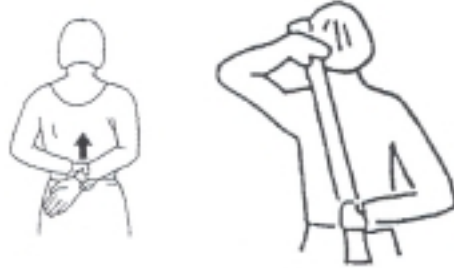


- Hand behind back** (right shoulder)
Standing with arms by side.
Grasp wrist of problem arm and
- a) **gently stretch hand towards your opposite buttock**
 - b) slide your arm up your back.
Can progress and use a towel



Remember this is often the last movement to return – do not force if painful, rather than stiff.

This leaflet has been written to help you understand more about the problem with your shoulder. This leaflet is not a substitute for professional medical advice and should be used in conjunction with verbal information and treatment given by the Orthopaedic and Rehabilitation Departments.

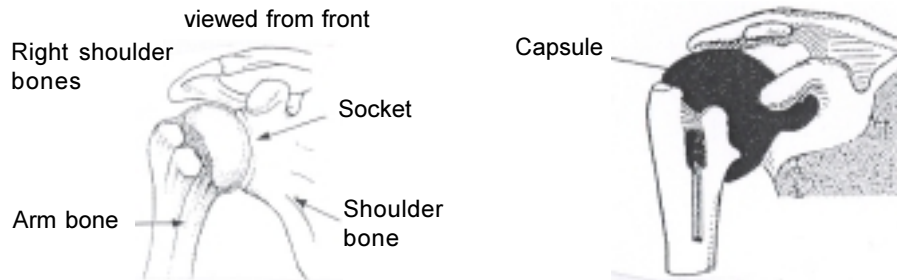
INFORMATION FOR YOU 'FROZEN SHOULDER' or ADHESIVE CAPSULITIS

We would like to thank the Nuffield Orthopaedic Centre (Upper Limb Clinic) for allowing us to re-produce the information in this leaflet.

The aim of this information sheet is to give you some understanding of the problem you may have with your shoulder. It has been divided into sections, describing your shoulder, what we know about frozen shoulder and your treatment options

ABOUT YOUR SHOULDER

The shoulder is designed to have a large amount of movement so that we can use our hands/arms in a wide variety of positions. Some movement occurs between the shoulder blade and chest wall. However, most shoulder movements are at the ball and socket joint. The ball at the top of the arm bone ('humerus') fits into the shallow socket ('glenoid') which is part of your shoulder blade ('scapula'). There is a loose bag or capsule which surrounds the joint. This is supported by ligaments and muscles.



WHAT IS 'FROZEN SHOULDER' OR ADHESIVE CAPSULITIS?

Typically the joint is stiff and initially painful, often starting without an apparent cause. The loose bag (capsule) around the shoulder joint becomes 'inflamed'. The bag then appears to tighten or shrink. This tightening combined with the pain restricts the movement.

HOW COMMON IS IT?

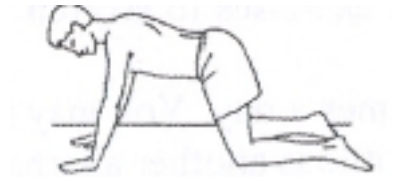
It is most common in people between the ages of 40-70 years and has been estimated to affect at least one person in 50 every year.

A staggering one million people in the UK will have frozen shoulder in a year

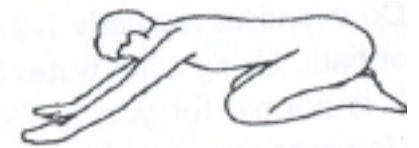
About 10% of people may develop adhesive capsulitis in the other shoulder within 5-7 years of the first one. However, it tends to resolve more quickly than the first. Although it is widespread, it is a difficult condition to treat. We hope that this information sheet will help to explain what we know about it so far.

Kneeling on all fours

Keep your hands still and gently sit back towards your heels.



To progress take your knees further away from your hands. Repeat 5-10 times.



Sit or stand (right shoulder)

Try and set up a pulley system with the pulley or ring high above you. Pull down with your better arm to help lift the stiff arm up.

Repeat 10 times



Stretching the back of the shoulder (left shoulder)

Take hand of your problem shoulder across body towards opposite shoulder. Give gentle stretch by pulling with your uninvolved arm at the elbow.

Repeat 5 times



3) **Recovery phase** (which can last between 5 to 26 months)

The pain and stiffness starts to resolve during this phase, and you can begin to use your arm in a more normal way.

The total duration of the process is between 12 to 42 months, on average lasting 30 months.

It is important to realise that although the pain and stiffness can be very severe, usually the problem does resolve. It will not bother you forever!

A review of people who had adhesive capsulitis approximately 7 years earlier shows that only 11% still had mild interference with everyday activities. However, 60% continued to have some stiffness in the shoulder joint when it was measured. So ultimately, you should have little effect in daily life although the joint may remain stiffer when tested.

WHAT ARE YOUR TREATMENT OPTIONS?

There is no one agreed treatment option that has been shown to 'work'. Ultimately, the shoulder appears to go through the three phases described and no treatment has altered this pattern. The passage of time is the main treatment!

During the **painful phase** the emphasis is on pain relief. Therefore, pain relief tablets and anti-inflammatory tablets may be prescribed. You can also try using **heat**, such as a hot water bottle, or cold (ice packs).

Injections into the joint may also be offered if the pain is not controlled.

Physiotherapy at this stage is directed at pain relief (heat, cold and other pain relieving modalities such as electrotherapy). Forcing the joint to move can make it more painful and is best not pursued. You can try using a **TENS** machine (transcutaneous nerve stimulation) which some people find helpful, or try alternative therapies such as **acupuncture**.

Once stiffness is more of a problem than pain, physiotherapy is indicated. You will be shown specific exercises to try and get the ball and socket moving. Some of these are shown at the end of this leaflet. In addition, the therapist may move the joint for you, trying to regain the normal glides and rolling of the joint. These are known as joint mobilisations. Muscle based movement techniques may also be used.

If movement is not changing with these measures, physiotherapy will be discontinued, although it is appropriate to continue with the suggested exercises to try and maintain the movement that you have.

Hopefully, as the recovery phase starts you will find that the movement gradually increases. This again, can be a useful time to have physiotherapy to help maximise the movement.

SURGERY

If you have significant stiffness which is lasting for longer than 12-18 months the doctors may offer you a 'Manipulation under Anaesthetic' operation. There is a separate information leaflet on this. It involves a 'distension' procedure which tries to stretch the loose bag (which is now tight) around the shoulder joint. In addition, the joint is stretched in certain directions to try and free the joint up.

This operation is not done routinely for adhesive capsulitis, only for those which are very slow to resolve

These are some examples of exercises to **stretch** your shoulder. They may be changed for your particular shoulder.

Do the exercises 1-2 times a day. You may find them easier to do after a hot shower or bath. Using a hot water bottle is another alternative.

It is normal for you to feel aching or stretching sensations when doing these exercises. However, severe and lasting pain (eg more than 30 minutes) is not recommended. Reduce the exercises by doing them less often or less forcefully. If the pain is still severe discontinue the exercises and see the physiotherapist or doctor.

Please note: Raising your arm forwards often improves first. Getting your hand behind your low back appears to be the last movement to return.
Do not force movements if they are painful rather than stiff

Pendulum (left shoulder)

Lean forwards with support.

Let arm hand down.

Swing arm.

a) forwards and back

b) side to side

c) around in circles (both ways)

Repeat 5-10 times each movement.



Twisting outwards (right shoulder)

Sitting holding a stick (rolling pin, umbrella).

Keep elbow into your side throughout.

Push with unaffected arm so hand of problem side is moving away from the mid-line (can be done lying down).

Repeat 5-10 times



Arm overhead (left shoulder)

Lying on your back.

Support problem arm with other

hand at wrist and lift it up overhead.

Do not let your back arch.

Can start with elbows bent.

Repeat 5-10 times.



Twisting outwards/arm

overhead (left shoulder)

Lying on your back, knees bent and feet flat.

Place hands behind neck or head, elbows up to ceiling.

Let elbows fall outwards.

Repeat 5-10 times. **unless stated**



WHY DOES IT OCCUR?

The exact cause of adhesive capsulitis is not known. It is more common in people with diabetes and with a thyroid gland problem. About 15% of people link it to a minor strain of, or injury to, the shoulder. This is known as **primary adhesive capsulitis**.

A **secondary adhesive capsulitis** can develop if the shoulder area is kept still for some time. For example, after a stroke or heart attack. It can also occur after major injury or surgery to the shoulder.

Some theories think the inflammation starts with a problem in the shoulder itself, others feel it is related to factors away from the shoulder (eg, stiff neck, certain diseases). Research is continuing to try and answer some of these questions.

WHAT TESTS MAY BE DONE?

The main way we diagnose the problem with your shoulder is from what you tell us and from our examination. Sometimes and X-ray will be done to check there are no bone changes in your shoulder joint.

WHAT IS LIKELY TO HAPPEN?

There are 3 main phases.

1) Painful phase (which can last between 2 to 9 months)

The pain often starts gradually and builds up. It may be felt on the outside of the upper arm and can extend down to the elbow and even into the forearm. It can be present at rest and is worse on movements of the arm. Sleep is often affected as lying on it is painful or impossible. During this time movements of the shoulder begin to be reduced.

2) Stiff phase (which can last between 4-12 months)

The ball and socket joint becomes increasingly stiff, particularly on twisting movements, such as trying to put your hand behind your back or head. These movements remain tight even when you try to move the shoulder with your other hand or someone tries to move the shoulder for you.

It is the ball and socket joint which is stiff. The shoulder blade is still free to move around the chest wall, and you may become more aware of this movement.