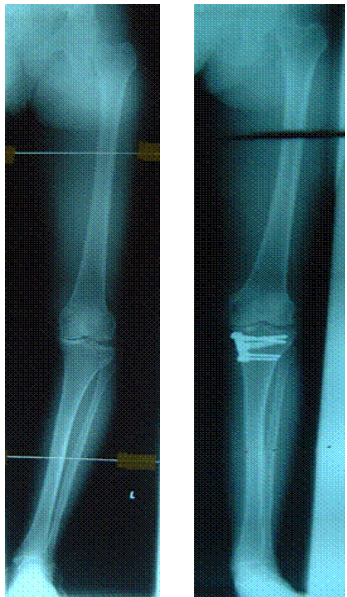
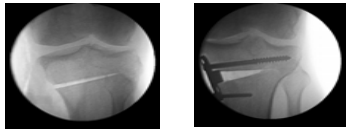


Other complications include haematoma, superficial infection and knee stiffness. Please feel free to discuss these with Dr Coolican.

Costs

Dr Coolican's fees are above the Medicare schedule and there will be a gap payable for your surgery. Dr Coolican's secretary will discuss this with you at the time of booking the procedure.

If you have any questions concerning your surgery, its risks, benefits or likely outcome please do not hesitate to contact Dr Coolican.



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Osteotomy for Lower Limb Realignment

Information for Patients

Introduction

Osteotomy, which literally means “cutting bone”, is an operation to change the alignment of a bone. In the lower limb it is most commonly done for arthritis around the knee where the arthritis involves one half of the joint. The osteotomy is performed by cutting almost all of the way across the bone and either taking a wedge of bone out and closing the gap (which we call ‘closing wedge osteotomy’) or opening a gap up and inserting bone into the space (which we call ‘opening wedge osteotomy’). In patients who are bow legged due to arthritis involving the medial side of the knee, the osteotomy is usually performed in the tibia and for patients who have a valgus (knock) knee, the osteotomy is usually performed in the femur. Osteotomy to realign the leg has two specific goals:

- a) To improve the pain associated with arthritis,
- b) To allow the native knee to survive to an age where total knee replacement has a greater chance of out surviving the patient.

Occasionally osteotomy can be performed as part of the treatment of knee ligament instability or in association with surgery to repair articular cartilage or transplant a meniscus.

Hospital and After

You are admitted to hospital the day of surgery where you will meet Dr Coolican and your anaesthetist. Please bring all of your X-rays and scans with you to the hospital. Please ensure that you have no cuts or scratches on your skin and no skin boils as this increases the risk of infection and will often result in surgery being deferred. Prior to surgery, your leg is washed, shaved if necessary and prepped with antiseptic and wrapped in a sterile towel.

The surgery is most commonly performed under a general anaesthetic. Leg alignment is usually changed by cutting the tibia (shin bone) just below the knee and either opening up the break to insert a wedge of bone or cutting a wedge of bone out. The size of wedge that is inserted or removed determines the eventual alignment and this is ascertained from a combination of pre-operative planning X-rays as well as radiographs taken during surgery.

After the osteotomy has been performed, patients undergoing a closing wedge osteotomy will have a plate in-

serted on the lateral side of the knee and patients undergoing a medial opening wedge will have a medial plate with the resulting defect being filled with bone from the bone bank or bone harvested from your pelvis. Dr Coolican will discuss this with you pre-operatively. After the wound is closed and dressings applied, a brace will be applied and you will remain in hospital after surgery until you can safely walk with crutches. The physiotherapists in hospital will help with this. Typically it takes 3—5 days until patients are safe and mobile.

Following discharge from hospital, you will see Dr Coolican at the two week mark to check the wound. Your brace is worn for a further 4—6 weeks (a total of 6—8 weeks) and in this period you will be on crutches. At the 6—8 weeks check, radiographs will be taken and if bone healing is continuing, you will start partial weight bearing.

Rehabilitation with a physiotherapist is commenced 6—8 weeks after surgery as bone healing progresses. This is aimed at restoring range of motion in the knee and improving muscle strength.

It takes most patients about six months to fully recover from a high tibial osteotomy. It is possible to resume a sedentary job 3—4 weeks after surgery if this can be done with crutches. It is usually 3—4 months before physical work is possible and between 6—12 months before sport can be resumed.

Results

Tibial osteotomy usually results in good pain relief and improvement in function. At this time we do not have a satisfactory cure for arthritis and osteotomy does not reverse arthritis but slows its rapid progression and relieves symptoms. Osteotomy is typically used in the young or active patient (less than 60) where older less active patients would more commonly undergo some form of knee replacement. Knee replacements do not last for ever but in general ninety per cent of knee replacements are still functioning well after ten years. We believe that today’s knee replacements are constantly improving but obviously it will take several years to be sure. The wisdom of performing osteotomy is that it will allow the native knee to survive longer. The older a patient is at the time of knee replacement the more likely the replacement will last the patient the remainder of their life.

Replacing a knee in a patient who has had a prior tibial osteotomy may be slightly more difficult than performing a primary knee replacement but is easier and achieves better results than redoing a knee replacement and is usually very successful. In gen-

eral terms, replacing a knee that has undergone a prior opening wedge osteotomy is easier than replacing a knee that has undergone a closing wedge osteotomy.

Most patients feel improvement in their knee following tibial osteotomy. A few (5% - 8%) are unimproved and 2% are worse. The improvement seen following tibial osteotomy lasts a variable time depending on how well the patient cares for the knee as well as the degree of damage already done by arthritis and the inherited quality of the articular cartilage in the joint. For over 70% of patients improvement following osteotomy lasts 10 years or more.

Complications

Infection:

Deep bony infection is rare but if this occurs and is untreated, serious problems follow. Any unexplained fever, wound redness or increasing pain should be reported to Dr Coolican.

Blood Clots:

Medication and stockings are used to help prevent clots. A clot which travels to the lung can be fatal although this is extremely rare. Chest and calf pain can be symptoms of a clot and must be reported to Dr Coolican immediately.

Poor Bone Healing:

In approximately 2% - 3% of patients the bone may not fully heal or may slip in position whilst healing. This is monitored by X-rays of the bone. Occasionally, revision surgery may be required to promote bone healing. Poor bone healing is much more common in smokers and you should stop smoking two months prior to surgery and not recommence until bone healing is complete.

Nerve and Vessel Injury:

Major nerves and arteries which supply the leg are in the vicinity of the surgery. Although rare, damage to these is possible.