

Calcific Tendonitis Treatment Guidelines

What is calcific tendonitis?

Calcific tendonitis is a condition characterized by the deposition of calcium phosphate crystals in the rotator cuff tendons, most commonly the supraspinatus tendon. It typically occurs in individuals between the ages of 30 and 50 and is more common in women than in men. This condition can cause significant shoulder pain and restrict the range of motion.

Treatment guidelines

Conservative treatment

- **Rest and activity modification:** Patients should avoid activities that exacerbate shoulder pain. Using an arm sling can help immobilize the shoulder and reduce stress on the affected tendons.
- **Medications:** Non-steroidal anti-inflammatory drugs (NSAIDs) are commonly prescribed to reduce pain and inflammation. In cases of acute pain, subacromial corticosteroid injections can be effective in providing relief.
- **Physical therapy:** Structured physical therapy programs focus on gentle stretching and strengthening exercises to improve shoulder mobility and strengthen the surrounding muscles. Therapists may use modalities like ultrasound therapy to reduce inflammation and pain.
- **Ultrasound-guided barbotage:** This procedure involves using ultrasound to guide the insertion of a needle into the calcium deposits, followed by aspiration and lavage (washing out) to remove the deposits. It is often combined with a corticosteroid injection to enhance pain relief.
- **Extracorporeal shock wave therapy (ESWT):** ESWT involves delivering shock waves to the affected area to break up calcium deposits and stimulate the healing process. This non-invasive treatment has shown promising results in reducing pain and improving function.

Surgical treatment

Surgery is considered when conservative treatments fail to alleviate symptoms after six months, or if the patient has chronic calcific tendonitis with significant functional impairment. Surgery may also be necessary for patients with large calcium deposits or those with coexisting shoulder pathologies like rotator cuff tears.

- **Arthroscopic surgery:** This minimally invasive procedure involves the removal of calcific deposits and, if necessary, repair of the rotator cuff. It offers a shorter rehabilitation period and less tissue damage compared to open surgery.
- **Open surgery:** In cases where arthroscopic surgery is not feasible, open surgery may be performed. This approach allows for direct access to the calcific deposits and repair of any associated rotator cuff tears.

Post-treatment management

- **Rehabilitation:** Postoperative rehabilitation is crucial for restoring shoulder function. Patients should begin passive and active range of motion exercises soon after surgery, followed by strengthening exercises. Physical therapy usually continues for several months to ensure full recovery.

- **Pain management:** Pain management strategies, including medications and ice therapy, are essential during the initial postoperative period to ensure patient comfort and compliance with rehabilitation exercises.
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Additional notes

References

- Kim, M.-S., Kim, I.-W., Lee, S., & Shin, S.-J. (2020). Diagnosis and treatment of calcific tendinitis of the shoulder. *Clinics in Shoulder and Elbow*, 23(4), 203–209. <https://doi.org/10.5397/cise.2020.00318>
- Raja, A., Craig, E. V., & Braman, J. P. (2019). Rotator cuff tendon calcific tendinitis treatment algorithm for primary care musculoskeletal physicians. *Journal of Family Medicine and Primary Care*, 8(5), 1647. https://doi.org/10.4103/jfmprc.jfmprc_110_19