



Shoulder ultrasound Reporting

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Medicolegal Duty of care



- Professional is legally accountable
- Public document, part of the patient's medical record
- Patient consent, right to expect competent ultrasound practitioner

Local guidance



- Standardise – account of the examination
- Communication with shoulder team – relevance
- MDT

Guidelines For Professional Ultrasound Practice

- 2.12 Musculoskeletal ultrasound examinations 77
- Examination specific guidelines and common scenarios
- | | |
|---|-----------|
| 2.12.1 Shoulder | 77 |
| 2.12.2 Elbow | 83 |
| 2.12.3 Wrist and hand | 87 |
| 2.12.4 Hip | 90 |
| 2.12.5 Knee | 93 |
| 2.12.6 Foot and ankle | 96 |
| 2.12.7 Rheumatology ultrasound examinations | 100 |

Steps to a good report



- Relevance
- Technical limitations recorded
- Scrutiny - images, cross-checking
- Critical analysis - normal age related
- Knowledge skills – further advice
- Further investigation
- Professional acknowledgment , communication with referrer
- Urgent communication recorded in report
- Communication with patient – CARE management

Standard report



Include:

- Type of examination e.g shoulder ultrasound
- Clinical details
- Observation of the findings
- Conclusion

- Succinct, relevant, plain English, avoid ultrasound, terminology or abbreviation
- Local template/short code

Standard shoulder report

Include:-

- normal anatomy – e.g. all structures examined
- pathology - measurements, increase in vascularity
- additional clinical information
- difficulties with interpretation – post surgical changes, obesity/muscular, lack of mobility

Sample - Normal

**Normal appearances of the rotator cuff tendons.
No evidence of tears or calcification or any bursal thickening or effusions.**

The long head of biceps tendon is intact and in situ.

**No evidence of a gleno-humeral joint effusion.
Unremarkable ACJ noted.**

If appropriate, the report may include the following:

- the rotator cuff tendons have reasonable depth and texture;*
- there is evidence of subacromial/subdeltoid bursal thickening but no more so than on the symptomatic shoulder;*
- there is good, pain free subacromial movement;*
- non-tender ACJ OA noted.*

Sample reports- tendonopathy

- **The supraspinatus tendon appears generally thickened/thinned and tendonopathic with loss of the normal fibrillar pattern. No tears seen.**
- **Focal tendonopathic changes are noted at the anterior/middle/posterior portion of the supraspinatus tendon, no tears seen.**

Sample report for calcific tendonopathy

- A x mm intratendinous calcium deposit is (calcific flecks are) noted within the ant/mid/post aspect of the supraspinatus tendon; no tears evident.
- There is a 6mm densely shadowing calcific deposit within the supraspinatus tendon.
- There is a 6mm non shadowing deposit within the supraspinatus tendon likely to be soft calcific tendonopathy.
- There is marked calcific tendonopathy of the rotator cuff tendons. The largest area of calcification in the supraspinatus tendon measures 15mm in diameter and the patient is tender on scanning.

Sample report - bursitis

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

Sample reports -LHB

- **The long head of biceps tendon is intact but has dislocated from the bicipital groove medially and is sitting on the surface of the subscapularis tendon.**
- **The long head of biceps tendon has subluxed onto the medial lip of the bicipital groove. The tendon is thickened and appears oedematous. The tendon sheath is hyperaemic and contains an effusion and the patient is tender to scan here. Ultrasound appearances suggest an intact subluxed long head of biceps tendon with evidence of tenosynovitis.**

Sample reports for PT tears

- **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.**
- **The supraspinatus tendon appears generally tendinopathic and there is a partial thickness (articular)(bursal) surface tear within the anterior/middle/posterior portion of this tendon. This tear measures xmm x xmm and affects over (or under) 50% of the tendon depth.**
- **There is a partial thickness tear on the articular surface of the supraspinatus tendon lying xmm posterior to the rotator interval. It measures xmm in width and extends over (or under) 50% of the tendon depth. The remainder of the tendon has reasonable depth and texture.**

Sample reports – FT tears

- **There is a full thickness, insertional tear of the supraspinatus tendon lying xmm posterior to the rotator interval. The tear measures xmm in width and there is xmm retraction from the insertion. The remainder of the tendon has reasonable depth and texture.**

Complete FT tears

- **The supraspinatus tendon has completely ruptured and retracted the retracted tendon end is not visualised. Cuff arthropathy noted.**
- **There is a complete, full thickness tear of the supraspinatus tendon with proximal retraction of mm from the insertion.**

References - report



- The Royal College of Radiologists (2006) Standards for the Reporting and Interpretation of Imaging Investigations. RCR
<https://www.rcr.ac.uk/publication/standards-reporting-and-interpretation-imaging-investigations>
- The Royal College of Radiologists (2012) Standards for the communication of critical, urgent and unexpected significant radiological findings. (2nd ed) RCR
<https://www.rcr.ac.uk/standards-communication-critical-urgent-and-unexpected-significant-radiologicalfindings-second>
- The Royal College of Radiologists (2011) Standards and recommendations for reporting and interpretation of imaging investigations by non-radiologist medically qualified practitioners and radiologists. RCR
<https://www.rcr.ac.uk/standards-and-recommendations-reporting-and-interpretation-imaging-investigationsnon-radiologist>
- Edwards H. et al (2014) What Makes a Good Ultrasound Report? Ultrasound, 22: 57–60.

References - shoulder

- Girish G, Lobo LG, Jacobson JA et al. Ultrasound of the shoulder: asymptomatic findings in men. Am J Roentgenol 2011; 197: W713–9 2)
- Tempelhof S, Rupp S, Seil R. Age-related prevalence of rotator cuff tears in asymptomatic shoulders. J Shoulder Elbow Surg 1999; 8: 296–9 3)
- Rutten MJ, Jager GJ, Blickman JG. From the RSNA refresher courses: US of the rotator cuff: pitfalls, limitations, and artifacts. Radiographics 2006; 26: 589–604 4)
- Beggs I, Bianchi S, Bueno A, et al. Musculoskeletal ultrasound technical guidelines I. Shoulder. European Society of MusculoSkeletal Radiology. See <http://www.essr.org/html/img/pool/shoulder.pdf>
- Smith MJ, Rogers A, Amso N, Kennedy J, Hall A, Mullaney P A training, assessment and feedback package for the trainee shoulder sonographer. Ultrasound 2015 23(1):29-41
- Tham ER. J Shoulder Elbow Surg. 2013 Aug;22(8)Ultrasound changes after rotator cuff repair: is supraspinatus tendon thickness related to pain?

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