

Calcific Tendinitis

Calcific tendinitis of the shoulder: a chalky calcium deposit builds up inside one of the rotator cuff tendons, often the supraspinatus, and can cause sudden severe pain when it inflames the surrounding tissue.

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What you're feeling

You may experience acute or chronic pain in your shoulder caused by inflammation around calcium deposits in your rotator cuff tendons. This condition, known as calcific tendinitis, can significantly impact your quality of life and may result in time off work. The pain is often intense and can flare up without warning. You might notice that certain movements trigger sharp discomfort, while others feel dull and persistent.

Daily tasks that require reaching or lifting become difficult. Simple actions like tucking in a shirt or reaching behind your back to fasten a bra can be challenging. You may find it hard to sleep on the affected side, as the pressure can worsen the pain. Nighttime discomfort is common, often disrupting your rest and leaving you feeling fatigued. The pain may also be worse upon waking, making it hard to start your day.

In some cases, you might experience atypical symptoms. For instance, pain could be isolated to the back of your shoulder or affect overhead movements if the teres minor muscle is involved. Rarely, you might have calcifying lesions in other areas, such as the medial collateral ligament, or in both shoulders simultaneously. However, most people experience localized shoulder pain that interferes with routine activities.

The good news is that symptomatic calcific tendinitis has a good likelihood of completely resolving in the long term. Conservative treatment is often the primary choice, especially for acute cases, and shows clinically significant improvement. About 72% of patients achieve excellent or good results with non-surgical care, regardless of the deposit size or location. If symptoms persist, your surgeon may discuss other options, but many find relief through conservative measures. Understanding these symptoms helps you manage expectations and work with your healthcare team to find the best path forward.

What's actually happening

Calcific tendinitis is a condition where calcium builds up inside the tendons of your shoulder. These tendons are the tough, rope-like bands that connect your muscles to your bones. Think of them as the cables that help you lift and move your arm. When calcium deposits form, they create a hard lump within this soft tissue. This

buildup can irritate the surrounding area, causing significant pain and limiting how well you can use your shoulder.

Your shoulder is a complex ball-and-socket joint. It relies on a group of muscles and tendons called the rotator cuff to stay stable and move smoothly. The long head of the biceps also plays a role in keeping this joint steady. In many cases, the calcium deposits affect these structures. You might feel pain in the front of your shoulder. This happens because the deposit interacts with the surrounding soft tissues rather than being a single, isolated issue. The pain is your body's signal that something is wrong in that delicate balance.

As you age, changes in your tendons become more common. Swimmers and active individuals often see these structural changes earlier. The calcium deposit itself can vary in size. If the lesion is larger than 1 cm, you are nearly three times more likely to need surgery to remove it. However, many people find relief without an operation. Conservative treatments, such as shock wave therapy, are often very successful at relieving pain and restoring function with very few side effects.

If surgery is needed, your surgeon will likely remove the calcium deposit. This is often done using a small camera and instruments (arthroscopy). In many cases, the surgeon will also repair the rotator cuff at the same time. This combination leads to significant improvements in pain and shoulder function. It takes time for these benefits to fully show. You should expect to wait at least six months after surgery for your shoulder function to reach its best level. During this time, your surgeon will guide you through recovery to ensure the best possible outcome.

What we can do about it

Most people find relief without surgery. Your journey usually starts with simple self-care and guided movement. You will likely try oral anti-inflammatory medication to calm the pain. Your surgeon may also recommend physical therapy to restore your shoulder's range of motion and strength. These nonsurgical modalities are the primary choice for acute calcific tendinitis.

You should give conservative treatment time to work. The condition has a good likelihood of completely resolving in the long term. In fact, 72% of patients achieve excellent or good results with nonsurgical care. This success rate holds true regardless of where the calcium is located, its size, or how severe your initial symptoms were. If your pain is protracted, it can lead to time off work and impaired quality of life. Consistent effort with therapy is key to getting back to your daily routine.

If self-care and therapy are not enough, your surgeon may suggest medical interventions. Corticosteroid injections are a common option to reduce inflammation and pain. Another effective noninvasive treatment is extracorporeal shock wave therapy (ESWT). This therapy uses sound waves to break up the calcium deposits. It is safe and produces a high rate of success in pain relief and functional restoration. Patients often see reduced painful symptoms and improved shoulder function after this treatment. Complications from ESWT are negligible.

Surgery is considered only when conservative care reaches its limit. Your surgeon might recommend operative treatment if your calcific lesions are larger than 1 cm, as these have a 2.8 increased likelihood of needing

surgery. Arthroscopic removal of the calcification leads to improved clinical outcomes for chronic cases. The majority of patients who undergo this surgical management also require a concomitant rotator cuff repair.

If you do proceed to surgery, expect a gradual recovery. Functional scores improve slowly after the procedure. They typically reach more than 75 percent at six months after surgery. At least 6 months of follow-up is needed for these improvements to become statistically significant. Most patients report significant improvements in shoulder pain and function after the operation. Your surgeon will discuss whether arthroscopic, endoscopic, or open surgery is best for your specific case.

What to expect

Your shoulder pain from calcific tendinitis may last for a long time. These symptoms can be protracted. This often means time off work and a lower quality of life. The good news is that this condition has a good likelihood to completely resolve in the long-term. Many people find their symptoms settle on their own.

If your pain does not go away, your surgeon may suggest treatment. Non-surgical options like shock wave therapy or needle aspiration are effective. Shock wave therapy offers a high rate of success in pain relief and functional restoration with negligible associated complications. Needle aspiration is only slightly invasive and painful. These treatments work well for many patients.

If surgery is needed, your surgeon will remove the calcium deposit. You will likely need a rotator cuff repair at the same time. This is a common part of the procedure. Your shoulder pain and function will improve significantly after surgery. However, recovery is not instant. Functional scores for patients undergoing arthroscopic treatment improved slowly. You will see more than 75 percent improvement at six months after surgery.

It takes time to feel the full benefit of arthroscopic removal. At least 6 months of follow-up is needed for these improvements to become statistically significant. Do not rush your healing. Your surgeon will guide you through this process. Most patients are satisfied with the final results.

When to see someone

See your GP if you have persistent shoulder pain that does not improve with rest. Calcific tendinitis is an acute or chronically painful condition caused by inflammation around calcium deposits in the rotator cuff tendons. You should seek help if symptoms interfere with your sleep or work, or if you experience weakness, instability, or locking. Conservative treatment is the primary choice, especially for acute cases, and shows clinically significant improvement with 72% of patients achieving excellent or good results. However, if your pain remains severe despite conservative care, ask for a specialist review. Your surgeon can determine if further steps are needed to restore function and relieve pain.