

# Frozen shoulder (adhesive capsulitis)

**This leaflet is for patients who have been diagnosed with a frozen shoulder (adhesive capsulitis).**

This information has been produced to help you gain the maximum benefit and understanding of your operation.

It includes the following information:

- Key points
- About your shoulder
- About frozen shoulder
- Risks and alternative solutions
- Frequently asked questions
- Exercises
- Contact details
- Useful links

## Key points

Here are the key points about frozen shoulder:

1. In most people it comes on for no good reason.
2. In most people it will get better on its own, without any specific treatment, over the course of about 18 months (it can take much longer in people with diabetes).
3. The painful phase can be helped with a cortisone injection into the shoulder joint.
4. The stiffness (lack of movement) can be helped by an operation.
5. Physiotherapy during the painful phase is not helpful.

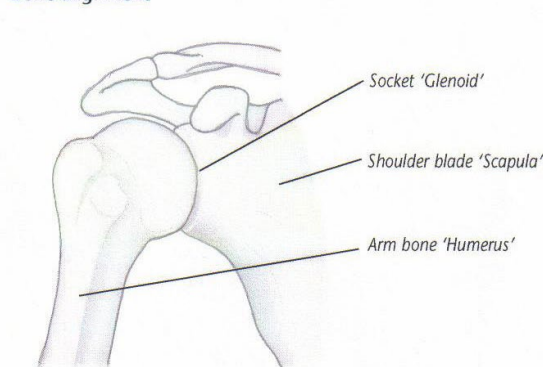
## About your shoulder

The shoulder is designed for a large amount of movement. Some movement occurs between the shoulder blade and the chest wall, but most movements are at the ball and socket joint. The ball at the top of your arm bone (humerus) fits into the shallow socket (glenoid) which is part of the shoulder blade (scapula). There is a loose bag or capsule which surrounds the joint. This is supported by ligaments and muscles.

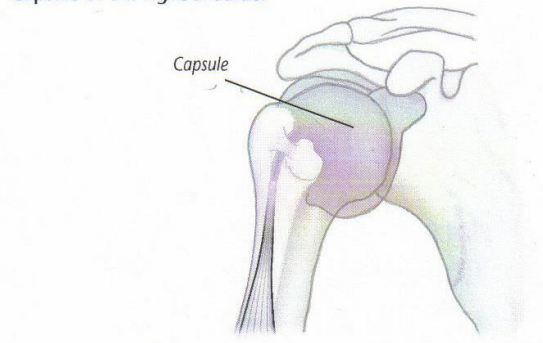
## What is a 'frozen shoulder'?

A frozen shoulder describes a shoulder joint that has become very painful, stiff and tight. The capsule surrounding the shoulder joint becomes inflamed and angry. This produces shoulder pain. As this settles, the shoulder becomes scarred and tight and, therefore, very stiff.

Bone alignment



Capsule of the right shoulder



Frozen shoulder is also known as 'adhesive capsulitis', which means that the capsule is inflamed ('-itis') and scarred (adhesive).

## What causes a frozen shoulder?

Nobody knows the cause of frozen shoulder and, in many people, we never find a reason for it. However, the following are more likely to get a frozen shoulder:

- People with diabetes
- People aged between 40 and 60 years of age
- People with heart disease
- It also can come on after a minor accident/injury, or after an operation.

## What are the symptoms?

The two main symptoms are **pain** and **reduced movement**.

To begin with the shoulder will be very painful. This may stop you from moving the shoulder. You may have difficulty in doing everyday activities such as combing your hair and getting dressed. You may often find it too painful to lie on that shoulder at night. Rapid stretching or jarring movements may bring tears to your eyes!

## What will happen over time?

For most people, the disease has three phases:

- PHASE 1 ('Freezing'): The pain comes on and gets worse. As a result, there is a loss of shoulder movement. This lasts for about 4-6 months.
- PHASE 2('Frozen'): The pain settles down but the shoulder remains very stiff. This lasts for about 4-6 months.
- PHASE 3 ('Thawing'): The stiffness improves and shoulder function and mobility returns. This takes about 6 months to a year.

You can see from this that your shoulder is likely to get better on its own, but it can take up to two years for complete recovery to take place. About four in every five people will make a complete recovery but the rest may be left with some pain and stiffness.

## What is the chance of my other shoulder becoming frozen?

About one in five people (20%) get a frozen shoulder on the other side.

## What if I have diabetes?

It is much more common to get a frozen shoulder on the other side. The stiffness takes a much longer time to go away, and may never go away entirely.

## What tests will my doctor do?

A shoulder X-ray is useful, it should look normal but is useful to rule out arthritis ("wear and tear"). If your doctor suspects other diseases such as a tear in the tendons around the shoulder, then an ultrasound or MRI scan may be suggested.

## Do I have to have treatment?

No, since the pain and stiffness are likely to improve over time anyway so as long as you are prepared to wait you do not have to have any treatment.

## Are there any treatments available?

Yes, there are several options and you may wish to discuss these with your doctor before deciding which is the most appropriate. Some treatments are aimed towards relieving pain, others towards managing the stiffness.

### For pain:

- **Modify activity and sport to avoid the pain:** It is quite safe to continue with any activities or sport as long as it doesn't cause you too much pain. Jarring movements such as hitting a divot playing golf will be very uncomfortable but gentle swimming or aerobics will probably be fine.
- **Painkillers:** These include simple painkillers such as paracetamol and codeine, as well as anti-inflammatories such as ibuprofen. Many of these can be bought over the counter. Check with your pharmacist if you are not sure which ones to take.
- **Cortisone (steroid) injections:** Cortisone can be injected into the joint to calm down the inflammation. It often helps with the pain of a frozen shoulder but does not speed up the time it takes for the stiffness to get better. The injection is uncomfortable and can make the pain worse for a few days. The pain may even come back again later, although further injections can be given if found to be useful. Cortisone injections are useful for controlling the pain for those people who do not wish to have surgery.
- **Hydrodilatation:** This is an ultrasound guided injection where the joint is injected with local anaesthetic and steroid (just like a cortisone injection) and then stretched by putting a large volume of fluid into the joint to stretch out the scar tissue. This helps 'kick-start' the physiotherapy exercises as well as give pain relief. It is as comfortable as a normal injection but with the added benefit of stretching out the stiff joint capsule. It is performed in the Radiology (X-ray) Department as a normal appointment and does not require any sedation or a trip to theatre. It is a good option for patients with a short duration of symptoms, avoids surgery and has a quicker return to normal function than a steroid injection alone.
- **Surgery:** Arthroscopic capsular release or a manipulation under anaesthetic (see below) can help with the pain.

### For stiffness:

- **Shoulder exercises:** Regular and gentle exercises may be useful to try and improve the stiffness in the shoulder but they are only useful once pain is no longer a major issue.
- **Physiotherapy:** It may be possible to stretch the shoulder with a formal physiotherapy programme although once again only when the pain is no longer an issue. Ice, heat and ultrasound therapy can also be used, as can other allied specialities such as acupuncture and osteopathy.
- **Hydrodilatation:** As discussed above.
- **Surgery:** Arthroscopic capsular release or a manipulation under anaesthetic (see below) can help with the stiffness.

## Why have surgery?

If the treatments listed above do not help, then surgery is usually the next step. Surgery is performed to try to increase the range of movement in the shoulder by cutting or tearing the tight capsule that restricts the movement.

## What operations / procedures are available?

The two procedures are manipulation under anaesthetic and arthroscopic capsular release. The aim of the manipulation under anaesthetic is to try to increase the range of movement in your shoulder. The tight capsule will be torn by forceful but careful and controlled stretching of the arm while you are asleep. A steroid injection is often given to the shoulder after the manipulation to calm down inflammation.

The arthroscopic capsular release involves keyhole surgery to carefully divide the scar tissue from inside the joint. Two or three small incisions (5mm) will be made around your shoulder. Both options require a general (full) anaesthetic (you will be asleep) and both can usually be performed as a day case (you go home the same day).

The decision as to which is the best option for you depends on a number of factors and should be discussed with your surgeon.

## What are the risks?

All operations involve an element of risk. We do not wish to over-emphasise them but feel that you should be aware of them before and after your operation. Please make sure you discuss any concerns with the doctors/consultant.

The risks include:

- a) **Anaesthetic complications** such as sickness and nausea or, rarely, cardiac, respiratory or neurological (less than 1% each, i.e. less than one person out of one hundred).
- b) **Infection**. This is usually a superficial wound problem and does not occur for a procedure involving MUA only. Occasionally deep infection may occur after the operation (less than 1%).
- c) **Failure** of the operation to improve the pain or movement in your shoulder (up to 30%).
- d) **Nerve and blood vessels damage** (less than 1%).
- e) **Fracture** of the upper arm bone (less than 1%).

Please discuss these issues with the doctors if you would like further information.

## What are the alternatives?

You probably have tried most of the alternative solutions for your frozen shoulder.

The alternatives for the **shoulder pain** include:

- Modifying activity and sport to avoid the pain.
- Seeking the advice of a sports professional.
- Taking painkillers and/or anti-inflammatory tablets.
- Cortisone injections.
- Hydrodilatation.

- Physiotherapy and other allied specialities such as acupuncture and osteopathy The alternative solutions for **shoulder stiffness** include:
  - Waiting for the stiffness to get better naturally. If you are suffering from a frozen shoulder, then the stiffness will get better naturally over the course of 18 months to 2 years even if you have no treatment whatsoever. If you have diabetes, then the stiffness may take much longer to go away and indeed may never disappear entirely.
  - If your shoulder is stiff as a result of a major injury, then there may be some natural improvement for up to 18 months. After that you may choose to simply put up with the stiffness.
  - Physiotherapy, stretching exercises and swimming can all help but only once pain is no longer a major issue

## Useful links

<http://www.nhs.uk/Conditions/Frozen-shoulder/Pages/Treatment.aspx>

<http://www.orthogate.org/patient-education/shoulder/adhesive-capsulitis.html>

This information sheet is not a substitute for professional medical care and should be used in association with treatment at your hospital. Individual variations requiring specific instructions not mentioned here might be required. It was reviewed by Mr Amar Malhas.

## Contacting us

If you have any concerns or problems following your discharge, you can contact the ward for general advice by telephoning:

Redlands Ward 0118 322 7485

Hurley Trauma Unit 0118 322 7335 / 7336

Adult Day Surgery Unit 0118 322 7622

Pre-op Assessment 0118 322 6546

Orthopaedic Clinical Admin Team (CAT5) 0118 322 7415 or email: [rbbh.CAT5@nhs.net](mailto:rbbh.CAT5@nhs.net).

Any concerns you may have during the first 24 hours of your discharge please telephone the ward you were on. After 24 hours please seek advice from your GP or NHS111.

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

RBFT Orthopaedics/Physiotherapy, January 2023.

Next review due: January 2025