

Shoulder Injection Posterior Approach

Before the Procedure

1. Comprehensive Shoulder Exam

- Assess intra vs extra-articular fluid collections
- Assess the skin over insertion site
- Assessing for an acceptable target.
 - Palpate the infero-posterior aspect of the acromion with the thumb. Place the index finger on the coracoid process.

2. Indications

- Symptom control with steroid injection
- Localized pain persists weeks after trial of NSAIDs
- Risks of NSAIDs outweighs risk of local corticosteroids.

3. Contraindications

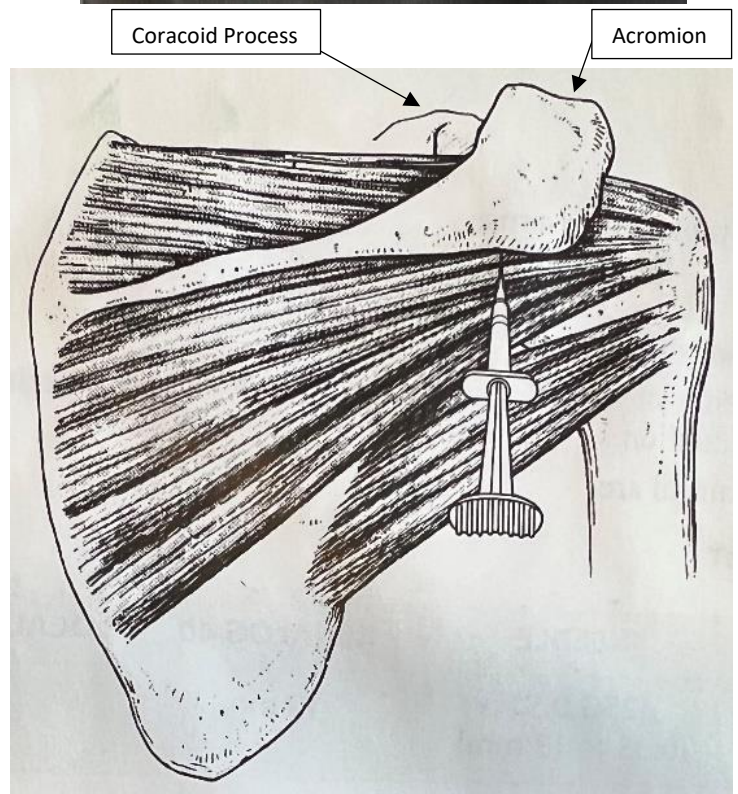
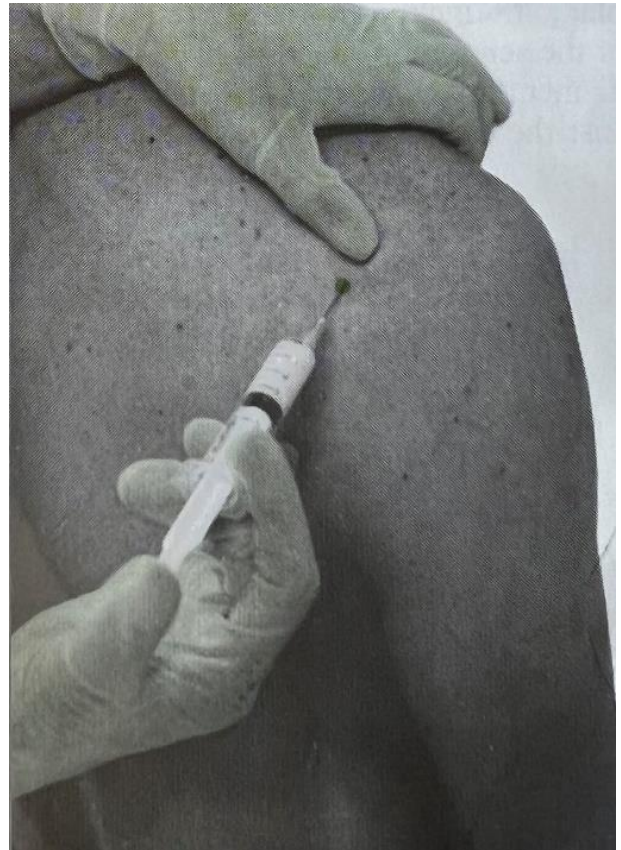
- Cellulitis or broken skin over entry site
- Uncontrolled Anticoagulant/Diabetes
- Severe primary coagulopathy
- Infected effusion, bursa, or peri-articular structure
- Do not perform injection on suspected septic arthropathy
- Allergies to injected meds
- Do not inject shoulders s/p arthroplasty – refer to ortho
- ≥3 previous injection in preceding 12 month period

4. Obtain Verbal or Written Informed Consent

- Risks, benefits, alternatives.

5. Equipment

- Non-sterile gloves
- Povidone-iodine swab
- Alcohol prep pad
- Band-Aid
- 2 ml 1% Lidocaine without epi vial Multi-use
- 40 mg or 1 ml Kenalog (40mg/ml)
- 3 ml syringe
- 22 gauge, 1.5" needle
- Band-Aid



During The Procedure

1. **"Time-out"** protocol to verify patient, side, and site of injection.
2. **Attending present** during the procedure.
3. **Prepare Equipment**
 - a. Put your gloves on
 - b. Draw up 2 ml Lidocaine, then 1ml Kenalog.
SHAKE WELL
 - c. Bandage opened and ready
4. **Patient Positioning**
 - a. Patient sitting upright
 - b. Arm internally rotated across the waist.
5. **Marking entry site** with marker or pen cap.
 - a. Palpate the infero-posterior aspect of the acromion with the thumb. Place the index finger on the coracoid process.
6. **Prep The Shoulder**
 - i. With Povidone-iodine stick –use circular motions from target outward.
 - ii. Repeat process with alcohol pad
7. **Posterior Approach**
 - i. Tell the patient when you will begin
 - ii. Advance needle from the point of entry just below the acromion and aim toward the coracoid. Insert 2-3 cm deep.
 1. You don't need to "hub" the needle
 - iii. Go slow so not to hit bone/cartilage.
 - iv. May feel "pop" of entering joint space
 - v. Aspirate to verify you are not in a blood vessel
 - vi. Inject medication in bolus – if difficult, stop and confirm position
 1. May need to advance a little further
 2. If on bone, pull back slowly.
 - vii. Remove needle and place bandage.

After the Procedure

1. **Aftercare Instructions for Patient**
 - a. Injections: Wrap up→Patient instructions: Corticosteroid Joint Injection
 - i. .IMCINJECTIONPTINSTRUCTIONS
2. **Place Order in EPIC**
 - a. Wrap up→Charge Capture: PR arthrocentesis aspir&inj major jt/bursa w/o US (aka injection)
 - i. PR 20610
3. **Document Procedure in EPIC**
 - a. .IMCINJECTION



Scan QR code with smart phone camera to access McMaster procedural video on shoulder injection.

Sources:

- Fowler, G. C. (2020). *Pfenninger & Fowler's procedures for Primary Care*. Elsevier.
- Loscalzo, J., Fauci, A. S., Kasper, D. L., Hauser, S. L., Longo, D. L., & Jameson, J. L. (2022). *Harrison's principles of Internal Medicine*. McGraw Hill.
- MSK injection techniques – teaching demonstration series · RheumTutor. RheumTutor. (2022, December 12). Retrieved February 8, 2023, from <https://www.rheumtutor.com/injection-techniques/msk-injection-techniques-teaching-demonstration-series/>
- Saunders, S., & Cameron, G. (1997). *Injection techniques in orthopaedic and Sports Medicine*. W.B. Saunders Co.