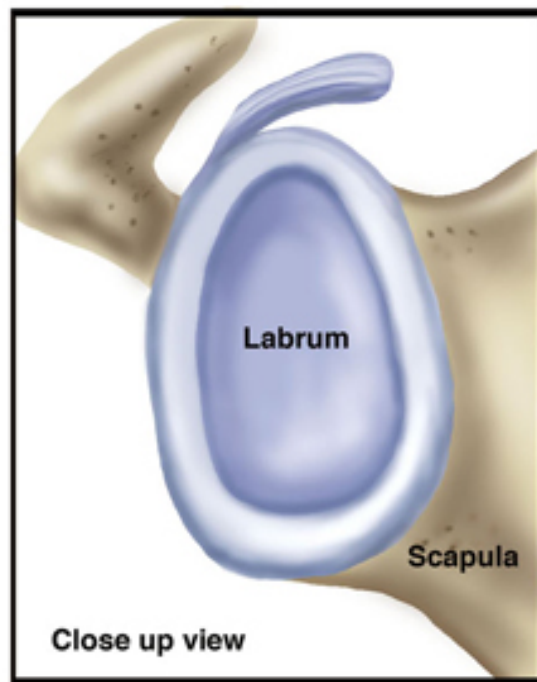
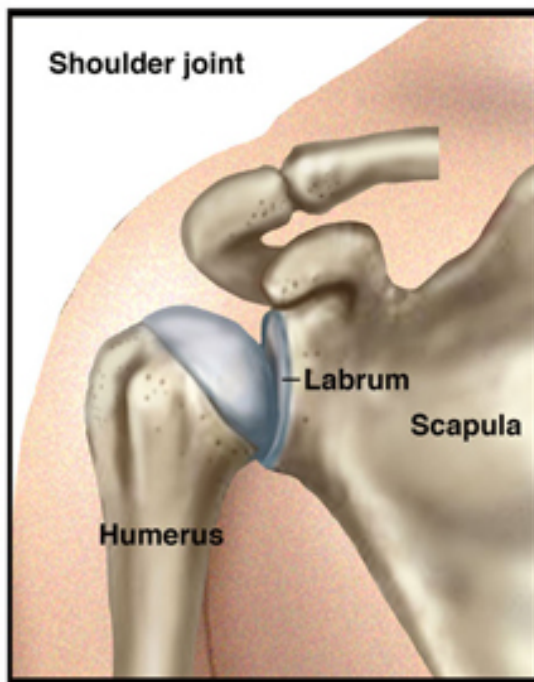


Shoulder Dislocation/Instability

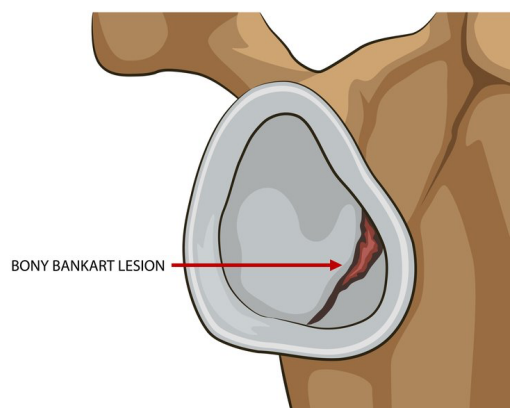
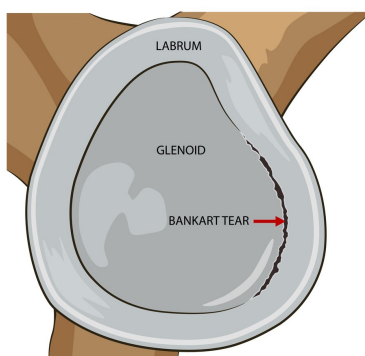
The Shoulder Anatomy

The shoulder joint is a ball and socket joint. Most shoulder movements occur where the ball at the top of your arm bone (the humerus) moves in the shallow socket (the glenoid). The glenoid is surrounded by a ring of cartilage (the labrum) which deepens the socket and provides more stability. The shoulder joint is designed to give a large amount of movement, but this also means that it has a tendency to come out of joint, or dislocate.



What Is Shoulder Instability and What Causes It?

Shoulder instability is when the ball slips out of the socket. This includes a dislocation, where the ball completely slips out of the socket, and a subluxation, where the ball partially slips out of the socket. Most dislocations occur after an injury, which can damage the labrum or the glenoid (a Bankart lesion). Shoulder instability is a common sports injury, especially in contact sports such as in football codes, skiing and surfing. The shoulder can dislocate out the front (anteriorly) and/or out the back (posteriorly).



Can Shoulder Instability Recur?

Recurrent shoulder instability is very common. The risk of recurrence is affected by several factors including age, sex, functional demand (sports), number of previous dislocations and previous treatment received. The greater the damage to the shoulder during the first dislocation, the higher the risk of recurrent shoulder dislocation treatment.

How Is Shoulder Instability Assessed?

Assessment includes and clinical examination, x-rays and usually an MRI scan. If there is extensive damage to the bones (glenoid or humeral head) then a CT scan may be required as well. An ultrasound scan is not usually helpful in assessing the shoulder after dislocation.

How Is Instability Treated?

The best treatment choice will be determined by several factors including extent of the damage to the shoulder and in particular bone abnormalities, other associated injuries to the shoulder, functional demand, participation in contact sports and age. There are several treatment options available for shoulder instability. These include:

- A period of rest in a sling to allow the tear to heal, followed by physiotherapy
- Arthroscopic surgery for repair of the torn labrum – shoulder stabilisation
- Open surgery with bone graft to the glenoid - Latarjet Procedure

Thorough pre-operative assessment is critical to determine the best treatment option for your shoulder.

What Is The Recovery Time From A Surgery?

Rehabilitation and recovery time will depend on the type of shoulder instability, the extent of the damage and treatment received. Generally, most surgeries require 3-4 weeks in a sling, which allows time for the labrum to heal back to the bone. During this time passive exercises (movement, without using the shoulder muscles) are performed to prevent excessive shoulder stiffness. After the labrum has healed to the bone, the sling can be removed and active exercises can commence. Exercises should never cause excessive shoulder pain.

Milestones	
Week 3	Return to sedentary work as comfortable, light lifting.
Week 6	Active range of movement at least 75% of normal. Begin driving as safe and comfortable, swimming (breaststroke).
Week 12	Full range of movement, with only minor loss of combined abduction and external rotation. Return to manual work, heavy lifting, swimming (all strokes), golf.
Week 16	Full ROM, strength and control through range. Return to contact sports

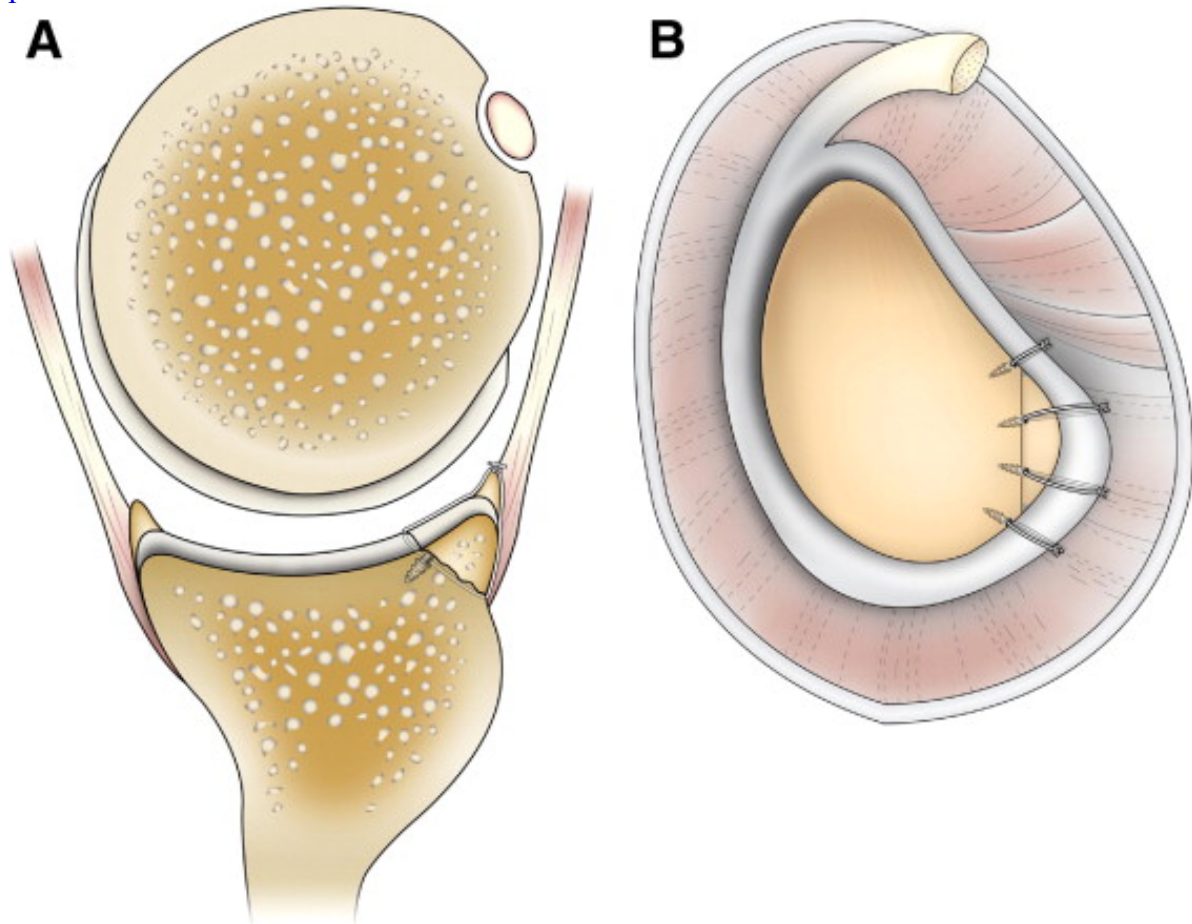
Arthroscopic Shoulder Stabilisation

Arthroscopic stabilisation is a keyhole procedure aimed at repairing the soft tissues surrounding your shoulder that were damaged due to trauma, dislocation or instability of your shoulder.

During an arthroscopic shoulder stabilisation, an arthroscope (camera) is inserted into the shoulder to allow the shoulder joint and surrounding structures to be seen. The damaged structures are repaired and tightened to restore the joint's stability. This involves placing small anchors into the socket of the shoulder and suturing (sewing) the torn tissue back to the bone. Usually this is performed via three small 1cm cuts placed around the shoulder so the surgeon can examine and repair as necessary.

Arthroscopic stabilisation video:

<https://www.orthoillustrated.com/animation/26-knotless-shoulder-labral-repair-with-arthrex-pushlock>

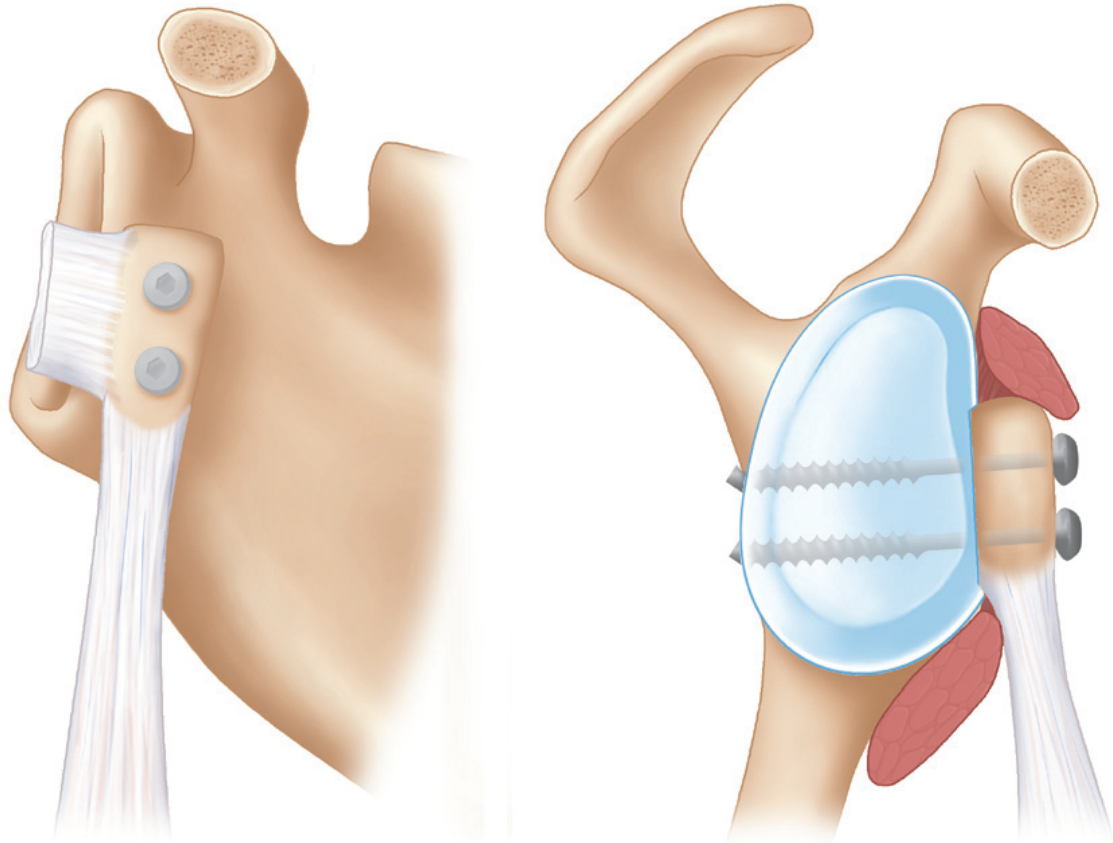


Open Latarjet Procedure

This surgery is performed when the bone on the socket needs to be repaired with additional bone and this is obtained from a small bone protruding off the front of the shoulder blade called the coracoid process. Because of the “transplant” of the bone, this is generally done as a traditional open surgery rather than arthroscopic. An incision is made on the front of your shoulder. The bone from the coracoid is “harvested” and then the socket is identified and prepared. The rest of the joint and soft tissues are inspected for damage and treated if necessary. The bone graft is then screwed into place on the socket and soft tissues are then repaired. Your incision will be closed with sutures or staples. The area is then covered with a sterile dressing. Your operative shoulder will be placed in a sling after surgery.

Latarjet video:

<https://www.orthoillustrated.com/animation/24-latarjet-for-instability>



What Are The Risks Associated With Surgery?

Decisions regarding surgical treatment are best taken jointly between the surgeon and an informed patient. In addition to the surgeon explaining the procedure, you must take the opportunity to ask and clarify, what concerns you the most, no matter how trivial you feel your concern may be.

All surgical procedures are associated with a degree of risk. Your surgical team will do everything possible to minimise the risks and complications. Below is a list of some risks and complications associated with shoulder stabilisation surgery.

- Pain levels felt after surgery vary depending on the type of surgery, individual pain thresholds, nature of the problem for which surgery was done and various other factors.
- Stiffness after shoulder surgery is not uncommon and occurs as a result of pre-existing pathology, surgical scarring and prolonged post-operative protection in a sling. It is very uncommon to see significant stiffness at 1 year after arthroscopic shoulder surgery.
- Bleeding during or after surgery. It is common to have oozing from the arthroscopic wound ports after surgery as the blood-stained sterile water used during surgery drains out.
- Infection of the wound is rare with surgery (less than 0.2%). Early diagnosis of post-operative infection has a significantly better outcome. After your operation you should contact the Rooms or your GP immediately if you get a temperature, notice pus in your wound, feel unwell, or if your wound becomes red, sore or painful.
- Unsightly scarring of the skin (less than 1%). Most surgical scars have disappeared to a thin pale line by one year after surgery. If you are concerned about your scar you must discuss it with your surgeon or therapist, as there are many treatments to improve scar healing.
- Nerve Injury is rare (less than 0.5%), with most shoulder operations, but some larger operations have a higher risk and this will be discussed with you by your surgeon.
- Vascular injury is again very rare at less than 0.5%. DVT – very rare with surgery of the upper limb.
- Anaesthetic related complications such as sickness and nausea are relatively common. Heart, lung or neurological problems are much rarer at less than 1 person in 1,000.
- Recurrent dislocation or instability risk after arthroscopic surgery is approximately 5-20%. The risk is higher in young males, those who play contact sports, and non-compliance with post-operative rehabilitation.
- Recurrent dislocation or instability after Latarjet surgery is approximately 2-5%. The risks of infection, nerve injury and stiffness are higher than in arthroscopic surgery.
- Revision surgery. Following revision surgery the outcomes and results are generally less favourable compared to primary surgery. Similarly complication rates and risks are usually higher in revision surgery.
- Shoulder Arthritis. Damage to the cartilage of the shoulder joint which occurs with shoulder dislocation treatment predisposes the shoulder to developing arthritis. Unfortunately, surgery cannot reverse any damage to the shoulder joint cartilage, however stabilizing the shoulder may prevent the cartilage damage from worsening during recurrent dislocations.

Anterior Stabilisation/Latarjet/Bankart Repair

	Rehabilitation
On Discharge - 3 Weeks	• Sling 3 weeks • Advice on sling management • Neck, elbow, wrist and hand ROM • Postural education • Passive/active assisted ROM within safe zones • Light proprioceptive exercises • Ensure dynamic scapula and cuff control within safe ranges • Eliminate poor muscle patterning/compensatory movements within safe zones • Can begin early kinetic chain rehabilitation excluding the affected arm • Avoid combined abduction and external rotation • Do not force or stretch
3-6 Weeks	• Wean off sling 3-6 weeks • Gently progress active assisted ROM beyond safe zones as comfortable • Continue proprioceptive exercises within safe zones • Begin strengthening within safe zone • Ensure dynamic scapula and cuff control • Monitor for abnormal muscle patterning • Continue kinetic chain rehabilitation within safe zones • Avoid combined abduction and external rotation • Do not force or stretch
6 Weeks +	• Continue to progress active ROM introduce combined abduction and external rotation as comfort allows • Ensure quality of movement monitor for abnormal muscle patterning • Progress strengthening through range • Dynamic scapula and cuff control through range (work on strength and endurance) • Proprioceptive exercises through range • Full kinetic chain rehabilitation • Address any core stability issues • Plyometric and perturbation training

Sling	Sling 3 weeks
Physiotherapy Follow Up	Within 2 weeks post op

Milestones	
Week 3	Return to sedentary work as comfortable, light lifting.
Week 6	Active range of movement at least 75% of normal. Begin driving as safe and comfortable, swimming (breaststroke).
Week 12	Full range of movement, with only minor loss of combined abduction and external rotation. Return to manual work, heavy lifting, swimming (all strokes), golf.
Week 16	Full ROM, strength and control through range. Return to contact sports