

Shoulder Instability without a Major Injury

Information for patients

You have been diagnosed as having non - traumatic instability of one or both shoulders.



The shoulder joint

The shoulder complex:

The shoulder joint is the most mobile joint in the human body; it is capable of moving in more than 16,000 positions.

It is described as a ball and socket joint. Unlike the hip joint, however, the socket of the scapula (shoulder blade) is not very deep. As a result of this mobility and shallow socket the shoulder has compromised some of its natural stability. This places a greater demand on the surrounding tissues, such as muscles (referred to as dynamic stabilisers) and the ligaments (referred to as static stabilisers), to keep the shoulder stable and therefore functional.

Here is a list of the most important factors (from inside to out) which help keep the head of the humerus (ball end of the arm bone) seated in the socket of the scapula (shoulder blade) during all these movements.

1. Bones – the shape of the ball and socket

2. Labrum – a thick rim of cartilage (gristle) which attaches around the rim of the socket which makes it a bit deeper
3. Capsule – the ‘bag’ which surrounds and contains the whole shoulder joint
4. Ligaments – thickenings of the capsule which help to limit the extremes of movement between the ball and the socket
5. Muscles – closely surrounding the shoulder joint (rotator cuff muscles) and the larger overlapping muscles (deltoid, pectoralis major, latissimus dorsi, trapezius), which together force the shoulder joint together while also making it move

All these structures need to be working normally to ensure the joint does not dislocate.

What is Instability? :

Instability is the sensation that the shoulder dislocates or partially dislocates (subluxes).

Symptoms of Instability:

You may have a sense of apprehension – an uncomfortable sensation that the shoulder may be about to slide out of place. This subsequently results in a lack of use of the shoulder and arm and so further weakening of the muscles.

The shoulder may ‘pop’ out and back into place with minimal force, such as when turning over in bed or reaching up for an object or to answer a question in school.

The shoulder may feel as if it will ‘fall’ out of joint when carrying heavy objects such as a bag.

You may be able to make the shoulder come out as a party trick. This type of movement or ‘dislocation’ is often painless. If untreated, this may progress to the point where the movement is out of control and actions such as coughing or sneezing may cause the shoulder to dislocate / ‘fall’ out.

Causes of Instability:

For most people there is at least one episode of significant injury to the shoulder which causes the first dislocation. However the shoulder can dislocate in some people without ever having suffered any trauma. Here is a list of the commonest causes.

- Generalised ligamentous laxity This is the same as being ‘double – jointed’ or ‘born loose’, and is usually seen in younger children and teenagers. This can also be responsible for dislocating knee caps (patella) and elbows and it often runs in families.
- Acquired instability due to repeated overhead movements in sporting activities such as swimming or volleyball. These can contribute to the laxity, or looseness, of the shoulder through sudden strong movements, repeated

minor injuries or overworking and tiring of the muscles around the shoulder that are meant to keep it in position.

- Abnormal muscle patterning which means that the strong muscles around the shoulder are not working in the correct order and so pull the shoulder out of joint.

Treatment of non traumatic instability:

- It is best treated by the physiotherapists as the primary aim is to restore correct muscle activity or sequencing. (which surgery can't achieve)
- The aims of physiotherapy are to allow a full return to work and sports. This will involve encouraging increased use of the shoulder in daily life and not an avoidance of movement or activities, which is a very common problem with this condition.
- The physiotherapist will look at your posture, the way in which the muscles work and how the shoulder joint moves. It is helpful if the correct shoulder movement is established before specific muscle strengthening begins. The exercises you will be given do not always focus on the shoulder as other areas, such as the trunk and leg muscles, may also need strengthening in order to assist the shoulder stability.
- This process can take a long time as there may be a lot to correct. It also relies on the exercise regime, given to you by the physiotherapist, being carried out on a regular and long term basis.

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www.readingorthopaediccentre.com

www.shoulderdoc.co.uk

www.orthogate.org/patient-education

www.theupperlimb.com/gost.home

www.oxfordshoulderandelbowclinic.org.uk

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 compiled by Catherine Anderson (Specialist Physiotherapist) and Mr Harry Brownlow (Consultant Orthopaedic Surgeon).