DEPARTMENT OF
Radiology
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Musculoskeletal Imaging and Intervention Section Imaging Procedures

Ultrasound-guided Treatment of Calific Tendinitis of the Rotator Cuff

1. Place patient on stretcher in semi-upright position.
2. Place arm in internal rotation with hand behind the back.
3. Localize calcification(s) within the rotator cuff by ultrasound (12 MHz linear array transducer) in two orthogonal views.
4. After the patient is prepped and draped using sterile technique, place local anesthetic, both superficial and deep.
5. Replace with an 18-gauge, 1.5 inch needle. With a 10 ml syringe filled with equal parts saline and 1% lidocaine hydrochloride attached, orient the needle and syringe in a craniocaudal direction to keep the syringe below the calcification. (i.e. gravity dependent)
6. Single needle lavage technique: place tip of needle into calcification. Do not aspirate. Instead, push syringe plunger a small amount and then release pressure. (similar to air release LESI technique) Allow lidocaine to flow back into the syringe along with calcifications. Replace syringe as needed. Repeat until calcification disappears, or if aspirate is clear. Of note, if cannot inject, then withdraw needle tip to edge of calcification and inject. (If all else fails, mechanically fenestrate the calcification with the needle to induce bleeding/resorption)
7. Finally, inject 1 ml of Kenalog-40 overlying the affected cuff in the SASD bursa. (prevents bursitis) If a lot of pain during procedure, you can mix with 0.5% Ropi.

Typical lavage time: 10 minutes