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ORTHOSPORTS

PATIENT NOTES | SHOULDER STABILISATION
ARTHROSCOPIC VERSUS OPEN STABILISATION

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

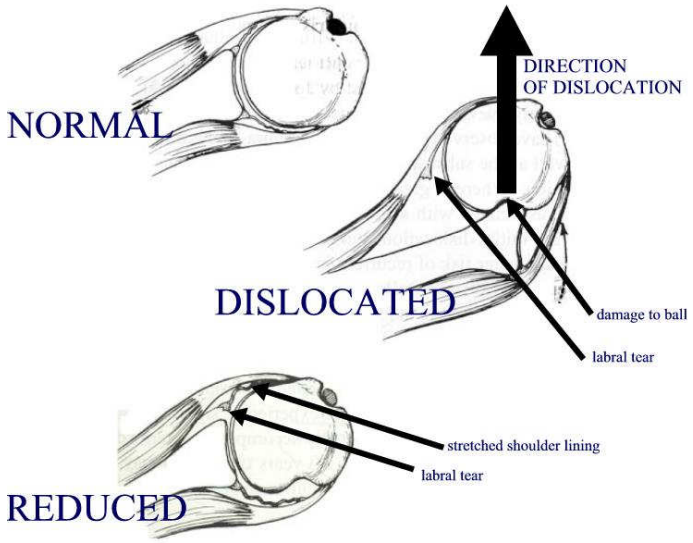
There are several different techniques available to stabilise your shoulder. I have suggested that you consider either an open (i.e. with a cut) operation or an arthroscopic (minimally invasive or keyhole) procedure. The arthroscopic procedure achieves good results in cases where there have been fewer dislocations or if you are not going to return to "collision" sports. The arthroscopic operation has a success rate of about 90%.

The open operation has a higher success rate especially in people who have had more than several dislocations or who are very active and play professional contact sports. The success rate of the open operation is greater than 90%. The open surgery is also indicated in cases where there has been associated bony damage. 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.



The principle of both operations is to reduce the size of the stretched capsule of the shoulder joint and to reattach the torn labrum back to the bone, if it is torn.

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.

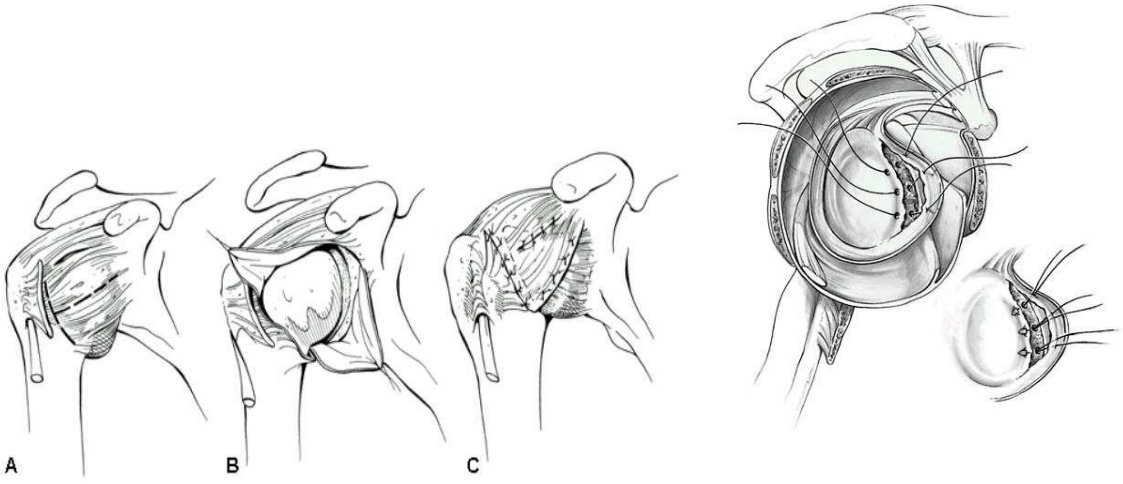
If you are on anti inflammatory tablets or Aspirin, please check with your G.P., and if he or she says it is safe, stop the tablets one week prior to surgery.

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 OPEN STABILISATION

This 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.



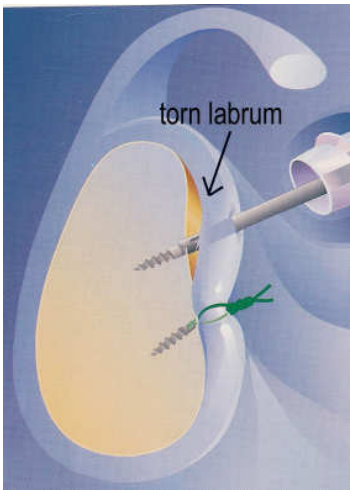
Very occasionally there is significant bone loss from the lower aspect of the socket and/or the ball. In such cases repairing the torn labrum alone will not stop the shoulder from dislocating. In these cases we remove some bone from the shoulder and reposition the bone on the socket, to deepen the socket,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

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 ARTHROSCOPIC STABILISATION

This operation takes about 120 minutes. You will have one small incision at the back of your shoulder and two small incisions at the front. The labrum, or cartilage, which is torn off the bone and is repaired with either a dissolving screw or a metal screw with a stitch attached to the end.

In cases where the capsule (or lining of the shoulder) has stretched there is the added option of dividing the capsule and then tightening the capsule with arthroscopic stitches, which acts like tightening a double-breasted coat. I occasionally use a technique known as Thermal Capsular Shrinkage where we run a hot current through the capsule and shrink the capsule. This however can also weaken the capsule.



POST OPERATIVE MANAGEMENT FOR BOTH OPERATIONS

The morning after surgery I will see you and discuss the surgery with you. Your drain will be removed if you have had an open procedure. 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.

If you have had an arthroscopic procedure you can leave hospital that morning.

If you have had an open operation you generally leave on the second postoperative day, though I have no objection to you leaving on the first postoperative day if your pain level is well controlled.

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.

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 open 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. The recurrence rate following the arthroscopic procedure is about 10% which climbs to 20% if you return to contact sport which includes snow and water skiing.

These operations do 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.

COMPARISON OF OPEN AND ARTHROSCOPIC SURGERY

	ARTHROSCOPIC	OPEN
Incisions	Three small 1cm incisions	One larger 4cm incision
Post operative pain	Mild	Significant
Hospitalisation	Overnight	Two days
Time in sling	Four weeks	Four weeks
Exercises/physio	6 months	6 months
Off sport/lifting	6 months	6 months
Slight permanent loss of motion	Occurs but far less than with open surgery	Usual
Success rate	90% (80% contact sports)	95% (90% contact sports)
Complications	Rare	Rare

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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 occasional 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. In particular post operative stiffness can be a problem especially if you have diabetes. Very occasionally we have to do a procedure called a Manipulation if stiffness remains a problem after 6 months.

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.

July 2009

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R. PATTINSON	paediatric, general	A. LOEFLER	hip, knee, spine	J. NEGRINE	foot, ankle
A. TURNBULL	hip, knee	P. WALKER	hip, knee	I. POPOFF	knee, shoulder, general
T. GOTHELF	foot, ankle, shoulder, elbow			J. TRANTALIS	shoulder, elbow

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