



4th Annual Symposium

***Creating The Future  
Of Physical Therapy Now!***

# **MUSCULOSKELETAL ULTRASOUND IMAGING REPORT WRITING**

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**AIUM**  
**(AMERICAN INSTITUTE OF ULTRASOUND IN MEDICINE)**  
**WWW.AIUM.ORG**

“THE AMERICAN INSTITUTE OF ULTRASOUND IN MEDICINE (AIUM) IS A MULTIDISCIPLINARY ASSOCIATION DEDICATED TO ADVANCING THE SAFE AND EFFECTIVE USE OF ULTRASOUND IN MEDICINE THROUGH PROFESSIONAL AND PUBLIC EDUCATION, RESEARCH, DEVELOPMENT OF PARAMETERS, AND ACCREDITATION.”



# INDICATIONS

Indications for MSK ultrasound include but are not limited to:

- A. Pain or dysfunction.
- B. Soft tissue or bone injury.
- C. Tendon or ligament pathology.
- D. Arthritis, synovitis, or crystal deposition disease.
- E. Intra-articular bodies.
- F. Joint effusion.
- G. Nerve entrapment, injury, neuropathy, masses, or subluxation.
- H. Evaluation of soft tissue masses, swelling, or fluid collections.
- I. Detection of foreign bodies in the superficial soft tissues.
- J. Planning and guiding an invasive procedure.
- K. Congenital or developmental anomalies.
- L. Postoperative or postprocedural evaluation.
- M. Joint laxity, stiffness, or decreased range of motion.
- N. Malalignment.
- O. Sensory deficits or paresthesias.
- P. Motor weakness.

**MSK ultrasound examination should be performed when there is a valid medical reason.  
There are no absolute contraindications.**

# COMPLETE (76881) OR LIMITED EXAM (76882)

**Complete exam-** Complete assessment of the joint or anatomic region

Evaluation of the joint, synovium, bone, muscles, tendons, tendon sheath, ligament, fascia, capsule, other supporting structures

**Limited Exam-** Specific anatomic structure

As applicable, structures should be imaged in more than one plane.

Measurements of abnormal structure in 2 orthogonal planes



# SOFT TISSUE MASS EVALUATION

Scan in both long- and short-axis planes.

Ultrasound is an excellent method to differentiate solid from cystic masses.

The mass should be measured in 3 orthogonal dimensions

Evaluate its relationship to surrounding structures, particularly joints, neurovascular bundles, and tendons

Compressibility of the lesion should be evaluated.

A color or power Doppler evaluation will help delineate whether the mass has internal vascularity.

# ELEMENTS OF REPORT

- Patient Name
  - Age
  - Gender
  - Date of Exam
  - Reason for the exam ICD 10 code
  - Name of referring provider
  - Location of Ultrasound facility & contact information
- 
- ☐ Commonly used anatomic measurement
  - ☐ Any limitation of the study (e.g. body habitus, high BMI, post surgical)
  - ☐ Comparison with prior imaging (if available)
  - ☐ Variations from normal size should be accompanied with measurements
  - ☐ Images labeled with patient identification, date, side (Rt/Lt) of anatomic site
  - ☐ Normal & Abnormal images
  - ☐ Impression/conclusion/interpretation



# REPORTING OF ULTRASOUND-GUIDED PROCEDURES

Documentation of the informed consent communication between the provider and the patient concerning the procedure

The final report must contain the following:

- Patient's name and other identifying information.
- Facility's identifying information.
- Performing provider/interpreting physician identifying information.
- Pertinent clinical information, including indication for ultrasound guidance.
- Documentation of informed consent.
- Date and time of the ultrasound guidance of the procedure.
- Specific ultrasound-guided examination performed,
- Description of the target and relevant associated structures, both normal and abnormal, if clinically applicable.
- Description of the use of ultrasound to localize the target and the essential elements of the procedure,  
Needle/device type and gauge.
- Number of passes performed.
- Name of medication(s) injected and amount used (if applicable).
- Specimen type and amount removed if any, as well as its disposition.
- Complications.
- Recommendations for follow-up imaging.



# **NEW REPORT TEMPLATE REVIEW**

# ROTATOR CUFF TEARS- PARTIAL

**There is a partial thickness tear of the bursal (or articular) surface (or intrasubstance) of the anterior aspect of the supraspinatus tendon which measures 2mm in longitudinal section and 3 mm in transverse section.**

**There is a partial thickness articular sided tear of the supraspinatus tendon lying 2 mm posterior to the rotator interval. It measures 3 mm in width and extends over (or under) 50% of the tendon depth. The remainder of the tendon has reasonable depth and texture.**

**The supraspinatus tendon has heterogenous hypoechoic appearance which is consistent with tendinopathic changes without the evidence of increased vascularity on color US**



# FULL THICKNESS TEARS

**There is a incomplete full thickness tear of the supraspinatus tendon. The tear measures 2 mm in width and there is 3 mm retraction from the insertion.**

**There is a complete, full thickness tear of the supraspinatus tendon with proximal retraction of mm from the insertion**

**There is a complete, full thickness tear of the supraspinatus tendon. The retracted tendon end is not visualised. Cuff arthropathy noted.**

# SUBACROMIAL BURSA

The subacromial/subdeltoid bursa with effusion. The wall is hyperaemic on power Doppler. The patient is tender to scan here and appearances are consistent with bursitis.



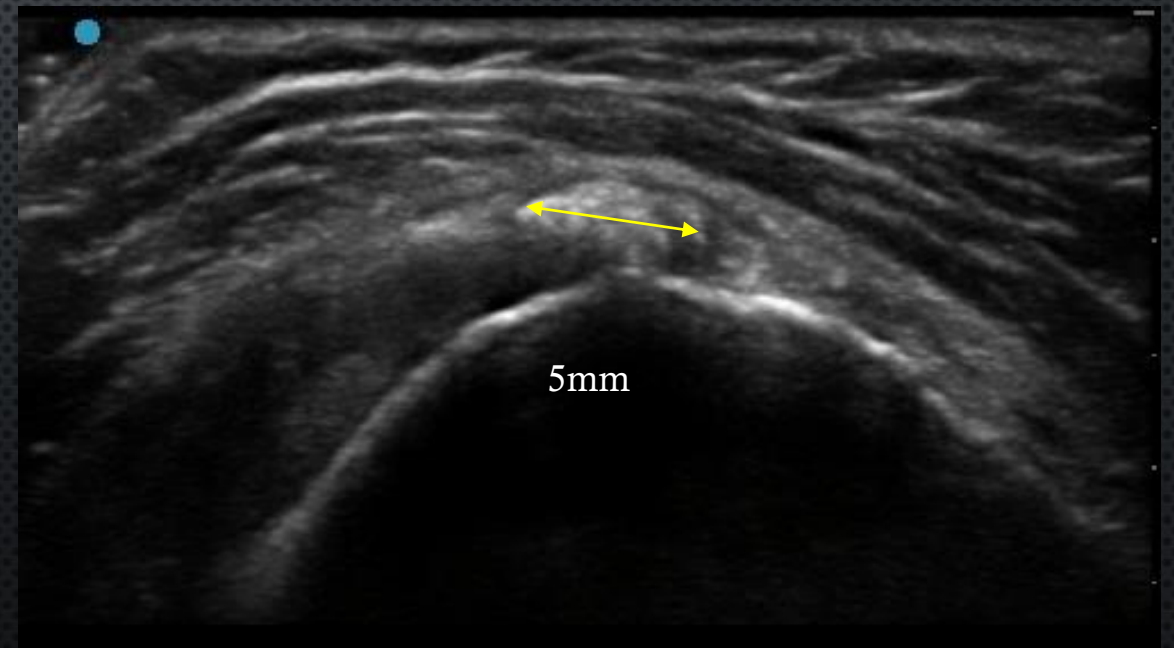
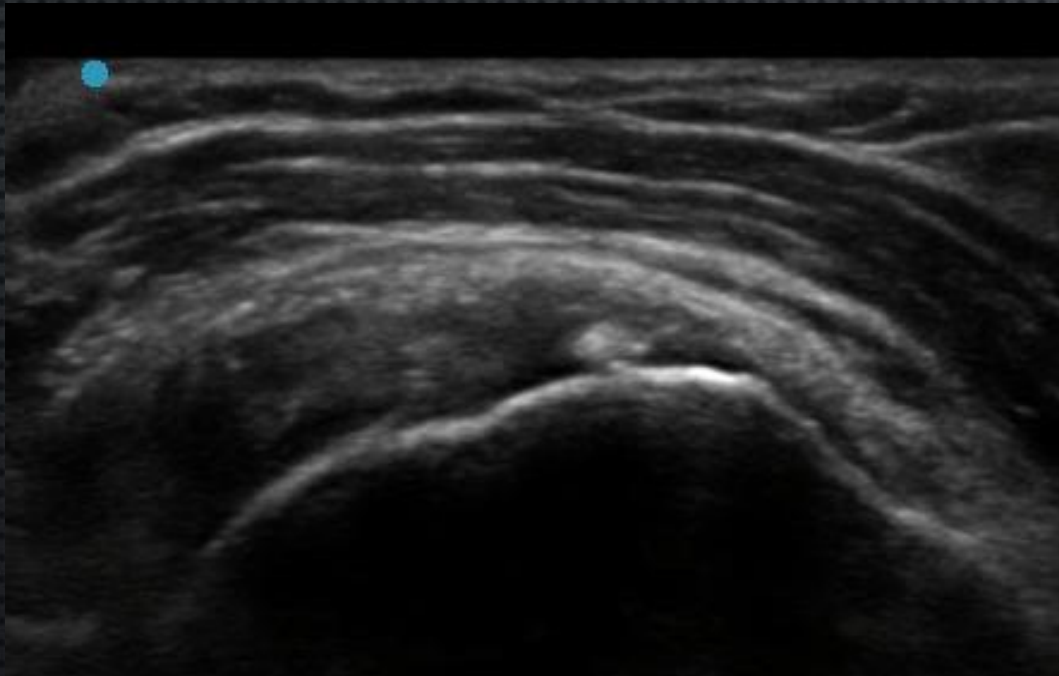
# CALCIFIC DEPOSIT

A 2 mm intratendinous calcium deposit is noted within the ant/mid/post aspect of the supraspinatus tendon

- There is a 5 mm calcific deposit within the supraspinatus tendon causing posterior shadowing.
- There is a 3 mm non-shadowing deposit within the supraspinatus tendon likely to be soft calcific tendinopathy.
- There is evidence of multiple calcific deposits in the rotator cuff tendons. The largest area of calcification in the supraspinatus tendon measures 7 mm in diameter and the patient is tender on scanning.

# IMPRESSION

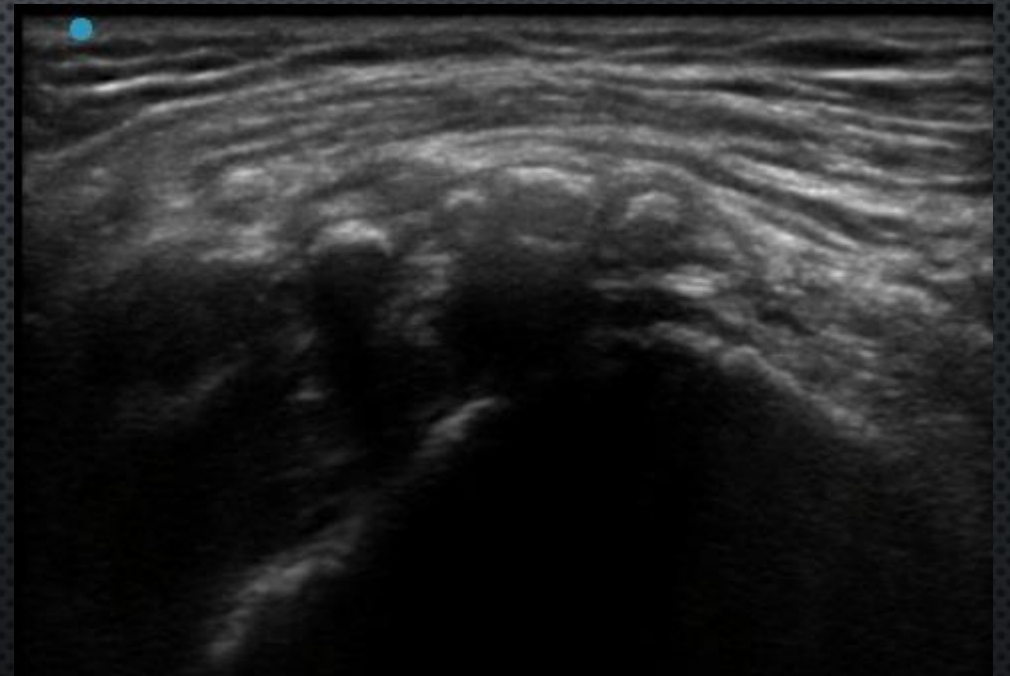
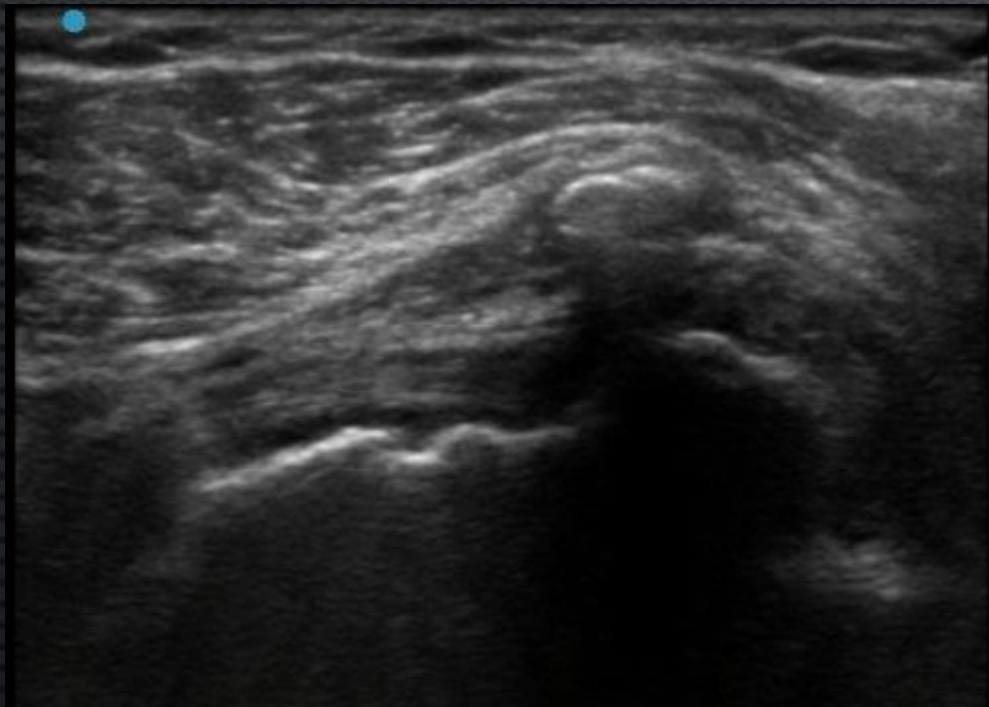
46 year old female with complaints insidious onset of right shoulder pain  
US exam shows calcific deposit in the supraspinatus tendon without evidence of hyperemia on color doppler US



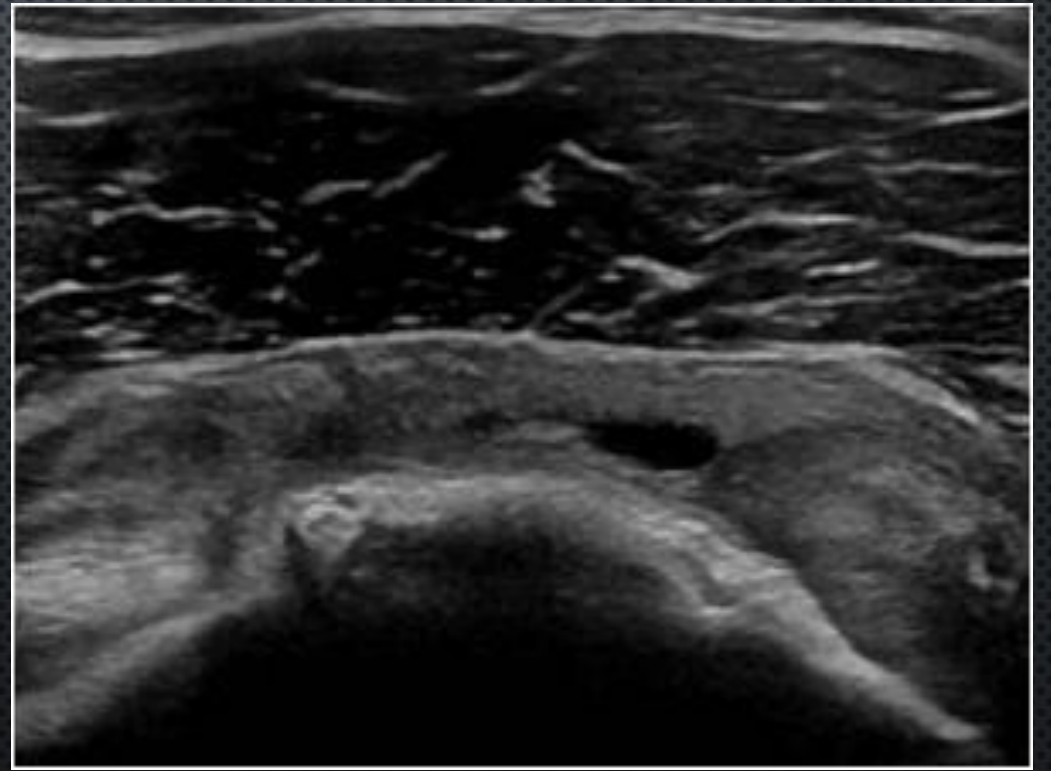
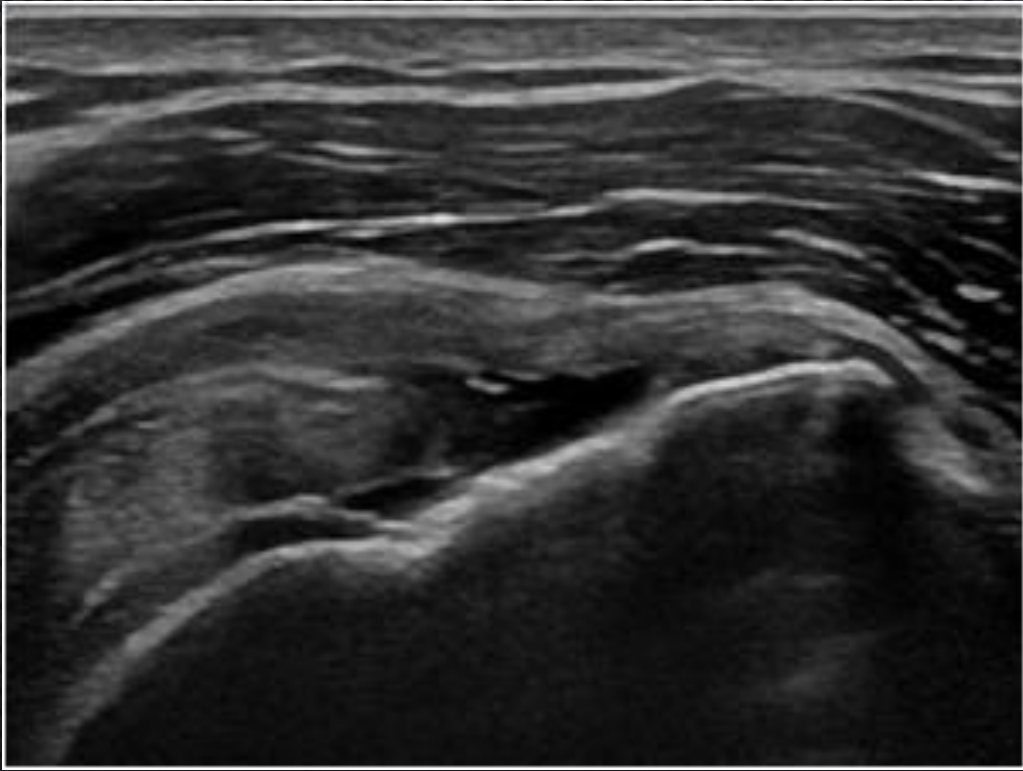


# IMPRESSION

Anterior shoulder pain with painful and mildly limited internal rotation



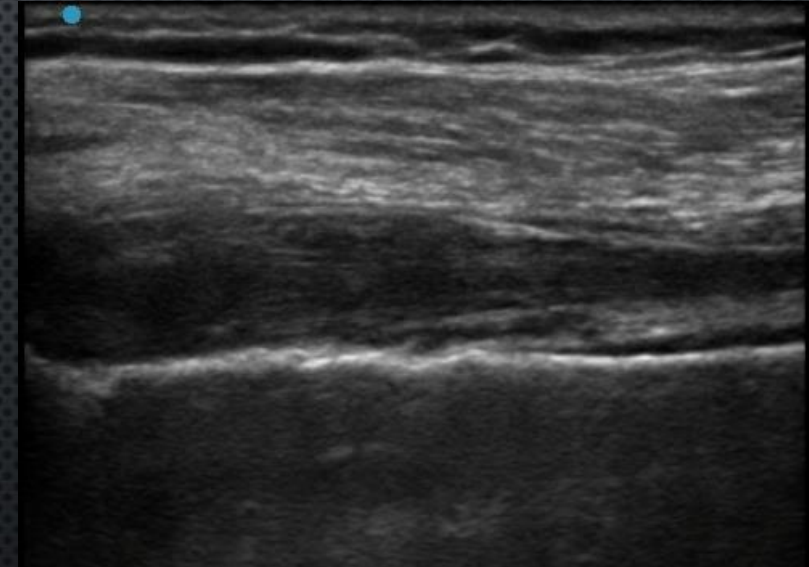
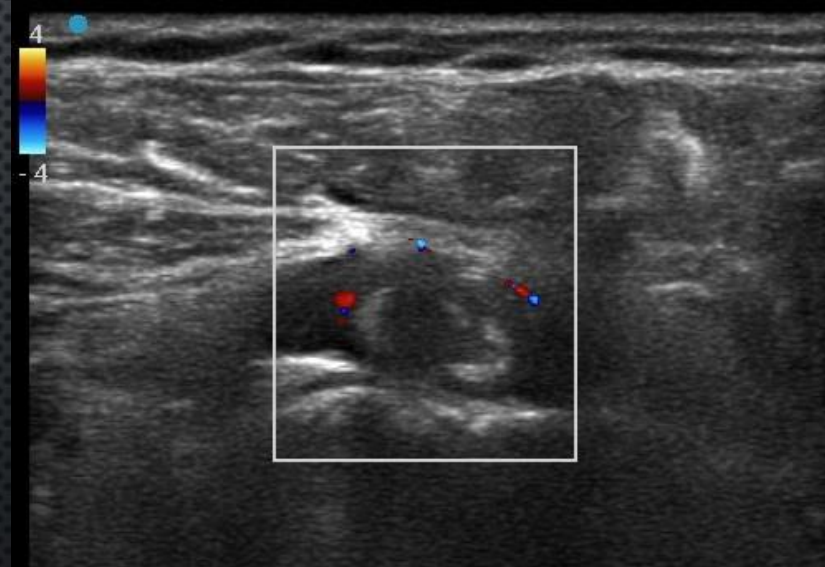
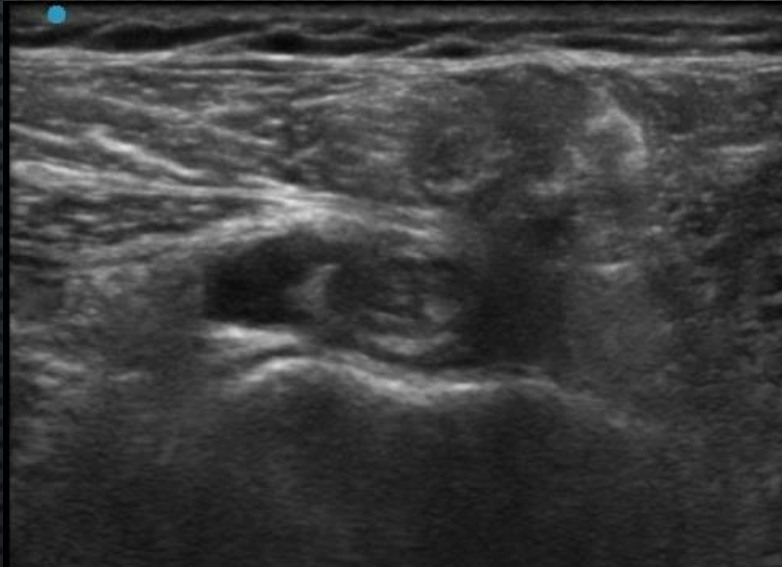
# IMPRESSION



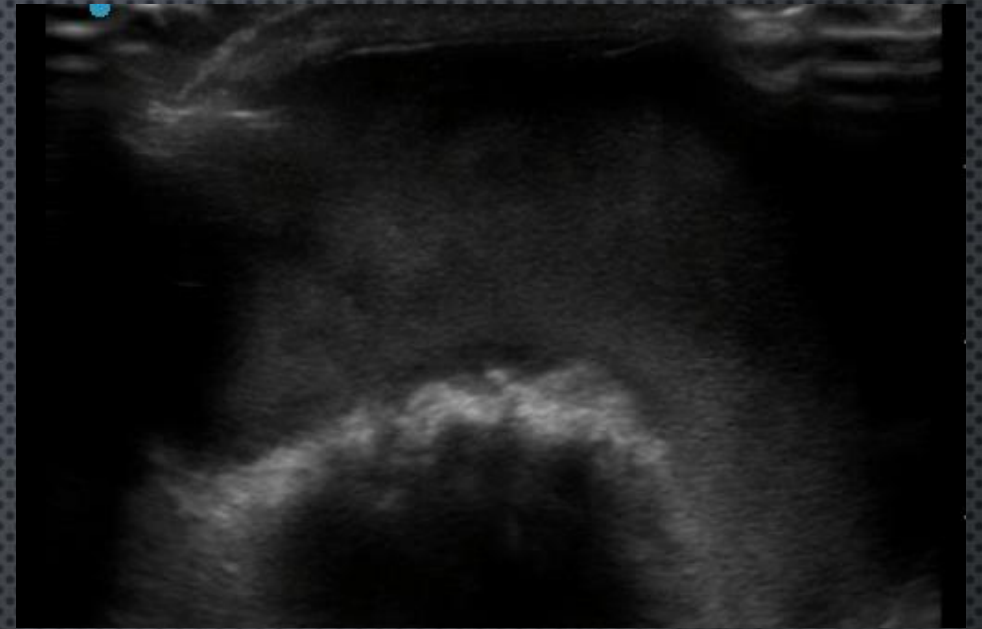
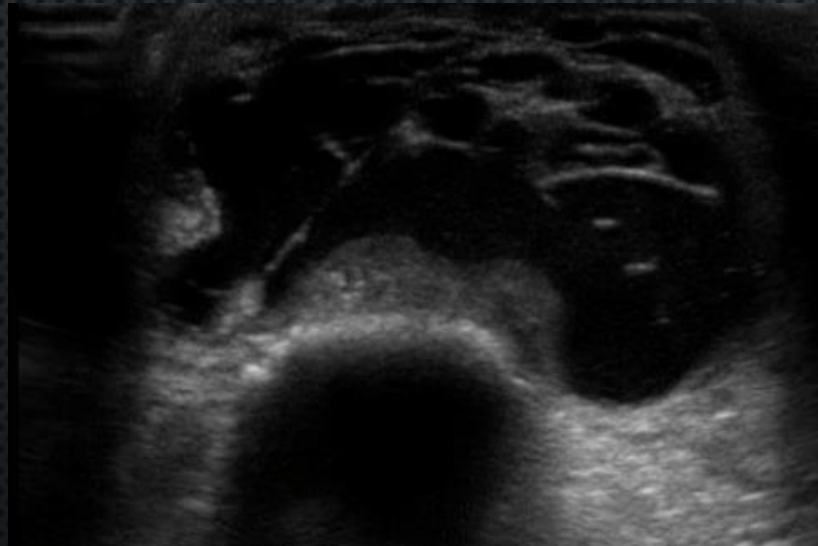
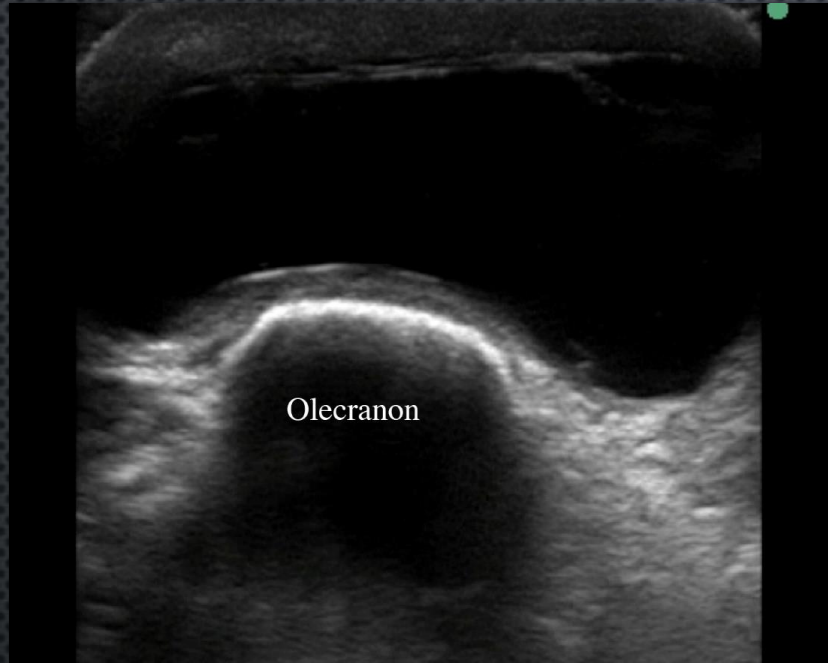


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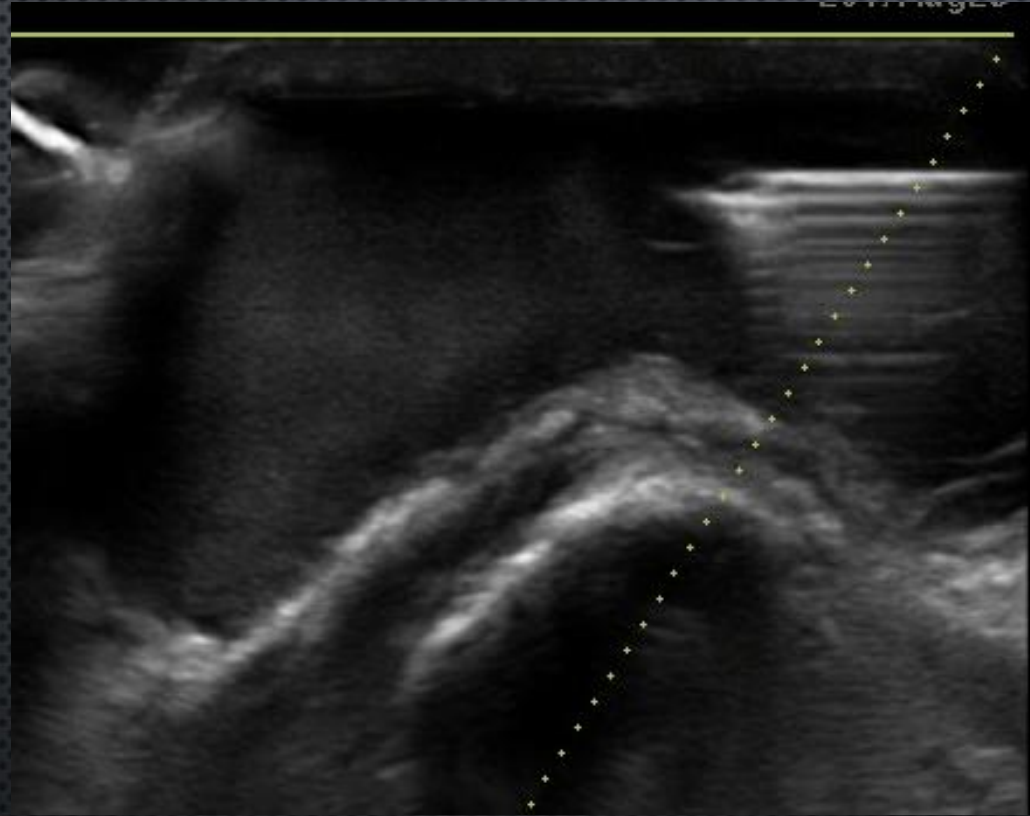
Complaints of pain of right shoulder which are localized anteriorly with tenderness to palpation in the bicipital groove



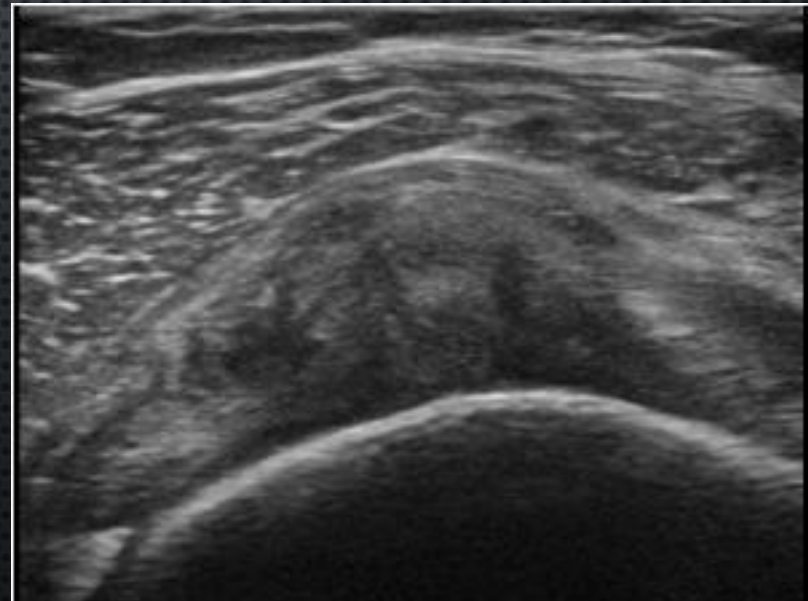
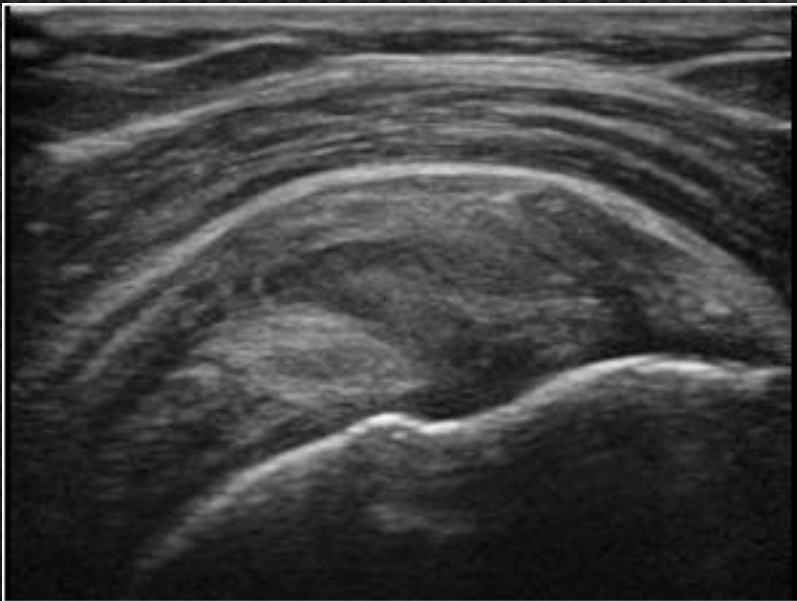
# OLECRANON BURSA





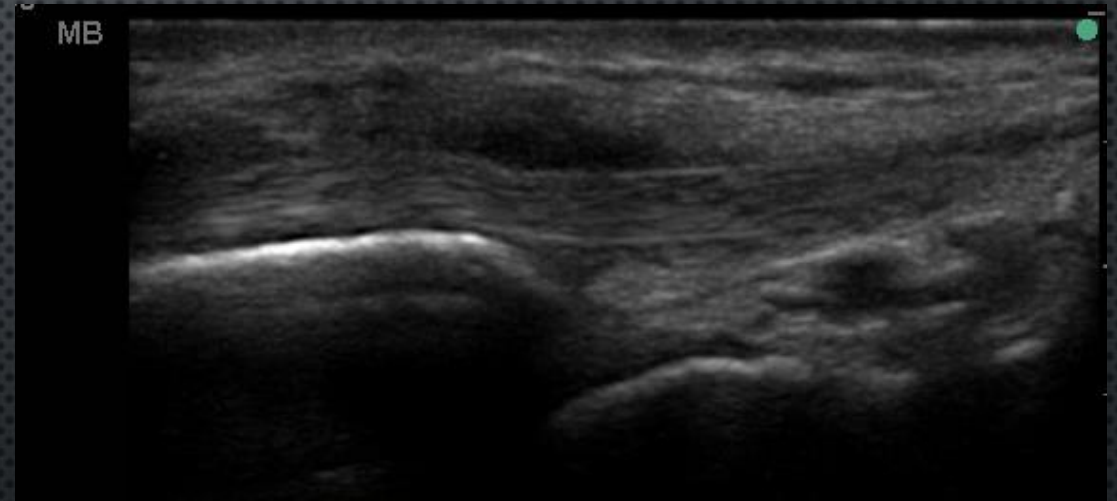


# IMPRESSION

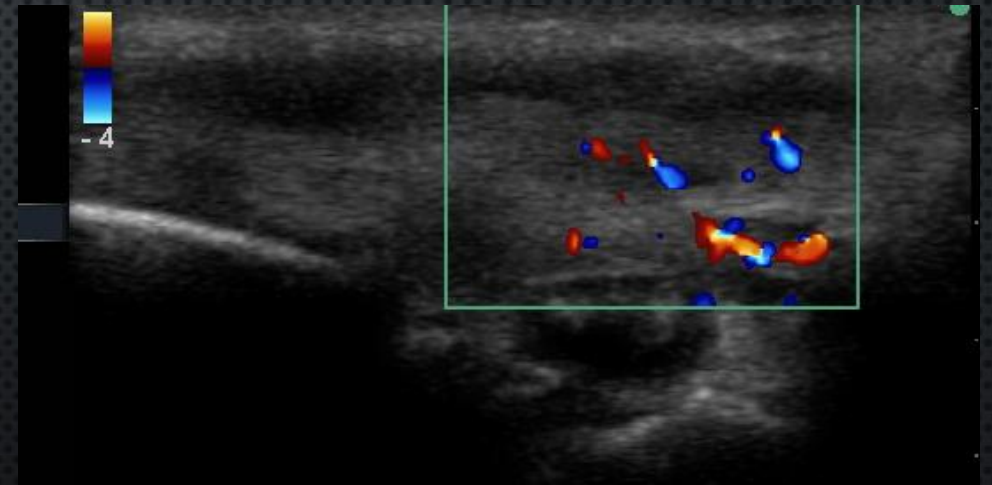
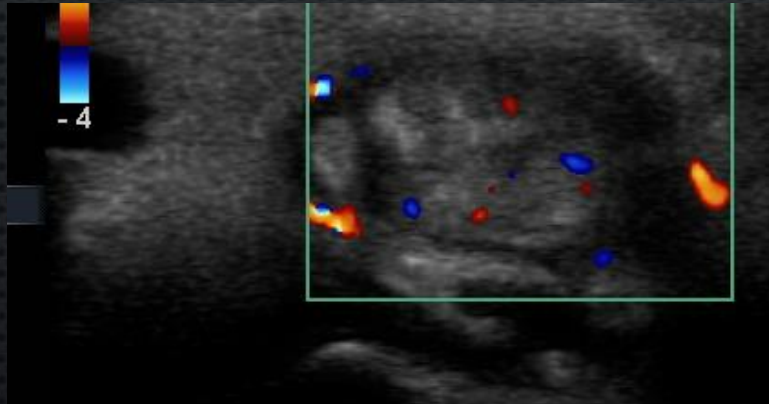
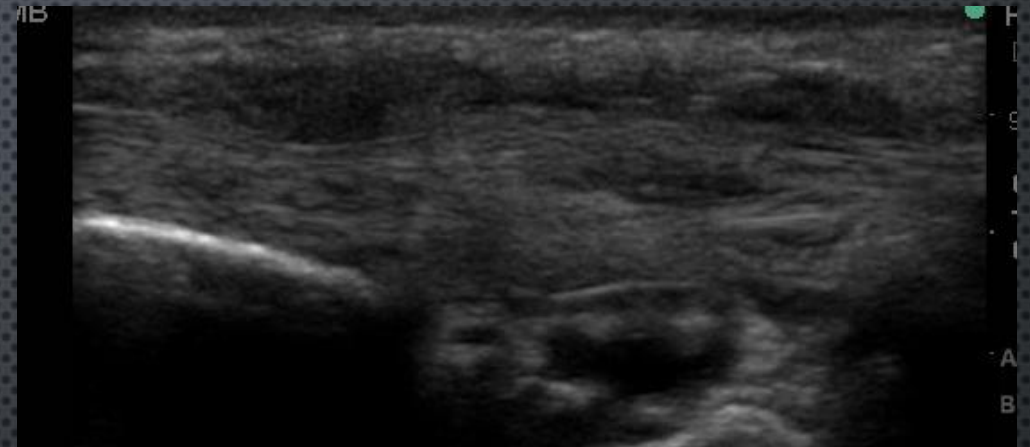
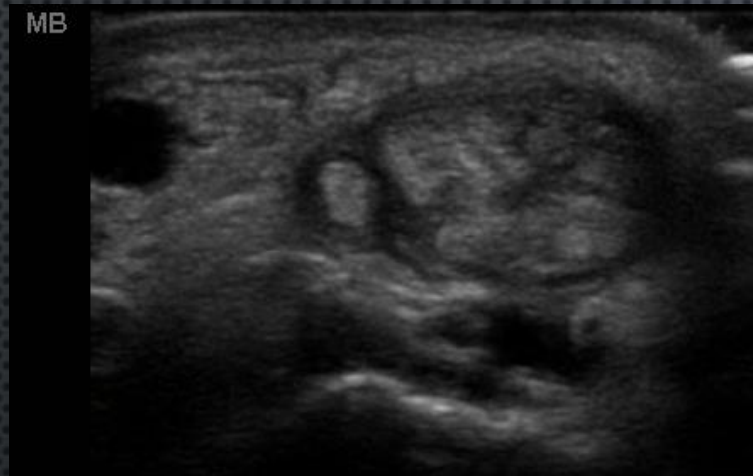




# DEQUERVAIN TENOSYNOVITIS

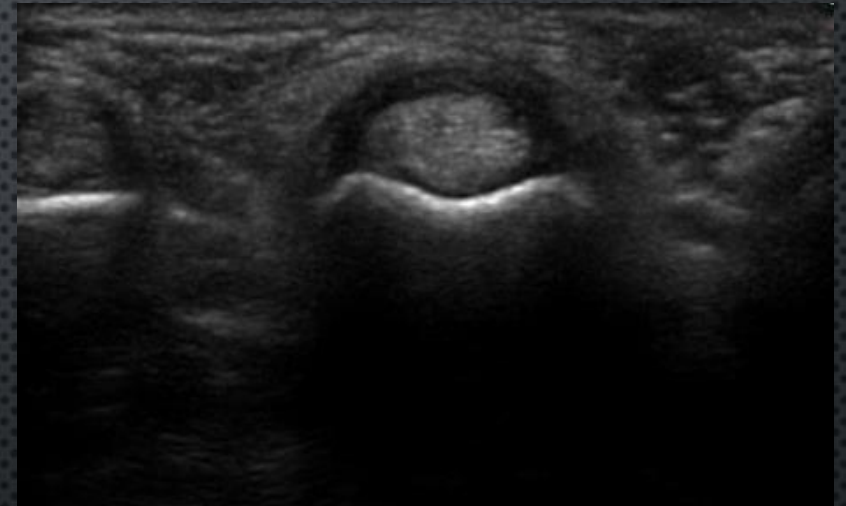
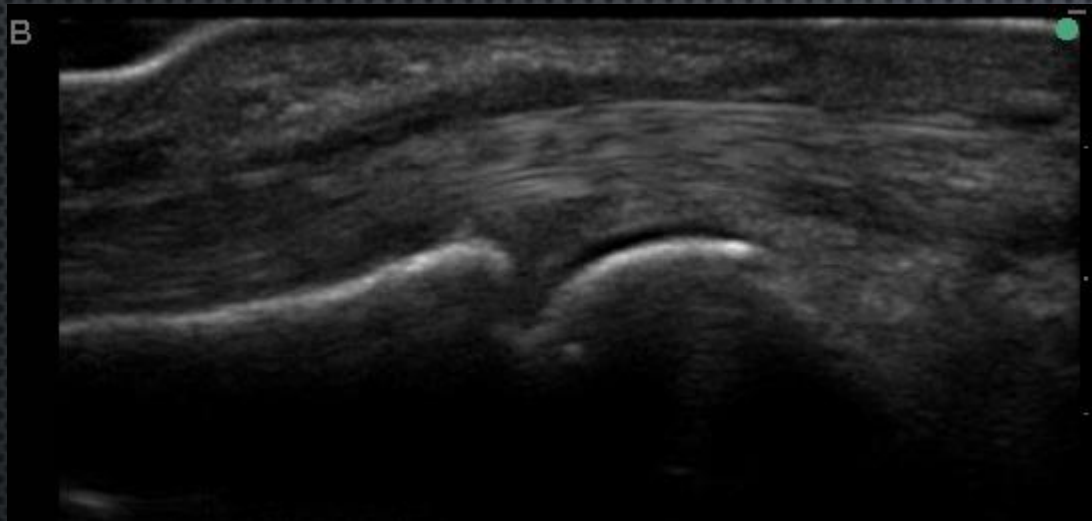


# FIRST DORSAL COMPARTMENT





# TRIGGER FINGER



**Thank  
You**