Dr Doron Sher

MB.BS. MBiomedE, FRACS(Orth)

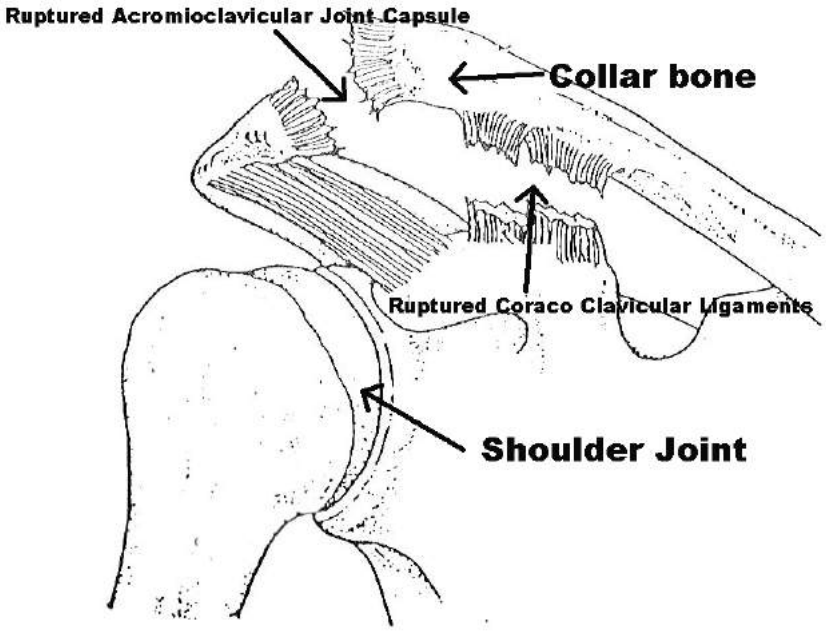
Knee, Shoulder, Elbow Surgery

ORTHOSPORTS

PATIENT NOTES – ACROMIOCLAVICULAR SEPARATION

AC joint injury is one of the most common injuries to the shoulder and usually results from a fall onto the point of the shoulder. This is most commonly seen in sporting accidents during cycling, snowboarding, skiing, or football.

The injury varies from mild to severe. In a mild or moderate separation the ligaments involved are stretched and the collar bone does not shift significantly. In a severe injury the ligaments that hold down the collar bone or clavicle are torn and the end of the collar bone rides up and appears very prominent.



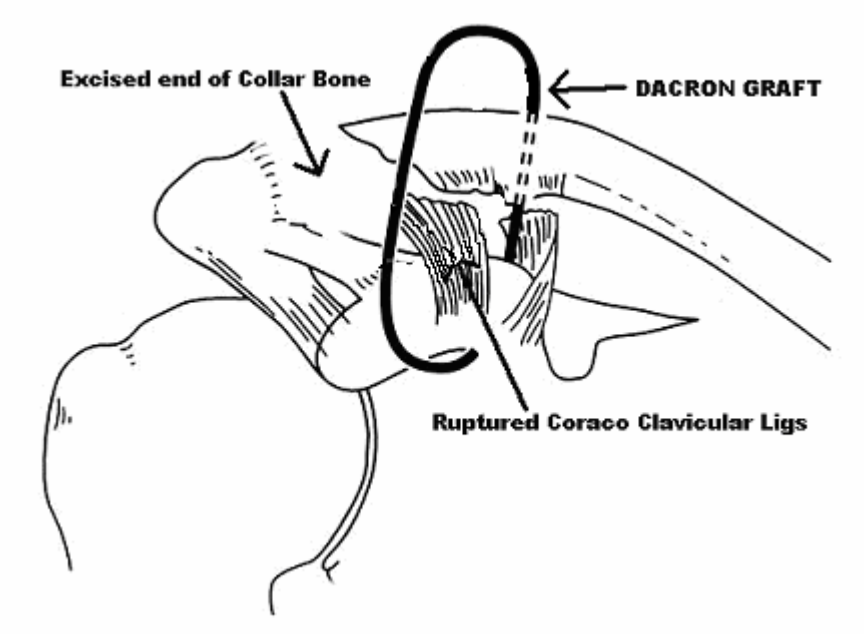
In the severe injury (called a Grade 3 injury) both the Coraco-Clavicular ligaments and the Acromioclavicular capsule are torn (leading to the deformity or bump on top of the shoulder). Unfortunately these ligaments never completely heal and can lead to ongoing problems with the shoulder. The severity of the injury is determined by clinical examination and plain xrays (which may need to be done with you holding a weight).

A mild or moderate separation (grade 1 or grade 2) is usually successfully treated in a sling for a few weeks followed by a course of physiotherapy and gradual mobilisation. Occasionally surgery is required but most people do well with non operative treatment.

The severe injury (Grade 3) can be treated either with or without surgery.

Non operative treatment involves keeping the arm in a sling for two to three weeks followed by a course of physiotherapy. The bump on top of the shoulder always remains prominent and occasionally arthritis of the acromioclavicular joint develops some years after the injury. If this occurs a small operation often fixes the symptoms.
Unfortunately the injury can lead to permanent weakness in people who do heavy overhead work or a lot of throwing. In a small number of cases this can also be associated with ongoing pain.

Surgery involves a small cut near the top of the shoulder. The end of the collar bone is cut out because it is always damaged and the torn Coraco-Clavicular ligament is replaced either by an artificial ligament made out of a strong synthetic material called Dacron or by a tendon taken from elsewhere in the body.



Surgery is much more successful when done within 3 weeks of the injury. Although it can be done later than this, the results of this particular operation may not be as good as if it was done within this time frame. In long standing and chronic injuries a different operation with bone grafting (called a Coraco-Clavicular Fusion) is usually performed.

In most cases I recommend that anyone who does heavy manual or overhead work consider having the surgery done soon after the injury. I also recommend surgery in any throwing or contact athlete.

With most other patients I recommend a non operative approach but you must understand that there is a small element of risk associated with this decision. That is, if you do not do well with nonoperative treatment and then require surgery at a later date, then that operation may not be as successful as an operation done immediately following the injury

If you have certain medical problems you may require some preoperative tests to ensure you are fit for a general anaesthetic. Prior to surgery, you will commence washing your shoulder girdle with PHISOHEX antiseptic solution (available from your chemist). This is to reduce the number of microorganisms found on your skin and hopefully reduce your infection risk. Should you get an allergic reaction to the Phisohex then cease using it 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 (the only exceptions to this are Celebrex or Vioxx which can be stopped the day prior to the 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 PCA) 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 operative procedure involves a scar over the top of the shoulder. You may get some permanent numbness around the scar but this is usually not very noticeable. The procedure performed is outlined above.

You will wake up with a drain coming out of your shoulder and your arm in a sling. Your shoulder will be reasonably numb if you have had a “block” but the “block” will wear off after which you can use the “patient controlled analgesia”. You may have a device which places local anaesthetic directly into the wound over an extended period of time. Otherwise the PCA and other medications will control your pain.

You will usually be discharged from hospital the day after your operation with your arm in a sling. No physiotherapy is required at this stage. 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 3 week mark, to take you out of the sling and start you on gentle movements. You do not do any specific exercises or physiotherapy at this stage because it may compromise the graft.

At about six weeks I will check you again and if your movements are fine I leave you to move your arm as you please. If the shoulder is a little stiff then I institute physiotherapy at that stage. I also may commence swimming at that time but it does depend on your progress. Do NOT get alarmed when you notice that the end of the collarbone rides up by 1 cm. This is a normal occurrence and without this you will not regain full movement.

Full activity, including all sports, can usually be started by 3 months.

Rarely (after 6 to 9 months) the Dacron graft irritates the bone and causes a condition known as “osteolysis”. If this occurs the graft requires removal at about 12 months. By then other tissues have usually compensated for the damaged ligaments, and when the graft is removed, the collar bone remains stable in its position. A small number of patients have ongoing pain at the outer end of the collar bone which can be quite resistant to treatment.

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 but are not limited to 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 me before your 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 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.

March 2004

D. SHER	knee shoulder and elbow surgery			J.GOLDBERG	shoulder surgery
P. WALKER	knee & hip surgery	C. WALLER	hip & knee surgery	R.PATTINSON	paediatric & general
A.LOEFLER	hip, knee & spines	J.NEGRINE	foot & ankle surgery	I. POPOFF	shoulder, elbow and knee
A.TURNBULL	hip & knee surgery	W.BRUCE	hip & knee surgery	S.MYERS	hand & wrist surgery

160 Belmore Road, Randwick 2031 Phone 93995333 Fax 93988673
47-49 Burwood Road, Concord 2137 Phone 97442666 Fax 97443706
1st Floor Easts Tower, 9 Bronte Road Bondi Junction Phone 93892766
www.orthosports.com.au