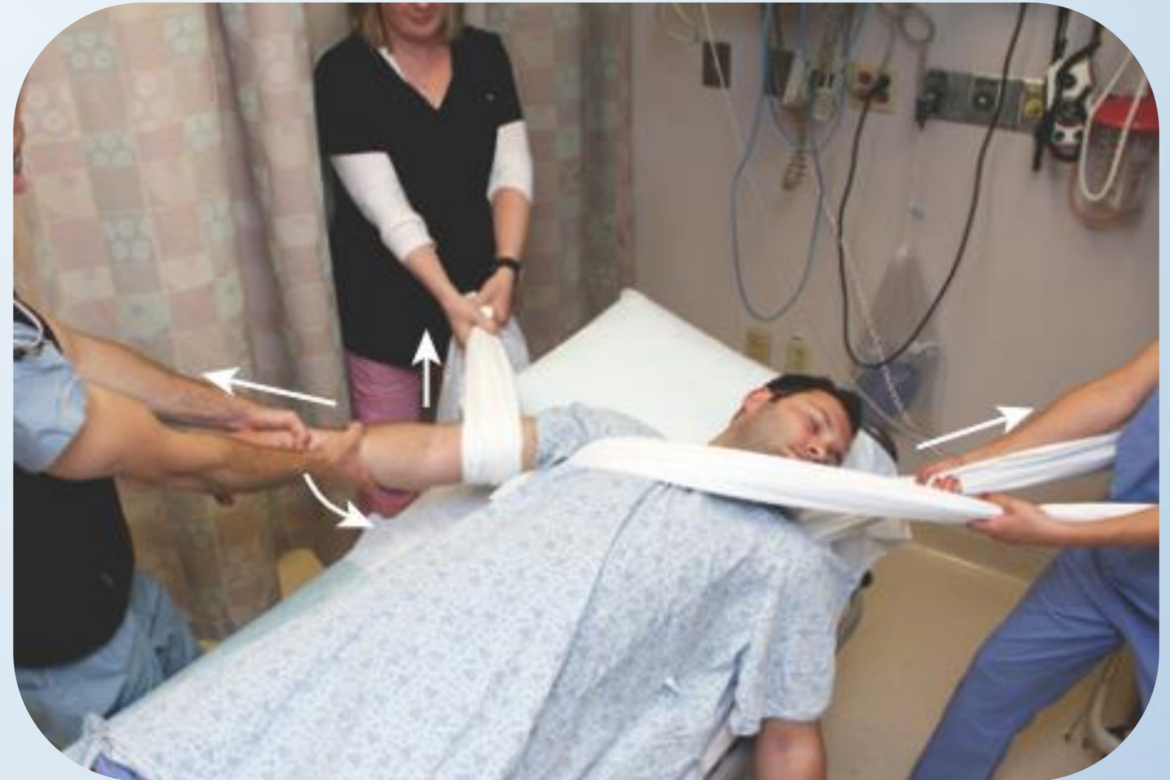


6. Traction-Countertraction Method

1. **Wrap one sheet** around the affected axilla and the assistant's waist.
2. The assistant leans back to apply countertraction
3. Wrap another sheet around the patient's **flexed arm** and your waist
4. Lean back to apply traction

Traction-Countertraction Method

Reduction can be facilitated by gently **adducting the arm** (after traction is applied) while a second assistant provides **gentle lateral traction on the humerus.**

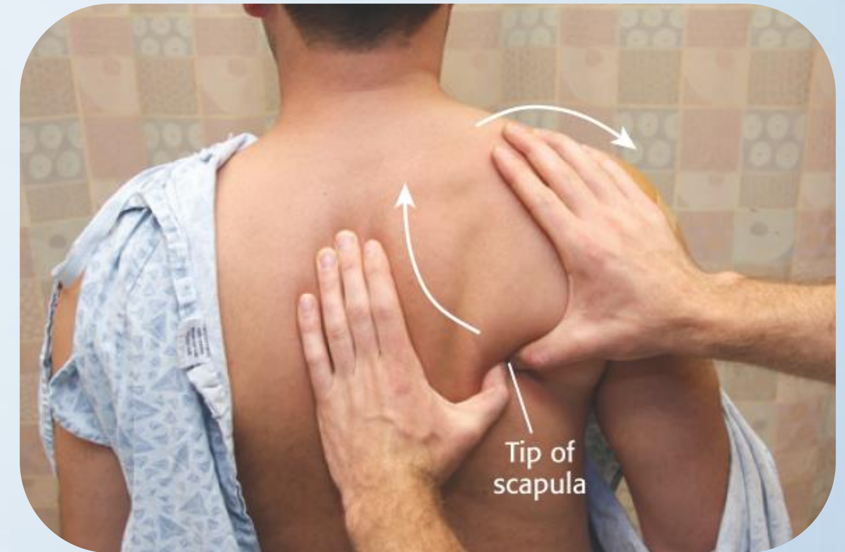


7. Scapular Manipulation

1.Rotate the inferior tip of the scapula medially and dorsally toward the spine with the tips of your thumbs

2. Have an assistant apply traction on the arm while applying **countertraction on the ipsilateral clavicle**

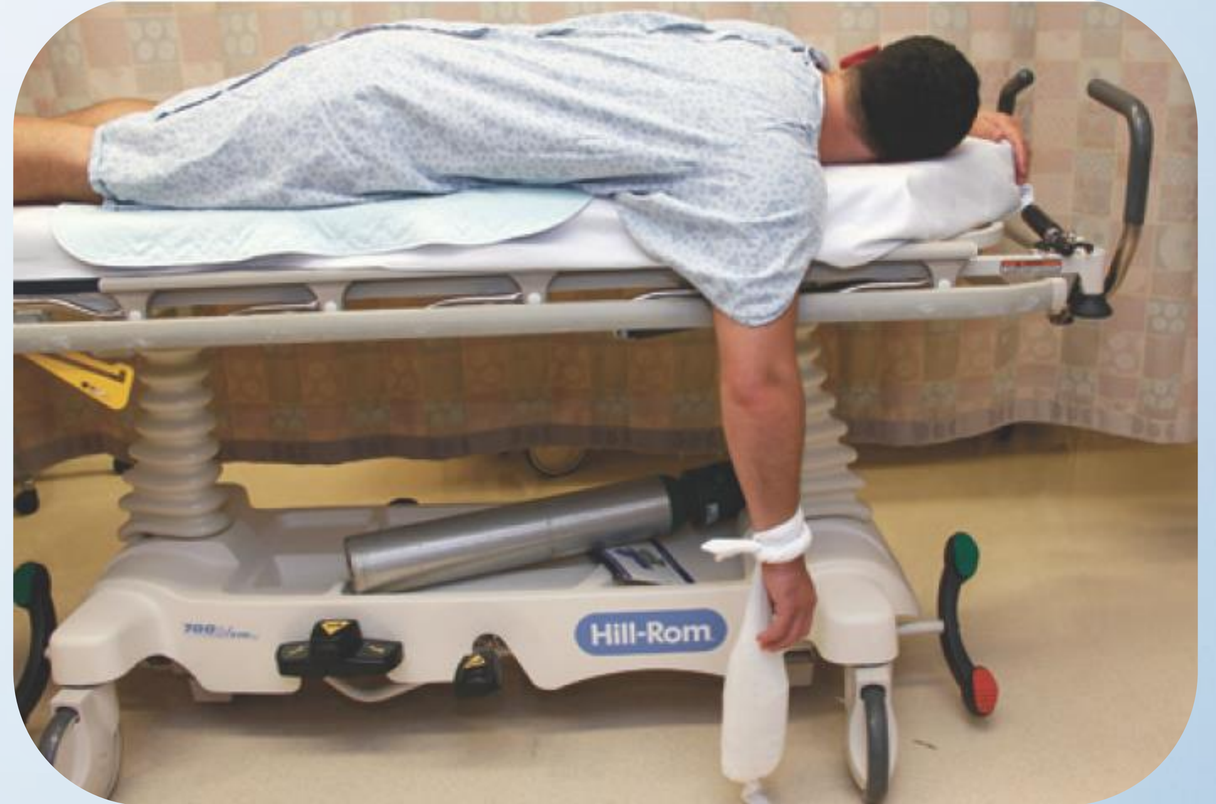
The procedure can take place with the patient **prone** (as in the Stimson technique) or with the **patient seated**



8. Stimson Maneuver

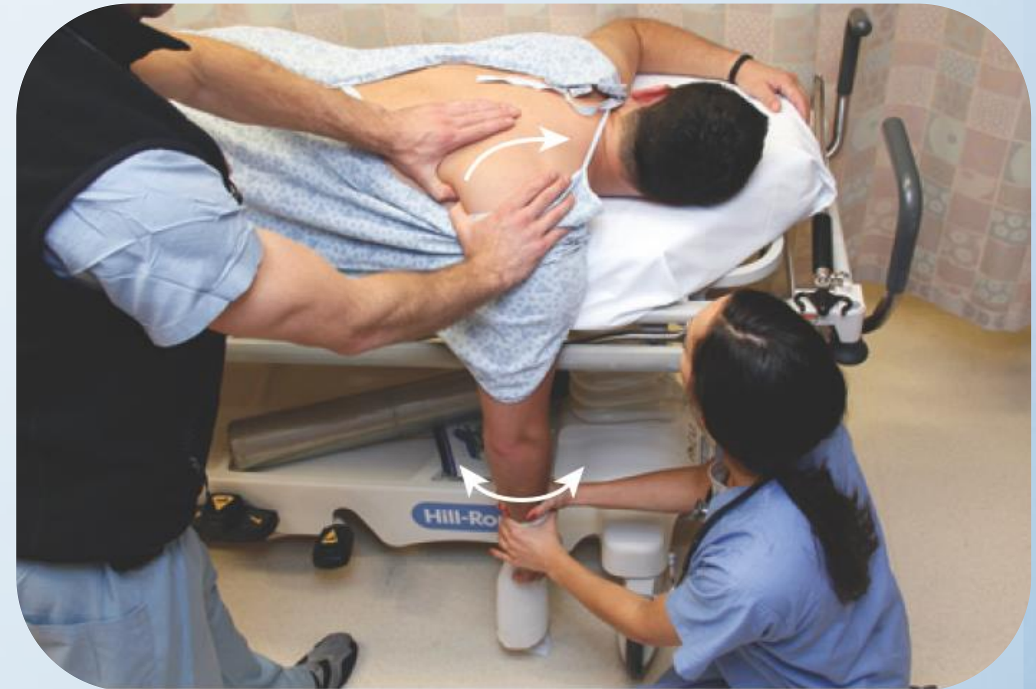
1.Place the patient **prone** on the edge of the stretcher

2. **5-kg weights are attached** to the arm, and the patient maintains
this position for 20 to 30 minutes



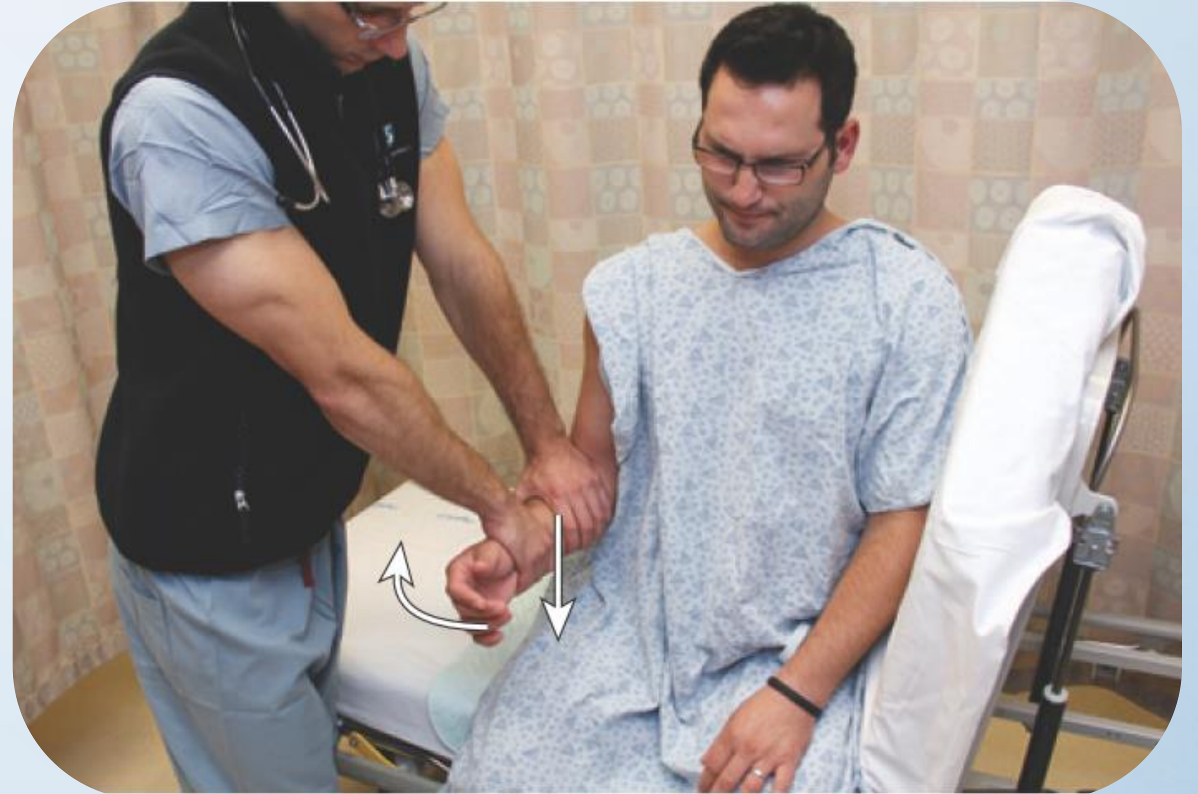
8. Stimson Maneuver

The addition of **scapular manipulation** and/or **gentle external and internal rotation** of the shoulder with manual traction may aid in reduction



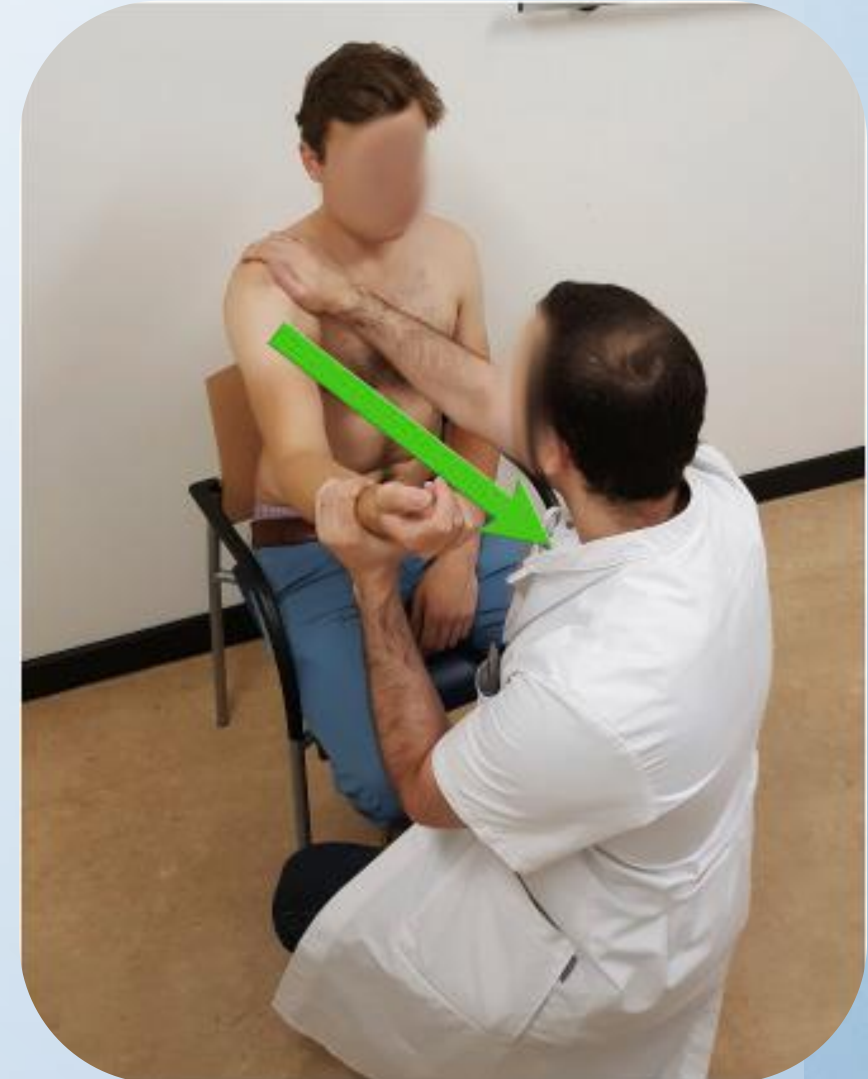
9. Best of Both (BOB) Technique

1.Position the **patient seated** sideways with the unaffected shoulder and hip against the upright head of the stretcher
2. Apply **downward force** on the patient's flexed forearm
3.Gently **rotate the arm internally or externally** as needed



9. Best of Both (BOB) Technique

1. The patient is seated while facing the practitioner
2. holds the forearm of the affected limb and **flexes the shoulder to 90°** while having the **elbow slightly flexed**
3. Places the other arm on the anterior chest wall at the side of the affected limb, to control the glenoid tilt by manipulating a part of the scapula such as the acromion or coracoid process
4. Apply **longitudinal traction** to initiate the reduction
5. If this fails, you can additionally **rotate the affected limb internally or externally**



10. Eskimo Method

1. The **patient lies** on the side of the unaffected shoulder

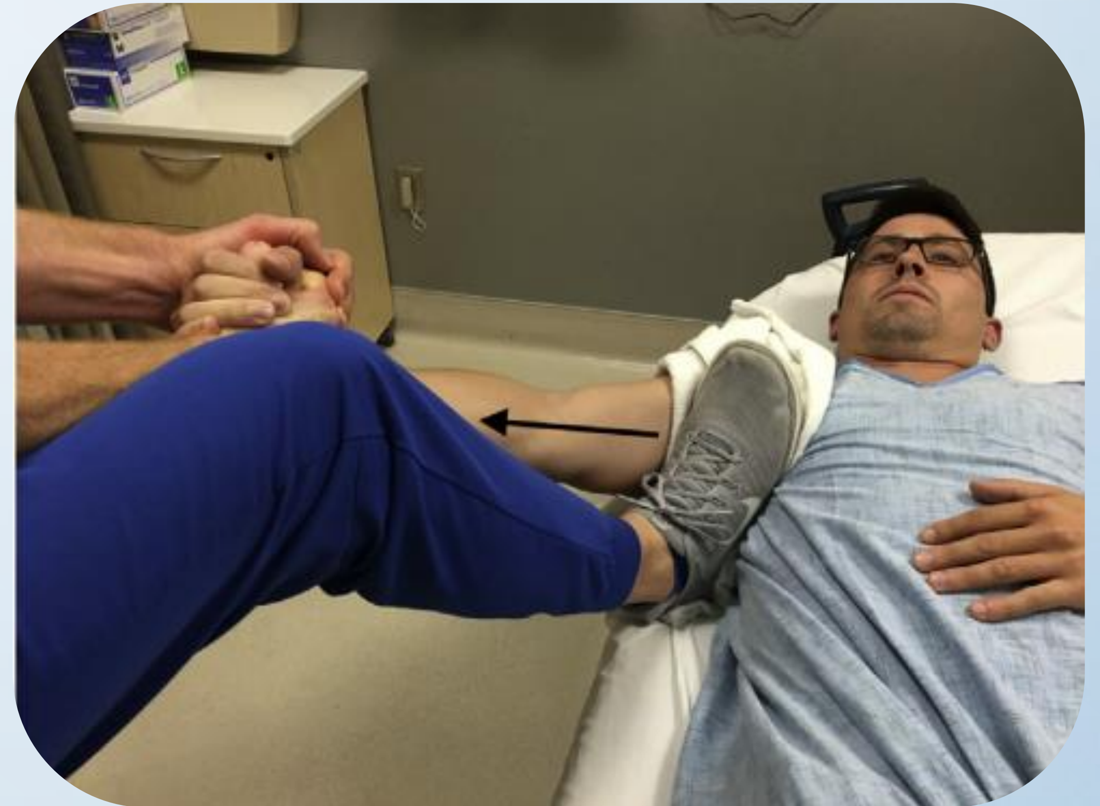
2. Two practitioners lift the patient by the dislocated arm, while the **arm is abducted**

3. If no reduction occurs, the practitioner can place his hand in the **axilla** and apply **pressure on the humeral head** to reposition it in the glenoid rim

Eskimo Method

11. Hippocratic method

1. The patient lying in supine position
2. Holds the affected limb by the forearm and hand of the patient
3. Place the **heel in the axilla of the patient**, acting as a fulcrum while the arm of the patient is **adducted**

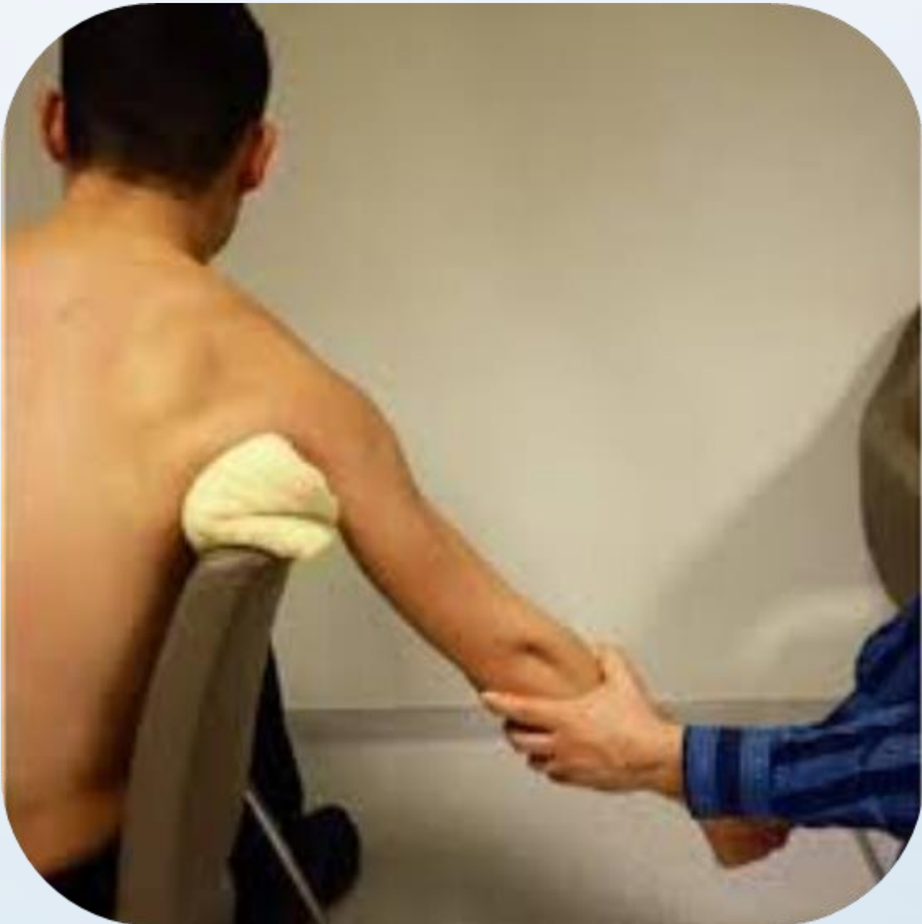


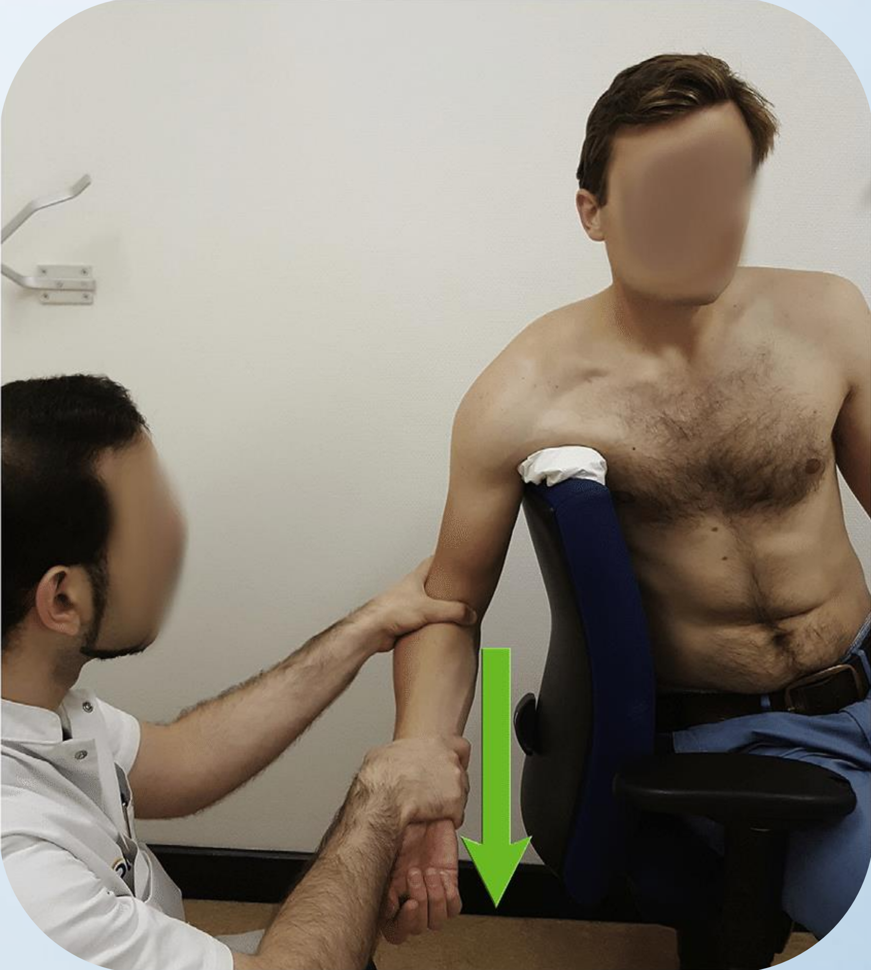
Hippocratic method

12. Chair method

1. The patient **sit in a stable chair sideways** using the backrest of the chair as a fulcrum in the axilla.
2. The dislocated arm is allowed to hang over the backrest of the chair
3. The physician **squats down behind the chair**, holds the patient' s elbow, and induces **gently flex the elbow**

12. Chair method





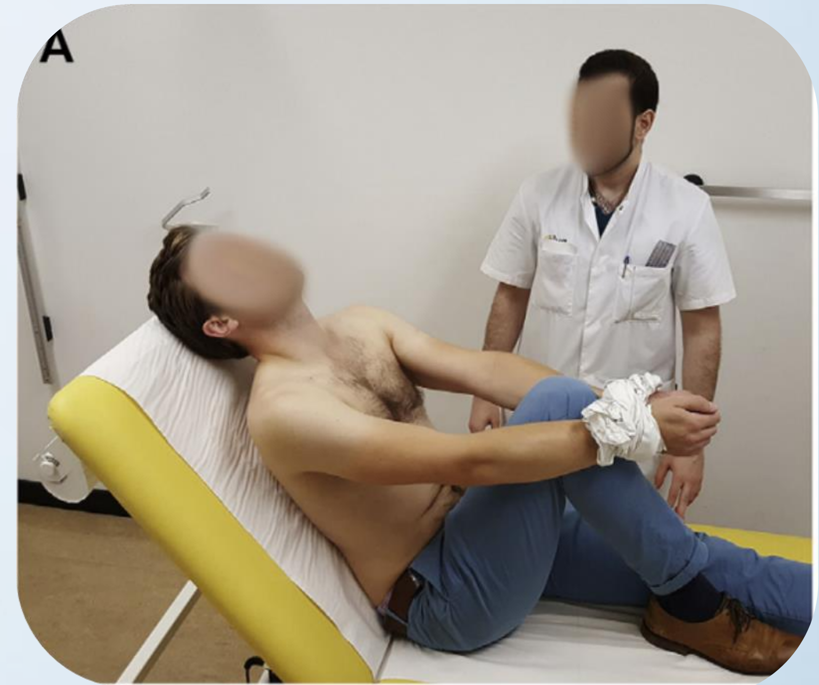
13. Self Reduction Technique

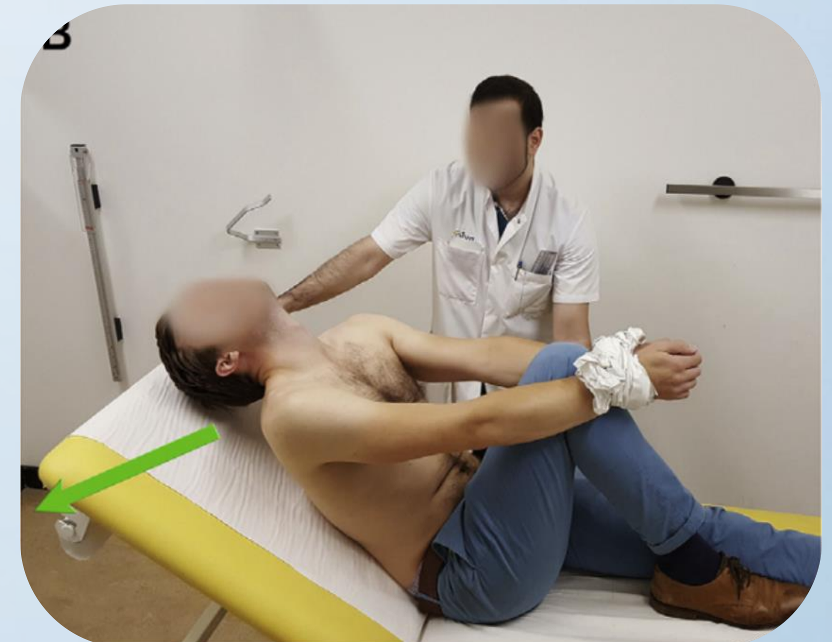
Boss-Holzach Matter Technique

1.The patient sits on the examination table with his leg straight while his wrists are protected by cotton wool and bound together

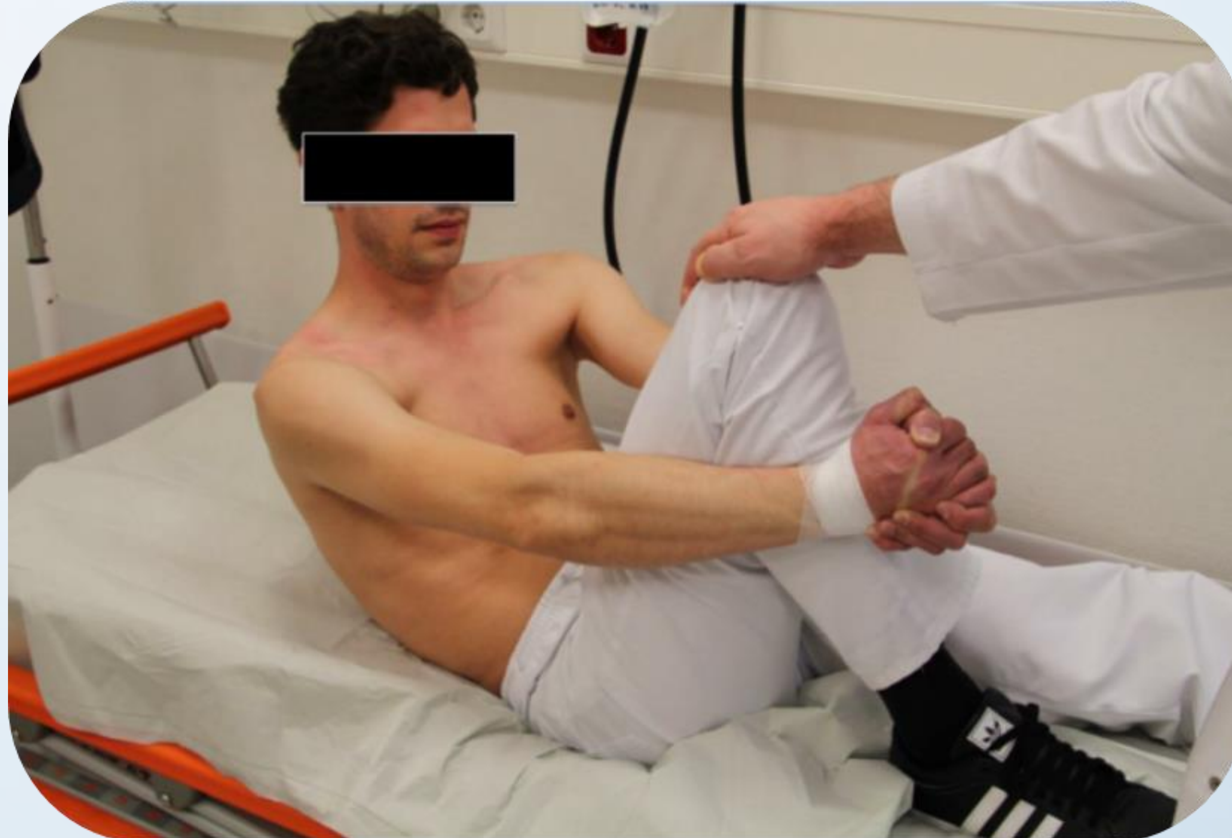
2.The **knee** on the same side of the dislocated arm is then **flexed to 90** and the patient places his **forearms around this knee**

3. The head of the examination table is then lowered slowly and the patient is asked to lean back **hyperextending his neck**





Self Reduction Technique



14.Cunningham technique

1.The patient must **sit upright**

2.The clinician **kneels or sits next to the patient** and places their **wrist on the forearm** of the patient's affected arm without any downward traction, and places the patient's hand on the clinician's shoulder

3.While supporting the affected arm, the clinician **slowly and gently moves the humerus into adduction** and **massages the patient's trapezius, deltoids, and biceps muscles**

14.Cunningham technique

4. When the clinician feels that the patient's **arm is relaxed**, the patient is asked to **shrug their shoulders in a superior and posterior direction** while the clinician continues to massage the patient's biceps muscle

5.Once the arm is **fully relaxed**, the humeral head should relocate quickly and painlessly

Thank You for your Attention