

MSK SERVICES PATHWAY - SHOULDER PATHOLOGY

GPs to follow guidance offered within this pathway and where relevant refer using Ardens templates and within remit of CCG Restricted and Not Routinely funded policy.

RED FLAG

Diagnosis to monitor

- Septic arthritis
- Dislocations
- Visceral referred pain
- Acute rotator cuff tear
- Fractures
- Tumours
- Neurological lesion

History & Symptoms

Medical Professionals seeing patients with MSK complaints in primary care should be trained in assessing for alarming features and red flags in all patients. [▶ Click Here](#)

Injury

Consider admission/urgent referral [▶ Click Here](#)

ASSESSMENT & DIAGNOSIS OF OTHER CONDITIONS

Adhesive capsulitis/contacted shoulder [▶ Click Here](#)

Subacromial pain syndrome [▶ Click Here](#)

Glenohumeral OA/18 AC joint [▶ Click Here](#)

Rotator cuff [▶ Click Here](#)

Instability (non-acute) [▶ Click Here](#)

RED FLAG SCREENING: SPECIFIC FOR SHOULDER PATHOLOGY

History & Symptoms

Medical Professionals seeing patients with MSK complaints in primary care should be trained in assessing for alarming features and red flags in all patients.

CONSIDER ADMISSION/URGENT REFERRAL IF:

History of, or suspected malignancy investigate and refer as appropriate.

SYMPTOMS SUGGESTIVE OF TUMOURS (PRIMARY OR METASTATIC):

- PMH of cancer - Bony metastasises develop in 2/3 of patients with cancer - Mostly prostate, breast, kidney
- Unexplained weight loss
- Non-mechanical night pain
- Deep, intense pain
- Pain worse at night
- Fever
- Mass presence
- Lymphadenopathy

If History of cancer, needs to be referred urgently for specialist assessment in line with 2 week fast track cancer pathway.

SYMPTOMS SUGGESTIVE OF INFECTION OR SEPTIC ARTHRITIS:

- Risk factors for sepsis include: Comorbidities of RA, or OA, prosthetic joint, low socioeconomic level, dia betic, alcoholism, previous intra-articular joint injection, IV use
- Constant pain
- Sudden onset, red, hot, pyrexia or red-hot joint
- High inflammatory markers
- Systemic symptoms
- Fever, not always present

Suspected inflammatory condition, investigate and refer to Rheumatology - see Rheumatology pathway.

SYMPTOMS SUGGESTIVE OF ACUTE SHOULDER JOINT FRACTURE/DISLOCATIONS:

- Trauma
- Pathological fracture (OP, Paget's, multiple myeloma, PMH Ca)
- Neurovascular deficit
- Deformity
- Muscle wasting

Suspected fracture, dislocation, refer to ED

SYMPTOMS OF VISCERAL REFERRED PAIN:

- Shoulder pain from visceral origin can be secondary to: heart, lung. Gall bladder and liver, upper GI and diaphragm
- Will be associated with additional; systemic symptoms, such as respiratory symptoms, SOB, chest pains, fever, sweats, vomiting

Referral to appropriate speciality-inform referring GP

SYMPTOMS OF NEUROLOGICAL LESION:

- Usually without trauma the presence of:
- Sporadic attacks of neuralgic pain
- Unexplained muscle wasting
- Significant motor or sensory deficit
- May not be specific to one muscles group

Suspected neurological lesion refer to neurologist.

RED FLAG SCREENING: SPECIFIC FOR SHOULDER PATHOLOGY

Injury

CONSIDER ADMISSION/URGENT REFERRAL IF:

- Recent trauma to shoulder
- Pain may or may not be present
- Muscles wasting
- Reduced function
- If high severity of pain and disability could mean possible large cuff tear therefore consider orthopaedics for surgical referral (following clinical assessment)
- Deformity- severe pain in any patient with known metabolic bone disease
- Neurovascular deficit
- Weakness- if after rotator cuff tear
- Infection- look for signs of infection- hot swollen joint
- Acute distal biceps rupture, urgent referral to Orthopaedics/A&E/Fracture
- Traumatic shoulder dislocation if unreduced: ED – Reduced: refer to soft-tissue clinic
- ACJ dislocation: Refer to Soft-tissue clinic or fracture clinic. Any urgent dislocations should be referred to ED and if no fracture, refer to soft tissue clinic. If fracture discovered refer to fracture clinic
- Acute Rotator cuff tear refer to soft tissue clinic as they can scan at this point
- If not sure – can always discuss a patient with a consultant in fracture clinic

DIAGNOSIS: ADHESIVE CAPSULITIS/CONTRACTED SHOULDER

TYPE OF INFORMATION

GUIDELINES

Background information

- Adhesive Capsulitis or Contracted (Frozen) Shoulder is a combination of shoulder pain and stiffness that causes sleep disturbance and marked functional disability
- The condition can run a prolonged course, and symptoms usually take between one to three years to resolve. In some cases, it does not resolve completely.
- Contracture is such a striking feature of the condition that the term 'Contracted shoulder' is now used to describe this condition
- The aetiology is unclear
- Most common in people aged 40 and 60
- Can occur secondary to:
 - Prolonged immobilisation- such as stroke
 - Diabetes
 - Females > males

CLINICAL FINDINGS: There is no agreed diagnostic reference standard

Stages of the condition: A true Contracted Shoulder is categorised into either 3 phases:-

- Pain predominant phase (early painful stage) - progressive stiffening and loss of motion in the shoulder with increasing pain on movement
- Stiffness predominant phase (later stage) - decrease in pain but range of movement remains restricted
- Recovery phase - range of movement improve

Subjective History

- Screen for red flags
- Most cases occur in patients aged between 40-60 years of age, in women > men, and could affect up to 1 in 20 people.
- The exact cause is not fully understood, although it appears to be more common in people with certain health conditions such as diabetes.
- There is a gradual onset of arm pain
- Unable to lay on the affected side
- Restriction of movements notably including elevation and external rotation
- The condition runs a distinct course

DIAGNOSIS: ADHESIVE CAPSULITIS/CONTRACTED SHOULDER

TYPE OF INFORMATION	GUIDELINES
Examination findings	<ul style="list-style-type: none"> The principal diagnostic test is passive external rotation which is restricted in Contracted Shoulder (but also in other conditions). It is recommended that external rotation be tested with the patient's elbow at their side and that trunk rotation is limited by the tester with the tester's shoulder behind the patient's scapula to detect scapular retraction. A finding of restricted passive external rotation should be corroborated by history (screening for substantial trauma/serious disease), X-ray exam (which can exclude the other causes of restriction) and palpation (screening for gross crepitus) Differential diagnosis between Contracted Shoulder and the impingement-type disorders does cause some confusion in practice. Specifically, standard tests for impingement are positive in the pain-predominant phase, because they involve stretching the joint capsule. A simple diagnostic approach is to regard the signs of Contracted Shoulder as taking primacy over signs of impingement in terms of diagnosis and management. Observe for muscle wasting, alignment Bony palpation- assessing for TOP, warmth swelling May be tenderness over anterior joint line Reduction in both active and passive range, in particular lateral rotation May have a capsular pattern of restriction Assess power- often no weakness; however pain can inhibit muscle strength in early stages of condition
Investigations	<ul style="list-style-type: none"> If diabetes is suspected in a patient with a stiff shoulder with which the clinical pattern is that of contracted shoulder, tests should be done to evaluate for diabetes GP rule out diabetes and thyroid disorders GP or APP to do X-ray AP and axial to exclude other pathology (GH OA, Posterior dislocation), as per BESS/BOA 2015 recommendations AP & Axial views are recommended
Conservative management	<p>REFER THROUGH TO PHYSIOTHERAPY IN THE FIRST INSTANCE:</p> <ul style="list-style-type: none"> Explain the usual timescale of Contracted Shoulder: It will spontaneously resolve with reduction of stiffness (although the full range of motion may not be fully recovered) but this will usually take months to years. Reassurance Advise avoidance of movements which aggravate the pain in the early, painful phase (e.g. overhead activities, vigorous stretching) but advise the person to continue a regular range of movement. Pacing and self-management. Ensure adequate analgesia, particularly in the early, painful phase: Paracetamol with or without codeine, or an oral NSAID e.g. ibuprofen). Consider which drug has a more favourable balance of benefits and risks for the person. If there is no early benefit from oral NSAID, discontinue its use. Refer r back to GP for analgesia management Physiotherapy if the person is able to tolerate movement of the affected shoulder. Ensure adequate analgesia is provided <p>IN THE EARLY PAIN PREDOMINANT PHASE:</p> <ul style="list-style-type: none"> Provide advice and education Advice re. application of heat and/or cold packs Gentle exercises and postural correction Mobilisation if appropriate Use a regional or validated outcome measure (at the least PSFS and VAS +/- DASH, Oxford Shoulder score etc.).

DIAGNOSIS: ADHESIVE CAPSULITIS/CONTRACTED SHOULDER

TYPE OF INFORMATION	GUIDELINES
Conservative management	<p>STEROID INJECTIONS</p> <ul style="list-style-type: none"> Consider an intra-articular (glenohumeral) corticosteroid injection early in the course of contracted shoulder if there is no, or slow, progress with conservative treatment. Via GP in Primary Care or referral to Secondary Care if not available by GP <p><i>Do not refer for injection if:-</i></p> <ul style="list-style-type: none"> The person has already had an intra-articular corticosteroid injection from an experienced practitioner, with minimal or no benefit The person has had one injection in the same shoulder in the course of a year either blind injection or USGI The pain has settled and stiffness is the predominant feature Steroid injection is contraindicated (e.g. infection, sensitivity to local anaesthetic etc.) If referring patient with DM ,ensure good diabetic control HB1AC<69 <p>PHYSIOTHERAPY IN THE LATER STIFFNESS PREDOMINANT PHASE:</p> <ul style="list-style-type: none"> Active ROM Stronger mobilisation Functional strengthening (avoiding impingement) with good scapular stability/posture Cord and pulleys If appropriate Functional rehabilitation <p>PROGNOSIS</p> <ul style="list-style-type: none"> Poorer prognosis is associated with older age, diabetes, severe and recurrent symptoms at presentation and those patients with associated neck pain
Referral on for orthopaedic opinion:	<ul style="list-style-type: none"> If the diagnosis is uncertain If there is an inadequate response to 3 months of physiotherapy If Opioid analgesia is being considered If arthroscopic release or manipulation under anaesthetic (MUA) are being considered.

DIAGNOSIS: SUBACROMIAL PAIN SYNDROME

TYPE OF INFORMATION	GUIDELINES
Background information	<ul style="list-style-type: none"> Subacromial pain syndrome is a term used to describe rotator cuff lesions in all stages from degeneration through to complete tears The pain comes from the subacromial space of the shoulder, which contains the rotator cuff tendons and the subacromial bursa, and NOT from the glenohumeral joint No specific age although age may give some indication of its likely stage - see Neer and Welsh's (1977) classification In those under 35 years old this can be linked and secondary to instability. May be insidious or related to a specific incident/trauma The treatment aim for subacromial pain is to 'improve pain and function'. Success is defined individually with patients to include the degree of improvement needed, and the level of residual symptoms that might be acceptable. Outcome depends on starting level of symptoms, patient demographics and expectations, as well as personal circumstances

DIAGNOSIS: SUBACROMIAL PAIN SYNDROME

TYPE OF INFORMATION	GUIDELINES
Subjective information	<ul style="list-style-type: none"> • Screen red flags • Pain is experienced in the shoulder / deltoid region and may radiate into the arm, it may be aching and / or sharp in nature • It may be aggravated by overhead activities and at night when lying on that side • May describe a painful arc • There may be crepitus and if secondary to instability painful clicking, a feeling of heaviness or a “dead arm”
Examination findings	<p>May include:</p> <ul style="list-style-type: none"> • Muscle wasting of supraspinatus in chronic SAP • Assess cervical and thoracic spine • Altered scapulohumeral rhythm may be present • Painful arc may be present with elevation (flex or abduction) and if a painful arc is positive, SIS is very likely. • There is possible limitation of elevation, MR and horizontal Adduction • Passive MR may be limited • Resisted muscle testing pain implicates the cuff and cuff tears are associated with weakness • Assess instability tests if felt, to be contributing to subacromial pain • Consider contractile, cuff and impingement tests (Full can test, - drop arm, lift off, Neers and Hawkins Kennedy tests, painful arc) • Must differentiate between full thickness cuff tears
Investigations	<p>AP & Axial may be required if poor response to treatment</p> <ul style="list-style-type: none"> • X-rays are of very limited value in the early stages • Age 40-60 physio to request AP/axial X-rays • Radiographs enable visualisation of calcific tendinitis, acromial morphology, subchondral cysts or sclerosis, osteoarthritis of the acromioclavicular joint and the acromiohumeral interval. • Magnetic resonance imaging is not normally indicated in SIS • Ultrasound may be of benefit for differential diagnosis and can identify full thickness tears of cuff if suspected <p><i>MRI is at the secondary care consultant's discretion if not responding to conservative treatment</i></p>
Conservative management	<p>The majority of patients can be managed conservatively.</p> <ul style="list-style-type: none"> • Advice: Initially relative but not absolute rest should be recommended together with the avoidance of overhead and other aggravating activities • Ensure adequate analgesia: The benefits of a short course (7-21 day) course of NSAIDs in appropriate patients are likely to outweigh the risks • Steroid injection: Steroid injections benefit SIS in the short term. It is suggested that they are best used to facilitate rehabilitation and that unless pain is severe a several-week trial of more conservative treatment should precede their use. Consider x 1 into sub-acromial space - if no tear in patients receiving physiotherapy

DIAGNOSIS: SUBACROMIAL PAIN SYNDROME

TYPE OF INFORMATION	GUIDELINES
Conservative management	<p>Physiotherapy:</p> <ul style="list-style-type: none"> • Explanation of the nature of the problem and treatment rational • If there is significant pain and NSAID's have not been prescribed, this option should be discussed with the appropriate medical practitioner. Refer back to GP for adequate analgesia • Advice regarding the use of cold packs may be useful in reducing the pain and inflammation of SIS and to settle irritation post exercise. There is insufficient evidence to support the use of heat, but this may be useful in addressing secondary protective muscle spasm, i.e. in upper fibres of trapezius • Posture improvement • Passive mobilisation of the upper quadrant (shoulder, cervical & thoracic spines) as necessary and according to standard principles (Maitland, 1991) • A programme of exercises to restore scapular stability, shoulder range of movement, strength and scapulohumeral rhythm (for 12 weeks)
Referral on for orthopaedic opinion	<ul style="list-style-type: none"> • If the diagnosis is uncertain • The evidence states that if there is an inadequate response to 6 - 12 weeks of best evidence conservative treatment as described above • If subacromial decompression or further investigations are being considered • Consider CCG prior approval form and that all conservative treatment has been considered/ trialled

DIAGNOSIS: GLENOHUMERAL OA / 18 AC JOINT PATHOLOGY

TYPE OF INFORMATION	GUIDELINES
Background information	Acromioclavicular OA is more common than glenohumeral joint OA
Subjective history	<p>SUBJECTIVE:</p> <p>AC joint OA</p> <ul style="list-style-type: none"> • Screen red flags • Pain over shoulder- typically superior to anterior shoulder • Patients can often point to area of specific pain • Pain provoked by arm reaching across body (golf swing, overhead lifting in abduction) <p>Glenohumeral OA</p> <ul style="list-style-type: none"> • Screen for red flags • Typically in older people or after trauma in younger people • Pain that is worse on movement • Less specific description of pain, vague dull aching • Describe stiffness in the shoulder • Reduced function
Examination findings	<ul style="list-style-type: none"> • May have wasting of muscles if OA coexists with rotator cuff disease • Difficulty with self-care • Stiffness of joint both active and passively

DIAGNOSIS: GLENOHUMERAL OA / 18 AC JOINT PATHOLOGY

TYPE OF INFORMATION	GUIDELINES
Investigations	<p>If stiffness present, x-ray is the only way to exclude other causes of joint stiffness such as inflammatory arthritis, OA, fractures, serious pathology of bone.</p> <ul style="list-style-type: none"> • GP to do X-ray AP View and Axial as standard • If X-ray shows arthritic changes, with gross limitation of function refer directly to Orthopaedic Surgeon • If minor arthritic changes: Consider analgesia, possible referral through to physiotherapy • Community clinic review for shared decision making with ESP and Orthopaedic Surgeon if diagnosis unclear or significant functional loss with minimal x-ray changes
Conservative management	<p>SUBJECTIVE:</p> <p>AC joint</p> <ul style="list-style-type: none"> • Most people will respond to rest and simple analgesia • Advice • Avoidance of aggravating positions and movements • Corticosteroid injection • No or temporary response to Physiotherapy and injection - 6-12 weeks refer to Orthopaedic surgeon <p>Glenohumeral</p> <ul style="list-style-type: none"> • Advice on diagnosis, prognosis, refer patient to NICE/NHS choice websites • SDM, include patient in planning of treatment, consider; • Analgesia, topical creams • Refer to occupational therapy if significant problems with self-care
Referral on for orthopaedic opinion	<ul style="list-style-type: none"> • Early OA reported on X-ray • Refer on those with significant joint OA with significant pain and disability despite appropriate treatment • ESP/advanced practitioner/physiotherapist to have some knowledge of possible surgical options • BESS/BOA patient care pathway • http://www.bess.org.uk/application/files/2314/8127/3403/Shoulder_Elbow-2016-Thomas-203-14.pdf

DIAGNOSIS: ROTATOR CUFF PATHOLOGY

TYPE OF INFORMATION	GUIDELINES
Background information	<p>Subacromial shoulder pain from rotator cuff pathology, including, tendinopathy, calcific tendinitis, and rotator cuff tears accounts for up to 70% of all new shoulder pain problems. The rotator cuff tendons can be either intact or torn. Tendons can tear acutely due to injury, or due to degeneration. A tear that does not extend all the way through the tendon is called a partial thickness tear. The treatment aim for rotator cuff pathology is to 'improve pain and function'. Success is defined individually with patients to include the degree of improvement needed, and the level of residual symptoms that might be acceptable. Outcome depends on starting level of symptoms, patient demographics and expectations, as well as personal circumstances.</p>

DIAGNOSIS: ROTATOR CUFF PATHOLOGY

TYPE OF INFORMATION	GUIDELINES
Subjective History	<ul style="list-style-type: none"> • Screen for red flags • Pain is experienced in the shoulder / deltoid region and may radiate into the arm, it may be aching and / or sharp in nature • It may be aggravated by overhead activities and at night when lying on that side • May describe a painful arc • There may be crepitus and if secondary to instability painful clicking, a feeling of heaviness or a “dead arm”
Examination findings	<p>May include</p> <ul style="list-style-type: none"> • Muscle wasting of supraspinatus in chronic pathology • Assess cervical and thoracic spine • Altered scapulohumeral rhythm may be present • Painful arc may be present with elevation (flex or abduction) • There is possible limitation of elevation, MR and horizontal Adduction • Passive MR may be limited • Resisted muscle testing pain implicates the cuff and cuff tears are associated with weakness • Assess instability tests if felt, to be contributing to pain • Consider contractile, cuff integrity and impingement tests (Full can test, - drop arm, lift off, Neers and Hawkins Kennedy tests, painful arc) • Must differentiate between full thickness cuff tears (acute/degenerative tears)
Investigations	<ul style="list-style-type: none"> • < 60 years AP view, > 60 years AP and axillary view • US can identify full thickness tears of rotator cuff if suspected • MRI can identify full thickness tears of rotator cuff if suspected, to be used at the consultant discretion • Clinical reasoning/learning tool/discussion: • Depth of tear- No correlation to physiotherapy outcome. Orthopaedic team will use depth of tear to determine type of surgery if not responding to conservative measures. • Guide as follows: <ul style="list-style-type: none"> 1/3 would consider decompression 2/3 would consider repair • Anterior edge full thickness tear terminology: is the anterior edge of the involved tendon - not full thickness of the whole tendon - for conservative measures initially.
Conservative management	<p>Referral through to physiotherapy:</p> <ul style="list-style-type: none"> • Education, rest, analgesia (refer to GP for adequate analgesia) • 80% of patients are reported to improve with conservative management • Appropriate structured physiotherapy with goal setting for 6 to 12 weeks to include postural correction and motor control retraining, stretching, strengthening of the rotator cuff and scapula muscles and manual therapy • If a partial or full thickness tear is reported on US scan/MRI discuss the possibility of a local injection with the patient and the aims of the injection to reduce pain and improve function. Inform the patient that an injection could delay surgery if this were required and could potentially affect the outcome of any surgical intervention- shared decision making conversation (SDM document in patient notes) • There is some debate regarding steroid injections in patients with partial and full thickness tears within local secondary care and BESS/BOA guidance. This could be discussed with shoulder consultant at local clinic or through advice and guidance (GP) • Do not do repeated injections into the subacromial space in patients where surgery may be considered as this may cause tendon damage • Over 75 years old may want to consider injection and rehabilitation as often cuff quality not amenable to surgical intervention

DIAGNOSIS: ROTATOR CUFF PATHOLOGY

TYPE OF INFORMATION	GUIDELINES
Referral on for orthopaedic opinion	<ul style="list-style-type: none"> • ALL acute traumatic tear should be referred for orthopaedic opinion (occurred in last 6 weeks) • Full or partial degenerative tears that have had no response to appropriate conservative management (6-12 weeks of physiotherapy) • Subacromial shoulder pain and profound weakness with ultrasound or MRI findings indicating a full thickness rotator cuff tear after adequate and appropriate conservative treatment • Consider referral for shared decision-making following BESS Guidelines: sub-acromial decompression or repair • Continue with physiotherapy for cuff tears even when listed for surgery • X-ray shows arthrogenic changes referral for orthopaedic surgical consideration • BESS/BOA patient care pathway below • http://www.bess.org.uk/application/files/2914/8127/3402/ • Subacromial_Shoulder_Pain.pdf <p>PROGNOSIS</p> <p>Cuff tears in over 75's generally not repairable or repair has high failure rate, but other interventions such as sub-acromial decompression are effective. If conservative treatment fails and the patient is still symptomatic refer to secondary care consultant</p> <p>Consider formal smoking cessation program prior to referral for cuff repair.</p>

DIAGNOSIS: INSTABILITY (NON ACUTE)

TYPE OF INFORMATION	GUIDELINES
Background information	Instability of the shoulder joint is a broad term for hypermobility including subluxation and dislocation. Laxity can exist without instability or they may coexist. Shoulder instability typically occurs in children, younger adults < 35.
Subjective history	<ul style="list-style-type: none"> • Screen for red flags • Onset- often traumatic but may present with multiple recurrence that are atraumatic • Typical mechanism of injury is position of external rotation and abduction • Feeling of instability • Pain/symptoms vague • May report 'dead arm' symptoms on occasion • Possibly report functional limitations in external rotation and abduction activities
Examination findings	<ul style="list-style-type: none"> • Observe, may have deformity • May have space below acromion • Muscle wasting or spasm • Functional loss • May have tenderness on palpation of soft tissue • Assessment for loss of active and passive movement as tolerable
Investigations	<ul style="list-style-type: none"> • Consider AP and Axial Shoulder • Recurrent dislocations- at the discretion of a Specialist Orthopaedic Surgeon
Conservative management	<p>Non acute or recurrent dislocations:</p> <ul style="list-style-type: none"> • Atraumatic dislocations for 3-12 months physiotherapy • Advice on provocative positions. Strengthening and functional rehabilitation • Multi-directional case by case – try physiotherapy in the first case

DIAGNOSIS: INSTABILITY (NON ACUTE)

TYPE OF INFORMATION	GUIDELINES
Referral on for orthopaedic opinion	<ul style="list-style-type: none"> Traumatic First time dislocation (reduced) if referred through triage should be treated via the soft tissue shoulder clinic referral pathway Traumatic Recurrent Instability (reduced) – routine referral to orthopaedic surgeon

DIAGNOSIS: CALCIFICATION TENDINOPATHY

TYPE OF INFORMATION	GUIDELINES
Background information	<p>Calcific tendinopathy is a disorder of the shoulder of unknown etiology. It is characterised by the formation of deposits of calcium crystals in one or several of the rotator cuff tendons, leading to pain and dysfunction. Many cases resolve spontaneously or with conservative management</p>
Subjective history	<p>Several systemic diseases are associated with an increased risk of calcification, such as gout, hypercalcemia of any cause, and various rheumatic diseases</p> <p>The chief patient complaints to expect in calcific tendinopathy are:</p> <ol style="list-style-type: none"> 1. Night pain, causing loss of sleep. 2. Constant dull ache 3. Pain increases considerably with AROM 4. Decrease in ROM, or complaint of stiffness 5. Radiating pain up into the suboccipital region, or down into the fingers
Examination findings	<p>Since imaging is the only way to diagnose calcific tendinopathy, physical examinations will seek to rule out a condition rather than to rule in a condition.</p> <ul style="list-style-type: none"> • Observation-check bilaterally for swelling, atrophy or scapular movement that will indicate compensation for decreased humeral movement. • Palpation-attention to any swelling, temperature difference, point tenderness. Most specifically, the supraspinatus tendon, as it is the most commonly affected[7]. The infraspinatus, teres minor, subscapularis, and biceps tendons are also involved and follow in incidence in the afore-mentioned order[1]. • Neuro and cervical screen • AROM and PROM-pain and decreased ranges may be present in any, or all planes (depending on tendon(s) involved). Observe end feel, may be empty 2° to pain. • MMT's-may demonstrate decrease from contralateral side or be limited by pain.
Investigations	<ul style="list-style-type: none"> • X-ray - As Calcific tendinopathy is a soft tissue injury that can only be conclusively diagnosed via imaging, it is important to rule out other shoulder pathologies. Imaging will provide definitive proof of calcific build-up through what appear to be “bone spurs”. • USS - An ultrasound image of the area is also advised, as this will rule out or rule in any differential diagnosis of soft tissue injuries such as a rotator cuff tear
Conservative management	<ul style="list-style-type: none"> • Physiotherapy including PROM/AAROM/AROM, capsule stretching and isometric activation of the affected rotator cuff musculature. Grade II-IV glenohumeral anterior-posterior and caudal glides should also be used when applicable restrictions are found. • If calcification in tendon on ultrasound scan – physiotherapy • If calcification in tendon on X-ray – physiotherapy + injection
Referral on for orthopaedic opinion	<ul style="list-style-type: none"> • Calcification on X-ray not improved by physiotherapy and injection – USGI may be considered