

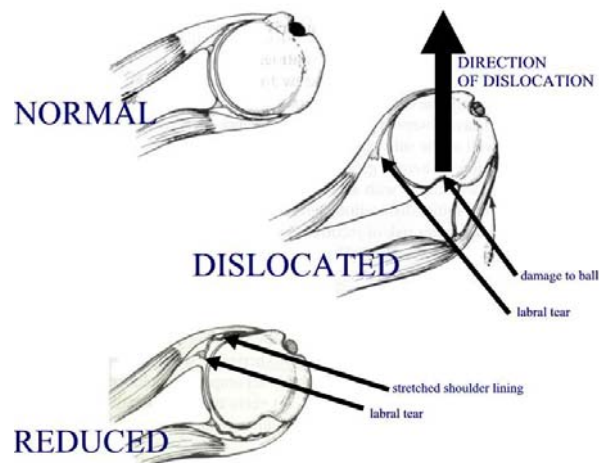
## PATIENT NOTES | SHOULDER STABILISATION

You have elected to undergo an operation to stabilise your shoulder for recurrent dislocations or subluxations of your shoulder.

There are several different techniques available to stabilise your shoulder. I have suggested that an open (i.e. with a cut) operation is more appropriate in your case than the arthroscopic (minimally invasive or keyhole) procedure. The arthroscopic procedure has reasonably good results in cases where there have been few dislocations or if you are not going to return to "collision" sports. The arthroscopic operation has a success rate of about 90% which drops to 80% if you are going to return to contact sports. The open operation has a higher success rate especially in people who have had many dislocations or who are very active. The open operation is also mandatory when there is a lot of bony damage to the shoulder joint or if the lining of the joint (capsule) is significantly stretched. The success rate of the open operation is greater than 90%. The rehabilitation following both procedures approximates 6 months but hospitalisation is shorter and the amount of pain is less with the arthroscopic procedure. I perform both types of operation and will discuss the alternatives with you.

The operation is necessary because your shoulder keeps coming out of joint and the risk of it continuing to come out of joint is very high. Each time the shoulder dislocates more damage is done to the joint itself and this increases the risk of arthritis in the future.

As a result of the dislocations you have stretched the capsule of the shoulder joint and it is larger and more voluminous than the normal capsule. In addition you may have torn a small piece of tissue known as the labrum off the bone and this is where the humeral head dislocates forwards.



If you have had many dislocations or have had severe trauma to the shoulder then there can be additional damage to the bony ball and socket of the shoulder.

The principle of the operation is to reduce the size of the stretched capsule of the shoulder joint and to reattach the torn labrum back to the bone.

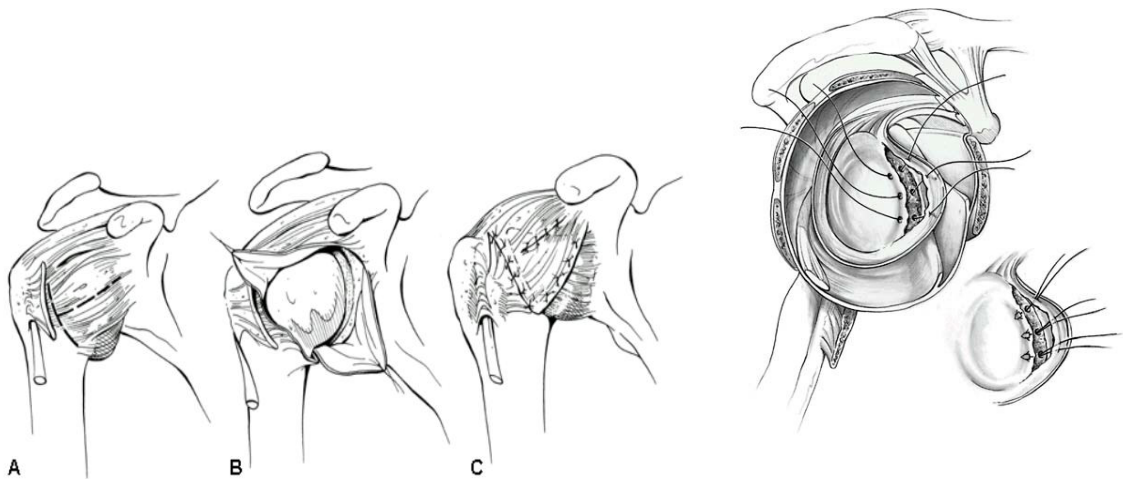
If you have certain medical problems you may require some preoperative tests which will be organised by our office, to ensure you are fit for a general anaesthetic. One week prior to surgery, you will commence washing your shoulder girdle with PHISOHEX antiseptic solution (available from your chemist). Should you get an allergic reaction to the PhisoHex then cease to use this immediately and inform our office. You are to avoid getting sunburnt.

If you are on Anti inflammatory tablets or Aspirin, please check with your GP, and if he or she says it is safe, stop the tablets one week prior to surgery.

Our office staff will ask you to fill in several different questionnaires prior to surgery. I am part of an international group who study outcomes of different operations to ensure that surgical outcomes are satisfactory. We get you to fill out similar questionnaires at the conclusion of your treatment. Please note that all answers are confidential and your personal details are removed from the data base (your information is “deidentified”).

You will be admitted to the hospital on the morning of surgery and you will be visited by the anaesthetist who will examine you and make sure you are fully fit to undergo a general anaesthetic. In many cases the anaesthetist will explain to you the option of having a “block” which is an injection in and around the neck, which will reduce pain for 12 to 18 hours post operatively. The nursing staff will also explain the use of “patient controlled analgesia” (or P.C.A.) where you regulate the amount of pain relieving medication that you use. You must remove all rings from your hand prior to surgery.

The operation takes about 90 minutes. The incision is adjacent to the crease in the armpit and unfortunately it can spread with time. You will have some permanent numbness around the scar, which is hardly noticeable. The operation involves dissecting down to the shoulder joint and reattaching the torn labrum back to the bone with either stitches, that do not dissolve, or small screws which are sunk into the bone and do not require removal. A T-shaped incision is made in the capsule and it is then tightened so that the volume of the capsule is reduced and the shoulder can no longer move in abnormal directions. There will be some mild permanent stiffness but this will hardly be noticeable and will not cause any functional deficit.



Very occasionally there is significant bone loss from the lower aspect of the socket and/or the ball. In such cases repairing the torn labrum alone will not stop the shoulder from dislocating. In these cases we remove some bone from the shoulder and reposition the bone on the socket, to deepen the socket, with 2 screws. This is commonly known as a “bone block” procedure.

You will wake up in the ward in a sling and you will have a drain coming out of your armpit. You will be given adequate analgesics to keep you comfortable.

The morning after surgery I will see you and discuss the surgery with you. Your drain will be removed. A waterproof dressing will be placed on the shoulder and you will be allowed to shower. When showering take the blue sling off but leave your arm adjacent to your body. You will be given a gauze sling to wear in the shower – do not attempt to lift or rotate the arm – and then put the blue sling back on after you are dry. Make sure the armpit is as dry as possible because of the risk of a sweat rash or an armpit infection. It is important to sit out of bed and walk around as soon as you are comfortable and able.

On the second postoperative day you will be discharged from hospital after I review you. In the immediate post operative period you will experience pain about the shoulder. There will also be significant pain at night as a result of the surgery. On discharge from hospital you will be given analgesics as well as tablets to help you sleep at night, which I would encourage you to use. Should you require extra tablets, either let my office know or see your family doctor. You will also be given a package of antibiotics which you should continue until you finish the packet. You only need the one package.

You will have a “see through” dressing over the wound made out of a substance called “duoderm”. This is a waterproof dressing that allows you to shower without compromising the sterility of the wound. You will notice under the dressing there will be a white material that looks like pus. This is the perspiration of your skin reacting with the medication in the dressing and is nothing to worry about. The dressing should not be changed. It is common to get swelling about the arm, forearm, hand and fingers. Please endeavour to keep the armpit as dry as possible – once the wound has healed at about 10 days you can use talcum powder, which will help.

Prior to surgery my office staff will have given you some information on the “Game Ready” ice compression system. This system is usually successful in reducing pain and swelling postoperatively. It can be used for up to 6 weeks. If you want to use the system you have to contact the provider yourselves (for Worker’s compensation patients we apply on your behalf to the insurance company) using the forms we will provide you. The system is expensive and Private patients should approach their insurance company to see whether they will cover this. Worker’s compensation patients should discuss the matter with their case manager.

The sling will need to remain on for at least 4 weeks but sometimes 6 weeks depending on what we find at the time of surgery. The sling must remain on 24 hours a day including at night. The sling only comes off to have a shower and get dressed and on those occasions the arm needs to be kept adjacent to the body. The Roads and Traffic Authority does not permit driving of a motor vehicle while you are in a sling. I therefore recommend you do not drive for 4 to 6 weeks.

**When to contact me before I have removed your stitches:**

- Fever above 38° Celsius
- Increased pain unrelieved with pain medications
- Sudden, severe shoulder pain.
- Increased redness around the incision
- Increased swelling at the incision
- A bulge that can be felt at the shoulder
- Shoulder pain, tenderness or swelling.
- Numbness or tingling in the arm.
- Change in colour and temperature of the arm.
- Change in motion ability
- Drainage or odour from the incision
- Any significant concerns you have

I will review you about 10 days following surgery to take out your stitches and check that the wound is clean and that there is no infection.

I will again review you at the 4 or 6 week mark, whichever is appropriate, to take you out of the sling and start a passive exercise program which lasts for 2 weeks. I will teach you the exercises and give you an exercise sheet, which clearly outlines the exercises required. You will do these under your own supervision.

Two weeks later you will be started on an active exercise program. By this time your shoulder movements will be about half normal and you will still have some pain and discomfort. I again will teach you these "active" exercises, give you an exercise sheet, and ask you to do the exercises under your own supervision. Supervised physiotherapy does not start for some time.

At 10 to 12 weeks following the operation I will start you on some breaststroke swimming and also allow you to progress on the exercise program. The rate of progression of the exercise program will depend on your progress, which I will monitor from time to time.

Under **NO** circumstances can you return to any sports for 6 months. Doing so may compromise the result. Fitness can be maintained by using an exercise bike or jogging, with care not to fall. As mentioned above I will allow some supervised swimming after 10 to 12 weeks. Tennis, basketball, touch football, soccer, weights training and ALL sports should not be started until I permit you to do so at about 6 months following surgery.

At about 5 months I will commence a supervised physiotherapy program incorporating light weights. At about 6 months, providing you have sufficient muscle control of the shoulder, I will permit you to resume full activity, including contact sports. You will however need to continue the exercise program for at least 9 months following surgery. Your shoulder may be a little stiff for up to 12 months following surgery. Please note that in most cases there will be minor but permanent loss of motion at the extremes of movement but this does not cause any functional impairment.

I also recommend persons who return to contact sport, especially professional athletes, use a brace on returning to play, for the first season. This is to protect the repair. The brace is usually fitted by the team physio. All patients who return to doing weights should permanently avoid training in positions that can stretch the shoulder, such as shoulder presses and full extension in bench presses. This should be discussed with your trainer and I am certainly happy to discuss this with your trainer.

The recurrence rate following surgery is about 5% in persons who do not return to contact sport, but climbs to 10% in persons who return to contact sport and this includes snow and water skiing. This operation does not give you a super strong shoulder and just as you dislocated your shoulder the first time, you may dislocate it again with violent sporting activity.

Smoking reduces the success rate of surgery as it inhibits tissue healing. I advise all smokers to avoid smoking prior to and after surgery for at least 6 months.

## **COMPLICATIONS**

All surgery carries potential risks and complications. In most cases the decision to proceed with surgery is made because the advantages of surgery outweigh the potential disadvantages. It is very important, however, for you to understand the reason for choosing surgical management over other non-surgical forms of treatment and to make an informed choice in consultation with the surgeon. This is particularly important in cases of elective surgery.

It should be noted that there is no operation that cannot make you permanently worse off than prior to surgery but I would like to emphasise that such complications are exceedingly rare.

The risks of surgery can be divided into general risks with any surgical procedure and specific risks of particular procedures.

The general risks of surgical procedures include the following:

**Respiratory tract infections:** This includes the development of pneumonia, which can follow anaesthesia for surgical procedures. It is more common in the aged and very uncommon in the young and healthy. Treatment involves antibiotics, physiotherapy and respiratory support. Treatment is not always effective.

**Thromboembolic problems:** This term refers to the formation of blood clots within the blood vessels. If they form in the veins they are known as deep venous thromboses, which can cause swelling and pain in the legs and a restriction of blood flow. These clots can travel to the lungs and cause a pulmonary embolus (which is potentially fatal). This complication is more likely to happen in smokers, overweight people and women using contraceptive medications. For this reason patients are advised to stop smoking and stop taking oral contraception before surgery. Long aeroplane flights also increase the chance of blood clots forming and therefore patients should not fly and have surgery in the same two (and preferably six) week period. Unlike lower limb surgery, blood clots are uncommon after shoulder surgery.

In emergencies, special precautions are taken. Treatment of this condition usually involves anti-coagulant (blood thinning) medication administered by injection into the skin or by intravenous drip and then followed up by a tablet form of anti-coagulant therapy. Therapy for this condition is not always successful. If clots form in the arterial system then a stroke may occur.

**Infection:** This can occur following any surgery. Operating theatres are designed to minimise the risk of bacterial infections. Surgical procedures are carried out in a sterile manner. In higher risk operations, antibiotics are given to decrease the likelihood of infection. In low risk operations such as arthroscopy, antibiotics are not given because the complication rate from the antibiotic treatment (which is extremely low) is greater than the potential complication rate from infection.

Despite expert treatment and antibiotic protection, infections still occur. These can cause prolonged disability, require treatment with antibiotics and occasionally require surgery. Infections can be found at the operative site, in the lungs, the urinary system and elsewhere.

**Anaesthetic Complications:** Anaesthesia itself entails a degree of risk, some of which is outlined above. For further information regarding anaesthetic risks please feel free to contact the treating anaesthetist for your operation. My office staff will be happy to provide you with a contact number. You will see the anaesthetist in hospital prior to your operation and will have the chance to discuss the effects and possible complications of anaesthesia at that stage.

Rare and unusual problems can occur as a result of surgery and anaesthesia. If you are concerned about the potential for complications or the advantages and disadvantages of a decision to proceed with surgery you should discuss that with your surgeon before operation. If there is any doubt in your mind then I would strongly recommend that you seek an independent second opinion. This can be arranged through your referring medical practitioner.

The common complications specific to shoulder surgery include but are not limited to wound infections, stiffness and occasionally some transient numbness around the shoulder. Stiffness in particular will take up to 6 months to resolve and occasionally longer. Nerve damage can occur, and is more common in the operation where a "bone block" is required. In the majority of cases the nerve is bruised and recovers within 12 weeks. Rarely loss of upper limb and hand function can occur and not settle for 12 to 18 months.

**Allergic reaction to anchors and stitches:** rarely patients develop this for unknown reasons and this can lead to premature arthritis of the joint.

My surgical practice is a subspecialty practice. I operate within my defined areas of interest and expertise. I believe that this results in better outcomes for patients and a very low complication rate. My patients are only offered the option of surgery after non operative forms of treatment have been considered. Surgery is offered only when I consider that the potential advantages of this form of treatment outweigh the possible complications and side effects (when I feel that it is likely to lead to a better outcome for you than non-operative forms of management). In the case of elective surgery, you are encouraged to consider the non-operative options of treatment and take time to make an informed choice about the preferred course of management. You are free to discuss this with me or your referring medical practitioner. If elective surgery is proposed, please feel free to take as much time as you need to come to an informed decision. If you are not completely comfortable with the decision to proceed with surgery, you are free to take up further discussions with me or seek an independent second opinion.

Dr Jerome Goldberg  
- Sept 2010