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CONDITION
Calcific Tendonitis

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CONDITION

What is Calcific Tendonitis?

Hard deposits of calcium can form in the rotator cuff tendons of the shoulder. When they dissolve this can cause an intense inflammation of the area.

What causes calcific tendonitis?

Approximately 5% of individuals will have a calcium deposit in their shoulder tendons, most commonly the supraspinatus tendon in the top of the shoulder. Usually the calcium causes few problems although it is sometimes associated with impingement of the rotator cuff beneath the acromion and occasionally the calcium 'dissolves' which causes a very painful inflammatory reaction. It occurs most commonly in people aged 30-50yrs and is slightly more common in ladies than men.

It is not clear why calcium deposits develop in the rotator cuff but they typically go through a 'formative' phase, followed by a 'resting' phase and finally a 'resorptive' phase. During the resorptive phase the calcium changes from a chalky to a 'tooth paste' consistency which causes an acute inflammatory, painful reaction. Sometimes the liquefying calcium is contained within a small cavity in the tendon which means that even the slightest movement causes intense pain. The intense pain typically lasts for three to five days before the calcium leaks out of the tendon and the acute inflammation settles.

After resorption of the calcium the shoulder can return fairly quickly to normal, but sometimes there are ongoing symptoms of impingement due to the inflamed bursa.

How is calcific tendonitis diagnosed?

The condition can be confused with impingement syndrome (bursitis), frozen shoulder or, in the acute resorptive phase, with an infected shoulder (as it can be very painful to move the joint). The diagnosis is made by a careful examination, which usually rules out infection, followed by an x-ray which identifies the typical calcium deposit in the tendon near to where it joins the bone. Occasionally more specialist tests such as an ultrasound are required, but an MRI scan is seldom indicated.

What are the treatment options?

In the very painful resorptive phase we recommend an ultrasound guided aspiration or needling of the calcium deposit combined with a localised steroid injection adjacent to the tendon. This has a good chance of fairly rapidly settling your pain and restoring function to your shoulder. In more chronic cases, we usually treat the condition similarly to impingement.

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The first line of treatment is almost always 'conservative' (non surgical). Typically you will be provided with a set of exercises to help stretch and strengthen your shoulder. You will often be referred to a physiotherapist to help you perform the exercises properly and to monitor your progress. If your shoulder is causing you a lot of problems an injection above the tendons into the bursa can be very helpful at alleviating pain and making it easier for you to perform your exercises. About 60-70% of patients can expect a resolution of their problem with this 'conservative' approach. Generally, if despite one or two injections and a comprehensive physiotherapy program you are still experiencing pain that is causing you problems then we would recommend surgical intervention.

What does surgery involve?

The operation for calcific tendonitis is called Arthroscopic Subacromial Decompression with Debridement of the Calcific Deposit. It is a 'key hole' procedure and a few mm of bone is shaved off the undersurface of the acromion to relieve the pressure on the underlying tendon. The thickened inflamed bursa is also removed. The top of the tendon is then needled to localise the calcium deposit. If a significant deposit is identified then a small cut is made in the top of the tendon and the chalky calcium is scraped out and the cavity lightly shaved. If the deposit is quite large then you may require a rotator cuff repair following the removal of the calcium. This will involve a small incision in the side of the shoulder and will affect the rehabilitation program you will need to undertake. The operation is typically performed under a general anaesthetic with a nerve block (which helps the pain for the first 12-16 hours) and takes about 45-60 minutes.

What can I expect after surgery?

You will wake up from surgery with your arm in a sling but you can remove this over the next couple of days. Your arm will feel numb and 'heavy' whilst the nerve block is working during the first night. The shoulder will become a bit sore after that but you will be provided with painkillers which you should take regularly for the first few days. Providing no tissue repair was required during the operation you will be able to start moving your shoulder as soon as you are comfortable. You will be provided with a 'rehabilitation' sheet showing you the appropriate exercises or you can download the instructions from this website.

Most patients will have recovered quite good movement by 3-4 weeks post surgery, will be able to return to driving by 3-4 weeks, will be able to return to light manual work by 3-4 weeks and heavier duties, including sports, by 6-8 weeks. By 3 months 80% patients can expect to have had a good or excellent outcome. Please note that if a rotator cuff repair is required this will have a significant impact to the length of your recovery.

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Shoulder, Hip and knee Replacemer
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If you have any problems or concerns, do not hesitate to contact the office or myself. I can generally be reached on one of the numbers listed below and if I am not immediately available, I will try to get back to you as soon as possible. If for some reason I am unable to be reached, then you may be able to seek advice from the hospital ward or from your General Practitioner.

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