Physiotherapy and frozen shoulder

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.

Right shoulder (view from front)

Bones

Capsule

If you need this information in another format such as audio tape or computer disk, Braille, large print, high contrast, British Sign Language or translated into another language, please telephone the PALS desk on 01271 314090.

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.
What is ‘frozen shoulder’? 

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

Why does it occur? 

A primary frozen shoulder is when the exact cause is not known. It is more common in people with diabetes and with a thyroid gland problem. About 15% of patients link it to a minor injury to the shoulder.

A secondary frozen shoulder 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.

Research continues to get updated.

How common is it? 

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

It is a difficult condition to treat.

What is likely to happen? 

There are 3 main phases.

1. Painful phase (which can last from two to nine months) 

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

Treatment in this phase 

The emphasis is on pain-relief. Therefore painkilling tablets and anti-inflammatory tablets may be prescribed. You can also use heat, such as a hot water bottle or cold packs. Sometimes acupuncture can be offered. Injection into the joint may also be offered if the pain continues. This is not suitable for every patient. Physiotherapy at this stage is directed at pain relief. Forcing the joint to move at this stage can make it more painful.
2. Stiff phase (which can last from four to 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. It is the ball and socket joint which is stiff. The shoulder blade is still free to move around the chest wall.

Treatment in this phase

When 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, if appropriate, trying to regain the normal glides and rolling of the joint.

If movement is not changing with these measures, physiotherapy will be discontinued, although it is appropriate to continue with the suggested exercises. Try and maintain your range of the movements. Hopefully as the recovery phase starts, you will find that the movement gradually increases.

3. The recovery phase (which can last from five to 28 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 from 12 to 36 months, on average lasting 30 months.

Surgery

If you have significant pain and stiffness, your GP might refer you to an orthopaedic consultant. He or she might suggest a manipulation under anaesthetic or a surgical procedure called capsular release.

This is an operation not done routinely for frozen shoulder, only for those which are very slow to resolve.

The important thing is to realise that, although the pain and stiffness can be very severe, usually the problem does resolve. The passage of time is the main treatment!

Exercises

These are a few examples of exercises to stretch your shoulder. Do these exercises regularly 1-2 times a day. You may find them easier to do after a hot shower or bath. It is normal for you to feel a stretching sensation. However if you get ongoing pain, reduce the exercises by doing them less often or less forcefully, or stop completely. If the pain is increasing, see a physiotherapist or a doctor.

Do not do these movements if they are painful rather than stiff.
**Pendulum**

Lean forward with support (shown for left shoulder)

Let arm hang down

Swing arm

- forward and back
- side to side
- around in circles (both ways)

Repeat 5 – 10 times each movement

**Twisting outwards**

Sitting holding a stick (eg. 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)

Do not let your body twist round to compensate

Repeat 5 – 10 times

**Arm overhead**

Lying on your back (shown for left shoulder)

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

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

Kneeling on all fours

Keep your hands still

- Gently sit back towards your heels
- To progress take your knees further away from your hands
- Repeat 5 – 10 times

Sit or stand

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
- NB. Normally it is best to have the fixed pulley point behind you.
**Stretching the back of the shoulder**

Take hand of your problem shoulder across body towards opposite shoulder

Give gentle stretch by pulling with your uninvolved arm at the elbow

Sometimes you can feel more stretch if you lie on your back to do the movement

Repeat 5 times, holding for 20 seconds

**Hand behind back**

Standing with arms by side

Grasp wrist of problem arm and;

- gently stretch hand towards your opposite buttock
- slide your arm up your back

Can progress and use a towel

Repeat 5 times

**Further information**

NHS Choices (www.nhs.uk)

NHS Clinical Knowledge (www.ck.nhs.uk)

Patient.co.uk (www.patient.co.uk)

Shoulderdoc (www.shoulderdoc.co.uk)

This leaflet has been originally produced by The Nuffield Orthopaedic Centre in Oxford. They have kindly given us permission to use it in our service.
PALS

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‘Patient Opinion’ comments forms are on all wards or online at www.patientopinion.org.uk.