Information About Rotator Cuff Surgery

What is the Rotator Cuff?

The Rotator Cuff is a group of muscles and tendons around the shoulder. These muscles are very important for the shoulder to function normally. It is very common for these tendons to tear. When the rotator cuff tears, it usually causes pain and weakness in the shoulder.

What does Surgery Involve?

Surgery involves restoring the anatomy, by attaching the torn tendon back to where it was originally attached. At the same time, any other problems in the shoulder which may be contributing to your pain will also be dealt with e.g. spurs removed.

Shoulder surgery can be quite inconvenient for the following reasons. Firstly, you will need to wear a sling for up to 6 weeks, and during this time you will not be able to drive a car (as it is against the law). You will also need to perform physiotherapy for 3 to 6 months after the surgery. The benefits of the surgery are usually experienced between 3 to 6 months after surgery, when the motion is returning and the strength improving.

How Do I Prepare for Surgery?

In the week leading up to surgery, do not do anything different to your shoulder other than your normal body cleansing routine. In particular, do not shave the shoulder or apply creams to remove hair from your shoulder. We will shave your shoulder if needed immediately before the surgery is due to commence. If you have any skin condition affecting the shoulder e.g. severe acne, then please contact my rooms so that we can offer advice.

If you are on anti inflammatory tablets, Aspirin, or any blood thinners (e.g. Plavix, Clopid, Warfarin) please check with your G.P., and if he or she says it is safe, stop the tablets two weeks prior to surgery, or as per instructions.

You will be admitted on the day of surgery. The hospital will contact you the day before surgery to organize a time for you to come in to hospital, and advise you as to when you should stop eating and drinking. It is important that you do not eat or drink anything for a minimum period of 6 hours before surgery.
Please ensure that you bring all your Xrays and MRI scans to hospital with you.

How will my pain be controlled during and after surgery?

The Anaesthetist is the doctor who ensures that you do not feel pain during the operation. He or she will discuss the option of an injection just above the shoulder (nerve block) to make it numb during the operation. I do recommend having this injection as the numbness normally lasts 12 to 24 hours and helps with pain control after the operation. In addition to the nerve block, you will be put to sleep with a light general anaesthetic to keep you comfortable during the operation.

The operation takes about 90 minutes, depending on exactly what procedure is done. There usually will be 2 or 3 very small incisions about the shoulder. Very occasionally there will be up to 6 small incisions if there are several facets to the surgery. The exact operation done will depend on what I find when we look in the joint. Rarely (less than 2% chance) we need to convert the operation into an open procedure which involves a much larger incision.

After the Operation

If agreeable with you, I will call a family member / friend to let them know the operation is completed- please have their contact details available. You will be placed in a sling and have large bulky dressings on your shoulder. Your shoulder will be swollen after the operation, and it is normal for this fluid and blood to leak out of the shoulder for the first few days after the operation. Before you leave hospital, these dressings will usually be changed.

Anticipate the Pain

Your nerve block will generally keep the shoulder numb and control the pain for 12 to 24 hours after the operation. As the block starts to wear off, you will notice some pain starting in the shoulder and some feeling and movement in your fingers. As soon as you notice this, it is important to start taking the pain killers that have been prescribed for you, even if you don't have much pain. By taking the pain killers early, you give them a chance to get into your system and start working before the nerve block wears off completely, otherwise the pain can be quite significant. If you had your operation in the morning or afternoon, and your shoulder is still numb and you are about to go to sleep, then it is best if you take the pain killers just before you go to sleep even if you don't have pain. Otherwise the nerve block can wear off during your sleep and you will wake in a lot of pain.

For the first 3-4 days it is important to try to stay in control of your pain by taking the pain killers liberally and regularly. Generally you should take the weaker pain killers (e.g. Panadol) regularly, and if you still have pain then take the stronger pain killers (e.g. Endone, Tramal) as well. You will be provided with a prescription for these medications. If you need a repeat prescription, please feel free to contact my office or your local GP.

I will see you after the operation to discuss the procedure and give you your copy of the photos taken inside your shoulder during the operation which are yours to keep. I will also give you an instruction sheet which has information about your exercises for the first 6 weeks (Stage 1), and other information which is specific for the first 6 week period after the operation (e.g when to wear the sling, how to shower etc). I will need to see you around 1 to 2 weeks after the operation to check your wounds and your progress.

Depending on the exact procedure done you will commence physiotherapy the morning after surgery and you will be taught some exercises by the physiotherapist. I recommend that you are supervised by a physiotherapist during the rehabilitation period after rotator cuff surgery, as they ensure that
you are doing the exercises correctly and are experienced enough to be able to pick up any problems which may need my attention. After receiving guidance from your physiotherapist, you will then need to do the exercises at home under your own supervision about 4 times a day. You may be discharged from hospital the day after surgery if you are medically stable, coping well with the pain, and are able to do your exercises. Most patients are able to leave the day after surgery.

What Happens During the Surgery?

Arthroscopic shoulder surgery is minimally invasive surgery, which avoids the major issue with older techniques of shoulder surgery involving big open operations which violate the important deltoid muscle of the shoulder. It potentially allows for a faster recovery with less pain and a lower chance of problems like infection. I use a small underwater camera on the end of a metal rod (see diagram). The images from the camera are displayed on a television screen, which allows me to see inside the shoulder with the aid of water being pumped into the shoulder to keep the viewing spaces “open”. Specifically designed instruments allow me to complete the work required, which is similar to building a ship in a bottle. I use a number of small 1cm incisions around the shoulder to achieve the solid repair. After a thorough assessment of the entire shoulder joint and appropriate treatment of any other problems in the shoulder joint, I begin the repair by cleaning up the torn rotator cuff tendon and preparing the bone surface. I then place plastic anchors into the bone which have stitches connected to them (see diagram). I pass these stitches through the tendon and then tie knots inside your shoulder to pull the tendon tightly down to the bone. An animated video of this operation can be seen on the Orthosports website at www.orthosports.com.au.
The weak point in this repair is your tendon. If you lift your arm actively (using the muscles of the shoulder you have had an operation on) too early after the operation then the stitch will slice through the tendon like a "cheese cutter". The repair becomes stronger after 6 weeks when the tendon has healed down to the bone, taking the stress off the stitches in the tendon. The repair continues to mature and get stronger over a 6 month period. It is for this reason that I will give you a graded exercise program after the operation, which is designed to protect the repair and allow it to heal, while slowly regaining motion and strength.

I am comfortable with most patients returning to light clerical work within 3 to 4 days of surgery, however, if your job requires heavy lifting or repetitive overhead work, then it is unlikely you will be able to return to these duties for 6 months. You should also remember that you will not be able to drive for 6 weeks, which may hinder an early return to work. One should avoid contact and racquet sports and upper body weights for 6 months. Jogging, cycling and breaststroke swimming can be commenced within 6 to 12 weeks depending on the procedure that you have undergone.

I will be reviewing your progress regularly during the first 6 months. During this time I will check your progress and upgrade your physiotherapy and exercise program. Please note that many people have a misconception that arthroscopic shoulder surgery leads to a complete recovery within a few weeks. This is totally incorrect. Such surgery though minimally invasive, generally has a six month rehabilitation period and requires a patient committed to his or her post operative rehabilitation.

Smoking reduces the success rate of surgery as it inhibits tissue healing. I advise all patients to avoid smoking prior to and after surgery for a minimum of 3 months.

What Are The Potential Complications of the Surgery

Anyone having an anaesthetic has a risk of general complications like heart and lung problems, strokes and deep venous thrombosis (clots in the veins). Depending on your age and other health problems, you may need to have some tests done before hand to help minimize the chance of these complications from occurring.

Complications specific to the shoulder include:

1. **Re-Tear of the Tendon and Ongoing Pain:** The tendon can re-tear or not heal after the operation. Smoking greatly increases the chance of the tendon not healing, so if possible you should stop smoking for 3 months after the operation. If the tendon re-tears then you may be left with ongoing pain or weakness in the shoulder. The risk of this occurring depends on the size of the tear. For small tears there is a 95% chance of a good outcome with surgery, but with large to massive tears, the outcomes are less favourable (50 to 80%, depending on factors including the size of the tear, how long it has been there, and the amount of wasting of the muscles). In general, the rotator cuff is much easier to repair very soon after it tears, and the chance of success is higher.

2. **Stiffness:** Most patients have some shoulder stiffness after spending 6 weeks in the sling, however with a guided physiotherapy program this is usually overcome over the following 3 to 6 months. Rarely a patient may need surgery to release scar tissue in a shoulder because of stiffness that has not responded to physiotherapy.

3. **Infection:** Due to the minimally invasive nature of this surgery, the risk of this complication is less than 0.5%. If it does occur however, it is a serious problem, which needs aggressive treatment.
4. **Nerve Damage:** This is a very uncommon complication. If a nerve gets damaged you can be left with temporary or permanent numbness or weakness in the arm or hand.

5. **Vessel Damage:** This is a rare complication. If a vessel is damaged it may need urgent repair to save the arm.

6. **Regional Pain Syndrome:** This is another rare complication, where for no obvious reason a patient develops significant pain and stiffness in the shoulder, arm or hand. It usually responds to physiotherapy and optimization of pain medication, but can run a protracted course.

For most rotator cuff surgery, the chance of a good outcome is 95%.

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 if appropriate. 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. Please feel free to discuss this with me, your referring medical practitioner or physiotherapist.

If you have any questions please do not hesitate to contact me via

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