

Knee Injection – Instructional Guide

Confirm Indication	1. Knee osteoarthritis with insufficient response to PT and NSAIDs 2. Aseptic inflammatory arthritis ** For viscosupplements: only indicated for OA and only after failed response to CSI
Consider Contraindications	1. Hardware in the joint 2. Infection in overlying skin, joint or peri-articular structures 3. Potential knee surgery in <3 months 4. Prior inadequate response (<1mo benefit) to CSI
Obtain Consent	Explain in simple terms & confirm patient's understanding: 1. Procedural process 2. Risks & techniques to mitigate them 3. Potential benefits 4. Risks of not performing & alternatives.
Organize Supplies	See reverse side for details
Draw-up solutions	1. Clean each vial alcohol swab (if sterile cap was previously removed) 2. Using the larger needle aspirate ~2cc of lidocaine, then 1cc of triamcinolone or methylprednisolone
Positioning	<u>Superior-lateral approach</u> <ul style="list-style-type: none"> Supine with knee fully extended or slightly hyper-extended Quadricep relaxed, patella mobile <u>Anterior (medial or lateral) approach</u> <ul style="list-style-type: none"> Sitting upright with foreleg dangling from chair/bed with knee ~90 degrees
Identify Entry Site	<u>Superior-lateral approach</u> <ul style="list-style-type: none"> Draw straight lines along the superior and lateral margins of the patella and mark the point where the lines bisect as the insertion point. <u>Anterior (medial or lateral) approach</u> <ul style="list-style-type: none"> Identify and mark the inferior-medial/lateral border of the patella and patella tendon, then superior margin of tibial plateau. Identify insertion point ~1cm superior to tibial plateau and ~1cm medial/lateral to patella tendon.
Timeout	Confirm name, DOB, procedure, location, allergies
Sterile Prep	1. Apply chlorhexidine using scrub/friction >30sec or providone-iodine and allow to dry. 2. Maintain sterile site with 'no-touch' technique
Local anesthetic	Apply ethyl chloride spray for 5-10 seconds or until skin turns white. (optional)
Needle Insertion	1. Insert quickly through the skin at the marked insertion point to a depth of 2-4cm <u>Superior-lateral direction</u> <ul style="list-style-type: none"> Advance needle under the patella, parallel to the floor, perpendicular to femur. <u>Anterior (medial or lateral) direction</u> <ul style="list-style-type: none"> Advance needle parallel to the floor and directed towards the center of the joint, ~45deg medial/lateral. 2. Attempt aspiration prior to injection of needle.
Extraction	Obtain hemostasis and apply band-aid



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Supplies	
Marker	21-25g 1.5" needle (for injecting)
Alcohol swab	Chlorhexidine (or providone-iodine swab)
Lidocaine 1% (5cc)	2x2 gauze
Triamcinolone or Methylprednisilone 40mg/ml (1cc)	Band-aid
5-10cc syringe	Ethyl chloride spray (optional)
18-21g needle (for drawing up)	

References

McNabb, J. W. (2014). A Practical Guide to Joint & Soft Tissue Injections. United States: Wolters Kluwer Health.

AAOS. (2018). Essentials of Musculoskeletal Care. United States: Jones & Bartlett Learning, LLC.