

Information for patients

Calcification of the shoulder



What is calcification?

This is when you get a build-up of calcium in the tendons around your shoulder. It goes through three processes:

- The formative stage - where the calcific deposit first appears and develops
- The resting stage
- The resorptive stage – the body will naturally break the calcification back down until it fully gone

It can form in 2 different ways it can be thinly spread out through the tendon or a more distinct lump.

What are the symptoms?

The main 2 symptoms are pain and reduced movement in your arm due to the pain. This can lead to not being able to use your arm as you normally would.

It is usually the resorptive stage that is the most painful. This is because during this process the calcification goes from an almost chalky form to toothpaste as the body breaks it down. This causes an inflammatory reaction as part of the healing process but this is also a painful process.

The level of pain can vary greatly. Sometimes people have no pain and do not even know they have calcification but for other people it can be a very painful condition. The pain will generally be felt from the top of the arm down to the elbow. It will be made worse on quick movements reaching up and twisting movements.

The pain is often worse at night and stops you from sleeping.

How is it diagnosed?

The calcification is normally viewed on an x-ray. It takes 2 forms

1. Striated - it appears thinly spread through the tendon
2. Discrete lumps - almost like small pebbles in appearance

The shape the calcification takes can determine which treatment we will offer you.

What causes it?

We do not know what causes it. Around 7 out of 100 (7%) of all shoulder pain is due to calcification. In some cases it will get better on its own but other times it doesn't and treatment is required. Only about 3 out of 10 people (30%) will ever need surgery.

Treatment options

- **Relative rest and painkillers**

When the shoulder is very painful sometimes a few days of resting the arm can be helpful but you do not want the shoulder to stiffen up, so carrying out gentle exercises can be helpful. You will find some examples at the end of the booklet. A short course of painkillers and anti – inflammatory can be helpful. You should discuss this with the pharmacist or your doctor.

- **Steroid injection**

This is particularly helpful to control the pain when it very severe and constant. You can usually receive an injection from your GP or local physiotherapy department. You should not have too many injections and if the relief is only short lived and it may that you need more invasive procedure such as needling or surgery (please see below).

- **Ultrasound guided needling or barbotage**

This procedure is used when there is a discrete lump of calcification. This involves injecting a local anaesthetic under the skin around the tendon of the shoulder. We use an ultrasound to guide the needle into the area of calcification. We insert the needle repeatedly to break the calcification, whilst injecting more anaesthetic around the area. Sometimes some of the calcification can be withdrawn into the syringe. At the end of the procedure we inject some steroid around the shoulder tendons to help settle any inflammation that occurs.

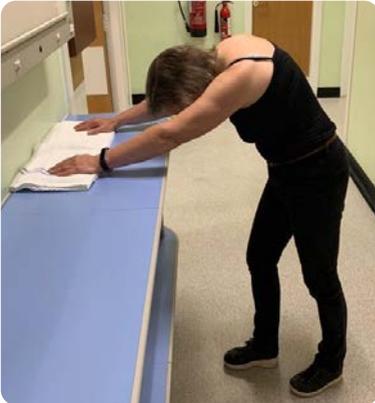
- **Surgery**

This is normally required when your shoulder problem has failed to settle with other measures. It is keyhole surgery. You would normally go home the same day as your surgery. The surgery is carried out whilst you are asleep with a general anaesthetic. Your arm is also fully numb and it will still be numb when you wake up. Following your surgery we would expect you to work hard at your physiotherapy. It can take up to a year to 18 months to reach the end of the rehabilitation process but the majority of the recovery occurs within the first 3- 6 months. If you do need surgery we will discuss this in more detail at your appointment.

Exercises



- Rest your hands gently on the counter top then step back as far as you are comfortable.
- Repeat about 15 to 20 times



- Resting your hands on a towel gently slide it forward with both arms.
- Do not let your body travel forward, keep your weight on your heels.
- Repeat about 15 to 20 times



- Slide the towel up the wall as far as is comfortable
- You can use your other arm to help. Step towards the wall as you do this
- Repeat until the arm feel tired



- Sit and support your painful arm on a table and make a fist
- Your arm should be slightly away from your body
- Place your other hand onto outside of forearm
- Push your forearm into hand and hold for 10-15 seconds without letting any movement occur
- You should apply half the maximum force possible

