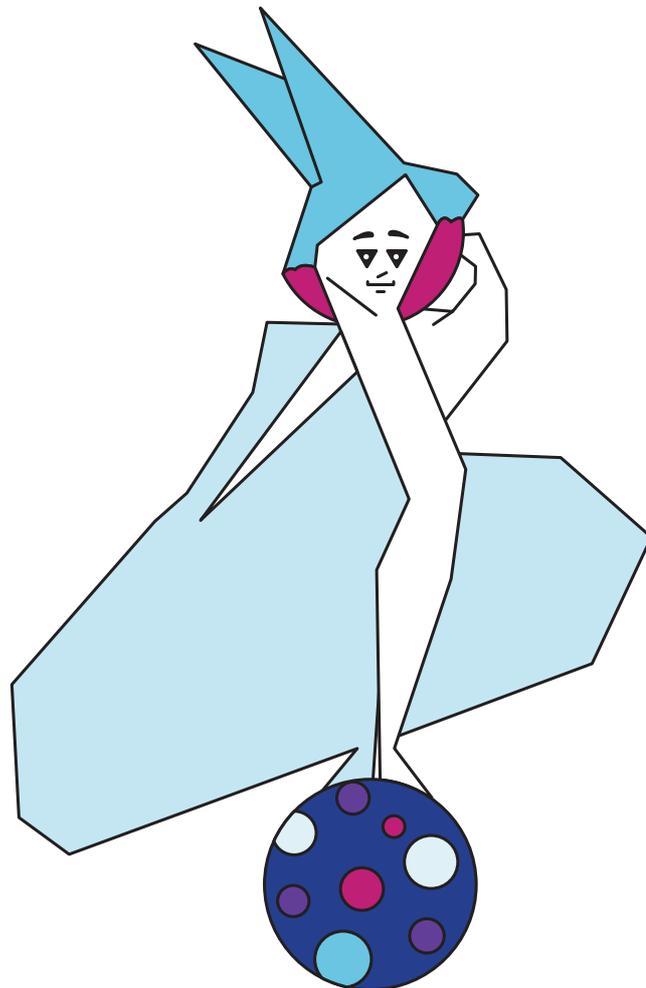


INFORMATION FOR YOU

Instability of the shoulder

INSTABILITY OF THE SHOULDER



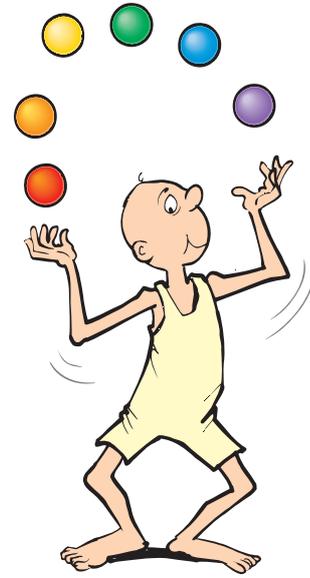
The aim of this information sheet is to give you some understanding of the problem you may have with your shoulder. It has been divided into sections, describing the shoulder, types of instability and your treatment options.

The shoulder

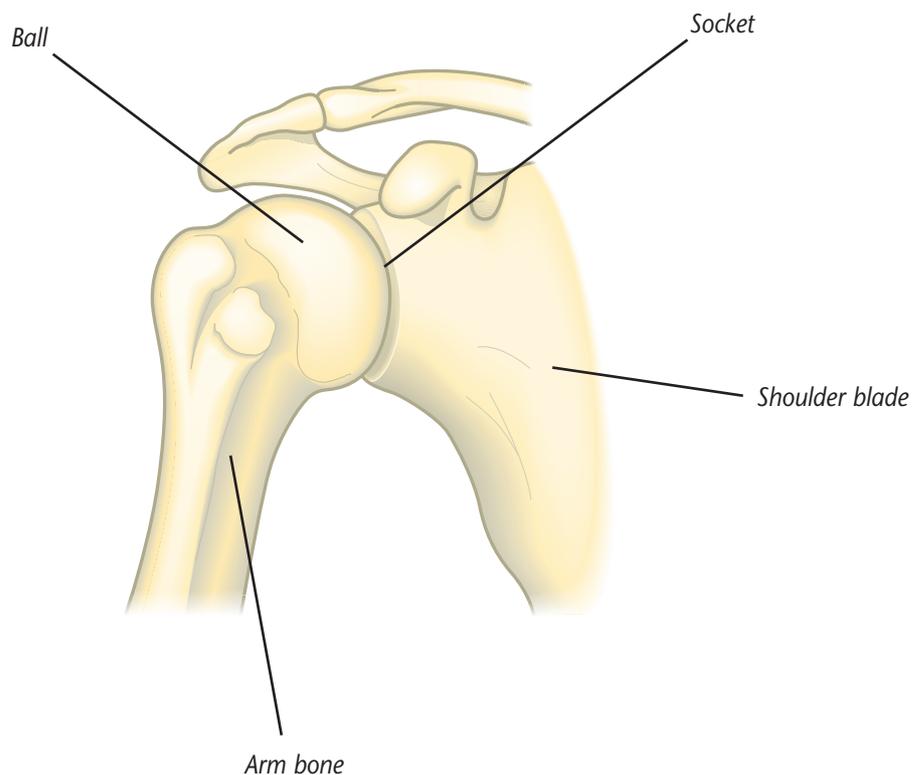
The shoulder joint is a ball and socket joint. Most shoulder movements occur where the ball at the top of your arm bone fits into the shallow socket which is part of the shoulder blade.

The joint is designed to give a large amount of movement. This also means that it has a tendency to be too loose. There are various structures which help to keep the joint in position. The most important ones are:

- Ligaments, which hold the bones together
- A rim of cartilage, which deepens the socket
- Muscles, which keep the shoulder blade and ball in the correct position when moving or using the arm.



Right shoulder bones viewed from the front



There is a balance between having maximum movement in the shoulder whilst maintaining stability.

When the shoulder is moving normally, the ball stays centred against the socket. With shoulder instability this mechanism goes wrong.



Shoulder Instability

When the ball is not moving normally on the socket (or vice versa) you may feel the ball slipping, catching or coming out of joint. This can be associated with pain and a sense of a 'dead arm' and you become apprehensive of moving your arm in certain positions.

There is a wide range of shoulder instability, from the joint slipping (subluxation) to a complete dissociation of the joint surfaces (dislocation). With a dislocation, you may not be able to put it back in joint yourself. A dislocation is more likely to damage the structure of the shoulder.

The instability does not normally progress, so don't think it is all going to get worse! However, you can get both dislocation and subluxations in the same shoulder. For example: you dislocate your shoulder with a fall and require help at the hospital to relocate it. Then you find the joint is slipping on throwing or swimming.

Types of shoulder instability

There are different types of shoulder instability which affect the treatment that you will be offered.

1. Traumatic instability

The main distinguishing feature is whether your shoulder was forced out of joint through contact with something e.g. the ground, another person. This is known as **traumatic** instability. You can injure other structures around the shoulder when this happens, such as nerves and muscles, especially if you are older.

Usually the ball is forced forwards and downwards. Commonly the ligament in the front of your shoulder is over-stretched and can pull part of the rim of cartilage off the socket. If the cartilage is detached in this way it is called a 'Bankhart lesion'. It is sometimes detectable with an MRI (Magnetic Resonance Image) scan but may only be visible when the surgeon looks in your shoulder joint at surgery.

Sometimes you can have a dent in the back of the ball which is formed as the ball is forced out of the socket. This is known as a 'Hill-Sachs lesion'.



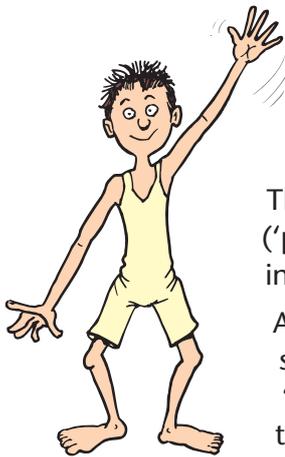
Unfortunately having had this injury once, it tends to recur, usually when your arm is out to the side and twisted backwards. This is because there is often damage to the structure of your shoulder.

From research, we know that the younger you are when you have the first dislocation, the more likely it is to recur. At present it is not clear whether the way you are treated immediately after the injury (i.e. put in a sling, given exercises, physiotherapy), makes a difference to the joint dislocating again in the future.

For very few people the ball may be forced out backwards (posterior dislocation). This tends to occur if your arm is in front and across your body on impact.

2. Atraumatic Instability

For some people the shoulder is not involved in a specific accident/event but the joint gradually feels unstable. This may develop with specific, repetitive



movements of the arm (e.g. throwing, swimming). Sometimes people have 'loose-joints' and these can become a problem and start dislocating or slipping on everyday activities. This is known as **atraumatic** instability.

The ball may be sliding forwards ('anterior'), backwards ('posterior') or downwards ('inferior'). Sometimes it may slide in more than one direction and occur in both shoulders.

A few people can make the muscles pull the ball out of the socket, without moving the arm at all. This is known as 'voluntary' dislocation. Often it starts as a party trick but then the joint slips out when you don't want it to. Do not do this movement! It trains the muscles incorrectly and reminds your brain of an incorrect movement. You will probably always have **the ability** to do this, our advice however is not to!

Sometimes it is not clear-cut as to whether it is purely a traumatic or an atraumatic instability problem. The two situations can overlap to some extent.

What tests may be done?

The main way we find out about shoulder instability is through what you tell us and by examining your shoulder. However, sometimes an X-ray will be done and very occasionally an MRI scan will be ordered, to see if there is any damage to the rim of cartilage and bone.

What are your treatment options?

We appreciate that as you are attending the Nuffield Orthopaedic Centre you may have had your initial instability episode some time ago or that you are now having recurrent problems.

Treatment options are often dependent on the type of instability group you are in.

Traumatic instability

If the joint is stiff or the muscles weak when tested, you may be sent for a trial of physiotherapy. However if the movement is good and muscles are working well, but the joint is dislocating or slipping regularly and stopping you doing what you want to do, the doctors may offer you an **operation**. This is called an Anterior Stabilisation Operation. You will be given further details on this operation if this option is given to you.

Sometimes if you are a teenager, the doctors will not want to operate on you until you have stopped growing, so the operation will be delayed.

Atraumatic instability

You will be probably sent for a course of **physiotherapy**.

Surgery is not recommended unless an extended, appropriate course of physiotherapy has been given and has been unsuccessful. Surgery is not always a helpful option and can make some people in this category worse, so it is important that you work hard at the physiotherapy. It is unfair to say physiotherapy has been unsuccessful if you have not done your exercises!

In the unlikely case that you are offered surgery, options will be discussed with you. The joint can be stabilised with an 'open' stabilisation operation – where the joint is opened and capsule tightened.

You are less likely to be offered surgery if you can voluntarily dislocate your shoulder as the research tends to show poor results in this group of patients.

If you show signs of having both traumatic and atraumatic instability, your treatment options will be discussed with you. Physiotherapy may be suggested in the first instance.

What is physiotherapy about?

The broad aims of physiotherapy are to:

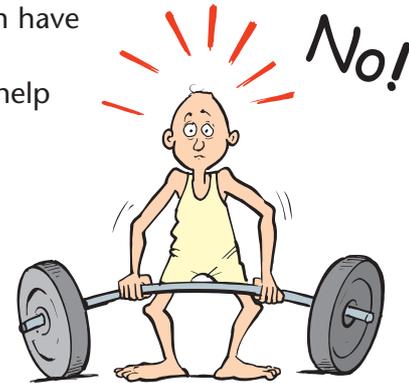
Retrain movement – this is probably the most important aspect of treatment. The emphasis is on getting the optimal movement of the shoulder blade (socket) and arm bone (ball). Sometimes you develop unusual movement patterns which need to be corrected.

Strengthen muscles – this is often *not* like weight-lifting type training! Initially the aim is to regain control of your muscles around the shoulder blade and the deep muscles around the ball and socket joint. Muscles that are weak or get tired easily need to be strengthened.

Retrain 'position sense' – the unstable shoulder can have a reduction in the ability to know where your arm/shoulder is in space. Certain types of exercises may help retrain this.

Return to sport or activity – once the control, muscle endurance and strength have improved you will be slowly guided back into positions or activities where the shoulder was feeling unstable.

In addition if you have pain and/or stiffness there are treatments that may help you.



How long do I need to do the exercises?

You need to do the exercises at least 3 times a week to give them any chance of working. Ideally, try and get into the habit of doing them every day, then it does not matter so much if you miss an occasional day.

In addition, you need to continue with the exercises over a minimum of 12 weeks. If your muscles are weak it will take this length of time for them to respond to the exercise programme.

It is important to realise that the response to physiotherapy takes time. **You may not see any changes for 6 weeks, even though you are doing your exercises regularly.**

If you have been doing your exercises and there is no response at all after 12 weeks, then it is probable that physiotherapy is not going to help. If your shoulder appears to be particularly stubborn at getting better, you may be asked to see a chartered physiotherapist who specialises in shoulder problems.

In addition you may find that if you stop doing the exercises the problem has a tendency to return. Therefore you may find that you will need to continue with some form of exercise for ever, just like cleaning your teeth!

Summary

The shoulder is the commonest joint in the body to dislocate or sublux. The most usual cause is trauma but some people are born with loose joints. Dislocations and subluxations caused by trauma often give ongoing problems and 50% of people will need an operation to stabilise the joint. The operation has a high success rate.

For people who develop instability without trauma, the best treatment is physiotherapy. Surgery can be used in severe cases but the success rates are much lower than with traumatic dislocations.

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 at the Nuffield Orthopaedic Centre.***

Comments will be gratefully received. Please send to Jane Moser, Superintendent Physiotherapist, Oxford Shoulder & Elbow Clinic, Nuffield Orthopaedic Centre NHS Trust, Oxford, OX3 7LD or give in at a clinic appointment.

