





# **Traumatic Shoulder Instability**

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#### Introduction

- The shoulder joint is a ball and socket joint which allows a lot of movement at the shoulder in order to reach in all directions.
- It is generally a very strong yet mobile joint but sometimes it can become loose and unstable.
- Traumatic shoulder instability is a term used to describe a shoulder joint that moves too much and may sublux (where the ball moves partially out of the socket) or dislocate (the ball comes fully out of the socket) after a high force injury or accident.
- The joint often needs relocating (the ball put back in the socket) by a medical professional.

## Causes of Traumatic Shoulder Instability

- Traumatic shoulder instability (subluxation or dislocation)
   occurs with a high force trauma or accident such as a heavy fall
   or rugby tackle and often causes injury to the soft tissues
   surrounding the shoulder such as the labrum (cartilage),
   ligaments and Rotator Cuff tendons. The ball on the top of the
   arm bone (humerus) can also be chipped or fractured at the
   same time. Less common is an (axillary) nerve injury.
- An anterior dislocation is most common where the ball is forced forwards out of the joint and is often related to sporting injuries. Less common is a posterior dislocation when the ball is forced out the back of the socket, this usually occurs with falling on an outstretched hand or during an epileptic seizure.

## **Symptoms of Traumatic Shoulder Instability**

- The initial incident may be very painful until the joint has been manipulated back into place by a medic. Pain usually settles quickly after the initial trauma.
- As a result of the injury, the shoulder may continue to feel loose or unstable during certain activities, especially with reaching out and high above your head.
- There may be repeated sensations of the joint slipping out of joint (subluxations) or further dislocations which usually occur with little force.

### Diagnosis of Traumatic Shoulder Instability

- A dislocated joint can be seen on an X-Ray. X-Rays are also used to check the ball has been successfully put back in the socket (relocated) and to see if the bones have been fractured/chipped in the accident.
- Sometimes an MRI or Ultrasound scan is used to see if the soft tissues were damaged in the injury.

## **Self Management of Traumatic Shoulder Instability**

- Immediate medical attention. Immediately after injury (suspected dislocation) it is important to see a medical professional and have an x ray to confirm dislocation and to ensure the joint is back in place. Pain relief may be required and a sling may be needed for the first few days for comfort.
- Rehabilitation. Early rehabilitation is important to help teach
  exercises designed to strengthen the muscles to help keep the
  joint stable and prevent further dislocations. As the soft tissues
  heal over the following weeks, the exercise programme can be
  progressed to help with return to activity, work and sport. You
  should avoid heavy lifting or return to contact sports until your
  shoulder feels stable, strong and full comfortable movements have
  been restored.
- Surgery. In younger patients (aged between 16-24years old) it is likely that key soft tissues such as the cartilage (labrum) and ligaments are injured and often need surgery to repair them otherwise there is a high risk of recurrent dislocations and dysfunction. Patients older than 30 years old are less likely to redislocate but may injure the rotator cuff tendons. Rehabilitation is important to try strengthening the muscles to help restore movement and strength. An operation is sometimes performed to repair the tendons. Physiotherapy after surgery is important to strengthen the muscles and regain movement and function.

# **Exercises for Traumatic Shoulder Instability**

#### **Exercise 1: Shoulder Isometric Abduction**



- Bend your elbow on the affected side.
- Reach across and grasp your elbow with the unaffected arm.
- With the affected arm, push outwards into the unaffected arm, hold and relax.

#### Exercise 2: Shoulder Isometric Internal Rotation



- Place a pillow/rolled up towel between your elbow and your body.
- Keep your arm by your side.
- Keep your elbow bent at 90 degrees.
- Put your palms against each other. Push inwards against your other palm as if trying to bring your hand to your stomach- resist with the other hand.

#### **Exercise 3: Shoulder Isometric Lateral Rotation**



- Place a pillow/ rolled up towel between your elbow and your body.
- Keep your arm by your side.
- Hold onto fist of the affected side with your other hand.
- Keep your elbow bent at 90 degrees.
- Push out against your opposite hand, holding with equal and opposite force with your other hand to not allow movement

Exercise 4: Shoulder Isometric Abduction – Tipping the Chair



- Stand next to a chair so that the backrest faces your affected side.
- Make a fist and push it into the backrest so you slightly lift the back legs of the chair.
- Hold then release

**Exercise 5: Scapular Stability with Small Ball on the Wall** 



- Stand close to a wall.
- Place your hand on a small ball on the wall just below shoulder height.
- Hold your shoulder blade still.
- Make circles alternating from clockwise to anti-clockwise, up and down and side to side movements with your hand on the ball (rolling the ball).

#### What Next?

If you are still experiencing symptoms despite following the above advice, it is important you seek advice from your GP. Your GP may decide to refer you to the musculoskeletal clinic or to a physiotherapist.