

Imaging Guidance for Ultrasound Imaging of the Shoulder.

Shoulder pain is common complaint and may be due to intrinsic derangement of the shoulder or referred pain. Referred pain can be cardiac, cervical or abdominal in origin.

Rotator cuff pathology and impingement are commonest causes of shoulder pain. Incidence of rotator cuff tears increase with increasing age and most of these are asymptomatic.

Diagnostic imaging of the shoulder is valuable when directed by the history and physical examination.

Non-specific use of imaging can result in delayed diagnosis, inappropriate management and poor patient outcome.

Treatment of symptomatic rotator cuff tears depends upon several factors like:

1. Duration of symptoms.
2. Shoulder dominance.
3. Type of tear (partial versus full thickness) and
4. Patient factors like age of the patient, general health condition, co morbidities and activity levels

In most cases, surgery is considered when conservative measures fail. The only important exception to this principle is an acute full thickness traumatic tear of an otherwise normal rotator cuff in a healthy individual.

For all non-traumatic chronic rotator cuff tears, a trial of conservative treatment, consisting primarily of physiotherapy, is indicated. Should physiotherapy fail to relieve pain or improve function, surgery may be needed.

Elderly patients (>70 years), patients with several co-morbidities and very limited activity levels are unlikely to be treated surgically.

Red flags:

1. Trauma, Pain and weakness? - Acute cuff tear.
2. Weight loss / History of cancer/ Mass swelling? - Tumour.
3. Septic, fever or systemically unwell? - Infection.
4. Trauma/epileptic fit/electric shock leading to loss of rotation and abnormal shape? - Unreduced dislocation.

Ultrasound examination modality of choice for evaluation of rotator cuff pathology at UHL.

US should not be used for evaluation of

1. AC joint problems,
2. Frozen shoulder or
3. Intra articular derangement like labral tears.

