



Surgery for Traumatic Anterior Shoulder Instability

The best operation for someone who has had a traumatic anterior dislocation with a Bankart tear is an Anatomic Repair of the torn ligaments and capsule. This is sometimes known as a Bankart Repair.

Essentially this involves mobilising and freshening up the torn edges of the ligament and capsule and then re-attaching them on to the front of the Glenoid (Socket), the bone here having also been freshened. The tissue is usually attached to the bone using '**suture anchors**'. These are small implants, made of various materials, that can be inserted, by drill holes, into the bone. Attached to the anchors are sutures that can then be passed through the torn ligaments and capsule and tied down into position. Having re-attached the freshened ligaments and capsule to the freshened bone of the socket they can then heal.

find out more about arthroscopic surgery suture anchors – www.cambridgeshoulder/...

Arthroscopic Bankart Repair (Anterior Shoulder Stabilisation)

A Bankart Repair operation can be undertaken as an open or an arthroscopic procedure. The advantages of an arthroscopic procedure are that smaller incisions are used without having to disturb and cut through other structures and it is possible to more accurately assess the damage to the shoulder and quality of repair.

I undertake all of my Bankart Repairs arthroscopically. There are a number of different variations to the technique and different implants that can be used. I have evolved my technique over the past 15 years, taking advantage of new implants and equipment, and have obtained consistently good results, with which I am happy. My routine Arthroscopic Bankart Repair is described below,

Procedure

- The patient is anaesthetised with a general anaesthetic and interscalene nerve block
- Prophylactic iv antibiotics are given
- A posterior and 2 anterior portals are used for joint access
- The joint is initially assessed to confirm the presence of the Bankart Tear, to assess the extent of any Hill-Sachs Lesion or Glenoid Bone Loss and any other pathology
- The Bankart Tear is then fully mobilised and the tissues freshened
- The Anterior Glenoid is then prepared and freshened
- 3 Osteoraptor or Pushlok bio-composite anchors are inserted into the anterior, inferior glenoid and the capsule and ligaments re-attached with a superior shift
- The repair is assessed and the wounds closed

see video and images of the surgery - www.cambridgeshoulder/...
find out more about having an operation - www.cambridgeshoulder/...



After the Surgery

Post-Operative Care

Following an Arthroscopic Bankart Repair the patient may be able to go home that day or may need to stay in the Hospital overnight, depending on circumstances. I would see the patient after the surgery to discuss how the procedure has gone and arrange for further Follow-Up. The patient will be seen by the In-Patient Physiotherapy team who will instruct them on how to take the sling on and off and the 'safe zones' of movement. Further physiotherapy will then be organised from the 3 week mark onwards.

I would usually review patients in the clinic 1 month, 3 months and 6 months after their procedure to assess their progress and recovery.

Period of Sling Immobilisation & Rehabilitation Protocol

After an arthroscopic Bankart Repair the patient's arm needs to be in a sling for 3 weeks. It is initially important to 'protect' the repair from any significant load as it begins to heal whilst, at the same time, it is preferable to not allow the shoulder to get too stiff. The physiotherapists will instruct the patient on the 'safe zones' of movement out of their sling over this period.

My standard rehabilitation protocol is outlined below. The information and time to recovery are a general estimation and may vary from person to person

	Post op
Immediate	<ul style="list-style-type: none"> • Sling 3 weeks • Proprioception and scapula setting • Neck, elbow, wrist & hand exercises
Day 1-3 Weeks	<ul style="list-style-type: none"> • Active assisted and closed chain exercises within <i>safe zone</i> • Avoid combined abduction & external rotation • Do not force or stretch
3-6 Weeks	<ul style="list-style-type: none"> • Wean off sling 3-6 weeks • Stretches, gently progressing from <i>safe zone</i> • Strengthening within <i>safe zone</i>
6 Weeks +	<ul style="list-style-type: none"> • Progress range of movement and resistance • Address any posterior capsule tightness • Open & closed chain proprioception exercises • Commence combined abduction and external rotation



Milestones	
Week 6	Active range of movement at least 75% of normal
Week 12	Full ROM, with minor loss of combined abduction and external rotation

Return to Functional Activities

Driving	4-6 weeks
Swimming	Breaststroke - 6 weeks Freestyle - 3 months
Golf	3 months
Contact Sport	4-6 months
Lifting	Light - 3 weeks Heavy - 3 months
Work	Sedentary - As able Manual – 2 - 3 months

Success of Surgery, Risks & Complications

Success following an Arthroscopic Bankart Repair has to be assessed slightly differently from other procedures. Rather than being able to measure how much better the shoulder is after the operation we are waiting for a further dislocation NOT to happen. By convention, for a stabilisation procedure to be considered successful, the patient needs to have had no episodes of instability for at least 2 years after their operation.

For a standard Arthroscopic Bankart Repair >90% of patients' shoulders will be stable 2 years after their surgery. For patients returning to contact sports this figure is decreased to > 80%.

There are always risks and complications associated with any operation.

- **Anaesthetic** - The risks of having a General Anaesthetic and an Interscalene Nerve Block are very low, but will always need to be assessed on an individual basis by an Anaesthetist. Suffice it to say, that whilst a Shoulder Operation can in no way be considered a 'life-saving' procedure, an Anaesthetist would not consider undertaking an anaesthetic if they had any concerns that an undue risk was being taken.
- **Recurrence** – The 2- year re-dislocation rate <10% (for Contact Athletes <20%)
- **Infection** – Infection following arthroscopic surgery is rare < 0.2%
- **Neurovascular Injury** – Damage to significant neurovascular structures during arthroscopic shoulder surgery is rare < 0.2%
- **CRPS Type 1** – A Chronic Pain Syndrome following arthroscopic shoulder surgery is rare < 0.02%



Outcome Measures

Assessing patient outcomes following surgery, using validated scoring systems, is a very important and useful exercise. It is able to follow and document an individual patient's progress, can assess the cumulative outcomes of patients undergoing the same procedure and can be a very useful research tool.

I use a web-based outcome system, SOS (Surgical Outcome Scores) to help me and my patients assess their progress and recovery. This will usually be discussed with the patient in the Out-Patient Clinic, when we have decided to proceed with surgery. My Research Nurse will then contact them prior to their surgery to enroll them and record some base line data. Following surgery patients will be contacted occasionally at set time intervals to assess their progress. This is predominantly an internet based system, but it is possible to arrange for the data to be recorded by either phone or by post.

Of course, this is an entirely voluntary process and there would be no problem if someone did not want to participate. All of the data collected is held securely and anonymized.

Find out more about the SOS outcome system - www.cambridgeshoulder/...