Calcific tendonitis
Clinical features
Management
Referral
Investigations
Consider corticosteroid injection
Review and follow-up
Consider other treatments
Review as appropriate
Refer to orthopaedic surgery
Good response
Poor response
Good response
Poor response

IMPORTANT NOTE
Last reviewed refers to the date of completion of the most recent review process for a pathway. All pathways are reviewed regularly every twelve months, and on an ad hoc basis if required. Due for review refers to the date after which the pathway on this page is no longer valid for use. Pathways should be reviewed before the due for review date is reached.
1 Calcific tendonitis

Quick info:
Calcific tendonitis:
- occurs in adults age 30-50 years
- is caused by the deposition of calcium phosphate crystals onto the supraspinatus tendon of the rotator cuff
- may be mild, chronic pain interspersed with episodes of acute, severe shoulder pain and inflammation, associated with sporadic pain down the arm or up into the neck
- pain increases in severity with movement and at night
- other symptoms include stiffness and weakness of the shoulder joint
- during the acute phase, the joint is usually too painful to allow examination
- X-rays may show calcium deposits in soft tissue

Reference:

2 Clinical features

Quick info:
Calcific tendonitis:
- occurs in patients age 30-50 years
- is caused by the deposition of calcium phosphate crystals onto the supraspinatus tendon of the rotator cuff
- may be mild, chronic pain interspersed with episodes of acute, severe shoulder pain and inflammation, associated with sporadic pain down the arm or up into the neck
- pain increases in severity with movement and at night
- other symptoms include stiffness and weakness of the shoulder joint
- during the acute phase, the joint is usually too painful to allow examination

3 Investigations

Quick info:
X-rays may show calcium deposits in soft tissue.

4 Management

Quick info:
Management may involve:
- patient education
- ice packs applied to the painful area
- rest or immobilisation is beneficial
- physical therapy to stretch and strengthen the tendon and associated muscles
- simple analgesia or non-steroidal anti-inflammatory drugs (NSAIDs; eg ibuprofen), unless contra-indicated
- NSAIDs:
  - provide short-term symptomatic relief, but are associated with adverse effects
  - contra-indications include:
    - patients with severe renal disease
    - pregnancy
    - patients with aspirin allergy
  - prescribe with caution in patients with:
Calcific tendonitis
Surgery > Orthopaedics > Shoulder pain

- hypertension
- gastrointestinal complaints
- mild liver or kidney disease – use lowest effective dose and monitor renal function
- asthma
- monitor adverse effects
- early referral may be considered necessary if the patient has severe pain or dysfunction

References:

5 Poor response

Quick info:
Poor response:

- some or all of the patient's symptoms, including pain, persist
- treatment does not fully restore the patient's ability to perform normal daily activities, including work, sleep, recreational and other activities

6 Good response

Quick info:
Good response:

- symptoms, including pain, improve
- treatment restores the patient's ability to perform normal daily activities, including work, sleep, recreational and other activities

9 Consider corticosteroid injection

Quick info:
Consider corticosteroid and local anaesthetic injection:

- may improve pain in the short-term
- procedure may be carried out with or without fluoroscopic or ultrasound guidance
- monitor blood sugar levels following intra-articular injection in patients with diabetes

References:

10 Poor response

Quick info:
Poor response:

- some or all of the patient's symptoms, including pain, persist
- treatment does not fully restore the patient's ability to perform normal daily activities, including work, sleep, recreational and other activities

References:
Calcific tendonitis
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11 Good response

Quick info:
Good response:
• symptoms, including pain, improve
• treatment restores the patient’s ability to perform normal daily activities, including work, sleep, recreational and other activities

12 Consider other treatments

Quick info:
In patients who remain refractory to first-line treatment and corticosteroid injection, consider:
• extracorporeal shock wave therapy (ESWT):
  • is a non-invasive alternative to open or arthroscopic surgical procedures
  • has been found to reduce pain and improve shoulder function
  • involves short duration sonic pulses aimed at the affected area to break down the calcium phosphate crystals in the tendon and joint
  • high energy ESWT may be more effective than low energy ESWT
• therapeutic ultrasound may reduce pain in the short-term but evidence is limited
• arthroscopic removal of the calcium deposits followed by debridement may be beneficial
• limited evidence suggests electrical stimulation may be beneficial

References:

13 Review and follow-up

Quick info:
• review:
  • pain control
  • functional ability
  • response to treatment
Evidence summary for Calcific tendonitis

The pathway is based on our interpretation of the following guidelines (9, 2, 6). All of these guidelines have been graded for quality and prioritised for inclusion based on their methodological quality. All intervention nodes (ie. those concerning therapy and therapeutic advice) have been graded for the quality of the evidence underlying them. Key non-interventional nodes are also referenced.

Search date: May-2006

Evidence grades:

- Intervention node supported by level 1 guidelines or systematic reviews
- Intervention node supported by level 2 guidelines
- Intervention node based on expert clinical opinion
- Non-intervention node, not graded

Evidence grading:

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References

This is a list of all the references that have passed critical appraisal for use in the pathway Shoulder pain

ID Reference

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