

Diagnostic Point of Care Ultrasound (POCUS) is a comprehensive clinical examination that incorporates a diagnostic ultrasound assessment into a single appointment.

Diagnostic Ultrasound uses sound waves to visualise conditions affecting muscles, tendons, ligaments, joints and soft tissue throughout the body. Advantages of ultrasound include detailed, real time, dynamic assessment of soft tissues and the ability to compare with the contralateral side.

Acute / Traumatic Onset Conditions

Patients presenting with an acute or sudden deterioration in function, not suspected to have a bony or neurological cause maybe suitable for an acute POCUS assessment. Early imaging in this group can be critical to reach a correct and prompt diagnosis, ensuring best care.

If the mechanism of injury, or patients bone health raises suspicion of a possible bony injury this must be investigated in the first instance, usually via plain film, through your usual referral pathways. Private referrals for x-rays or MRI can be arranged on request.

Chronic or Gradual onset Conditions

Chronicity presents many clinical challenges. POCUS adds another layer of clinical information into the assessment, enhancing the ability to differentiate between relevant and incidental pathology to reach a diagnose in complex clinical presentations.

Patients do not always progress despite the right treatment. POCUS assessments reassure the patient and clinician in clarifying the clinical diagnosis, support patients understanding and adherence to rehabilitation plans. On occasion POCUS can identify patients that may need further imaging, alternative treatment or onward referral.

Contraindications for diagnostic scans are unlikely; however, some limitations exist and include:

- spinal conditions including the head and neck
- inability to see structures that lie deep to bone or intra-articular structures/ pathology
- casts, dressings, open wounds/ulcers etc.
- Severe oedema/swelling
- patients who are unable to co-operate or supply a clinical history due to reduced cognitive functions e.g., Alzheimer's or dementia and through involuntary movements.

Common musculoskeletal pathologies suitable for diagnosis by MSKUS are:

Tendinopathy / Tenosynovitis
Bursitis
Tendon ruptures – Partial or Full

Calcific tendinopathy
Effusion / Ganglion
Ligament ruptures – Partial or Full

Tendon Dislocation or Subluxation

Joint synovitis



N.B. Lumps and Bumps are not covered in the MSKUS service. If an unexpected finding is made a suitable discussion/ referral will be made.

Please see the IT Quick Reference Guide for a list of conditions suitable to be assessed via POCUS

Referral Steps

If the patient is a new patient, please specify. Where the patient has already seen a colleague, please complete the MSK US + IT Referral Form. All requests should include:

- Specific site of symptoms.
- A clear clinical question(s)
- Summary of presenting symptoms, relevant past medical history, and clinical findings.
- Results of any other relevant investigations
- Differential diagnosis

All POCUS assessments are performed as part of a clinical assessment. The patient's medical records will include an Ultrasound report that is a recording and interpretation of observations made during the examination. The report is intended to answer a clinical question and to help with the patient journey. Some structural changes seen on ultrasound may not be clinically relevant and may not be associated with pain as age-related changes are common in the musculoskeletal system. The site of current symptoms and clinical context will help reach a correct diagnosis.

Comparison with the contralateral side (assuming it is asymptomatic) is often performed and documented in the report to help when deciding the clinical significance of age/activity related changes. Any difficulties with interpretation of the ultrasound appearances will be recorded.

If you would like advice and guideance please feel free to email info@thevalleyclinic.co.uk.

N.B. if you are considering referring for shockwave treatment it is best practice to arrange an US-assessment first to rule out the potential for a partial tear as this is a contra-indication to shockwave treatment.