

## Ankle Replacement

**Ankle replacement surgery is an option for end stage ankle arthritis. This may have been discussed with you or planned for your ankle arthritis problem.**

One recent study showed that people with end stage ankle arthritis suffer just as much pain and disability as people with end stage hip arthritis (not surprising really).

Ankle replacement technology has been improving over recent years. The original ankle replacements performed over 30 years ago were not very successful. Newer technology and experience in ankle replacements has meant over the last 10 years newer designs have had improved results.

Ankle replacements are still uncommon and ankle arthritis is 20 times less common than hip or knee arthritis. Therefore not many people have heard of ankle replacements and usually you will not have heard of 'someone who has had one done' – compared to hips and knees. The current replacements are having good results although still not quite as good as hip and knee replacements.



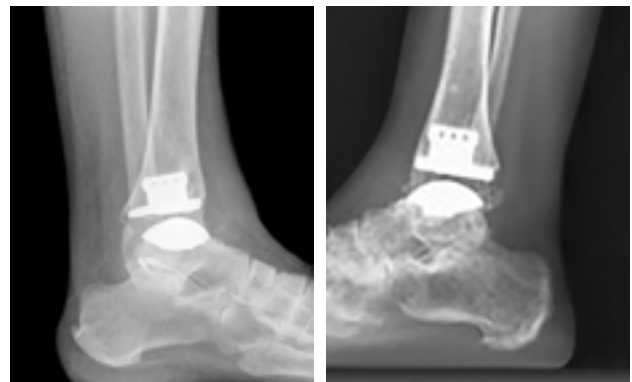
**(A: Loss of cartilage in joint space "bone on bone" arthritis, B: Tibia, C: Talus.)**

Overall approximately 80% (8 out of 10) ankles will last for more than 10 years without any major problems. As with any artificial joint they can wear out, become loose or infected. Care must be taken not to over stress the joint as this may lead to premature wear. However, regular day-to-day activities such as walking, golf, swimming, snow skiing and bike riding should be possible. Running is usually not possible and not encouraged (Except to get out of the way of an oncoming car)!

A small percentage of ankles will have minor troubles such as scar tissue impingement or early wear of the plastic liner that may need minor adjustment surgery within the first few years.

Of the 10-20% that may wear out over 5-10 years then the main option is to remove the ankle and then fuse the ankle joint. Occasionally a 'redo' or revision of the ankle prosthesis may be possible.

Pain relief is the main aim of any ankle arthritis surgery and an ankle replacement will generally give good to excellent relief of pain (equivalent to an ankle fusion). Sometimes there may be an occasional 'niggle' as it is an artificial joint with moving parts and not 'normal'.



**(A: Metallic components - tibia and talus, B: Roughened surface allows bone attachment, C: Articulating plastic (polyethylene) component.)**

The advantage of an ankle replacement is the ability to maintain movement in the joint. This encourages a more normal walking gait pattern and therefore better functional outcome. It also helps 'protect' the surrounding joints (e.g. subtalar joint) compared to an ankle fusion. With an ankle fusion the surrounding joints have to 'work harder' after the surgery and may have progressive arthritis, which requires fusion of more joints in the foot (not ideal).

An ankle replacement will not allow full normal movement but certainly gives a good useable range of movement.

Overall most people are very happy with their ankle replacement and get back to a relatively active lifestyle without the severe pain of ankle arthritis.

## SURGERY

The surgery is done generally under general anaesthesia or spinal anaesthetic. The operation takes approximately 2 hours.

An incision is made over the front of the ankle. The worn out surfaces of the ankle joint are carefully resected and special instruments are used to help guide the insertion of the prosthesis. There is a metal component (made of titanium and chrome cobalt) on the bottom of the shin bone (tibia) and one on the top of the ankle bone (talus), in between these is an articulating biocompatible plastic (polyethelene).

The components are 'uncemented' – meaning they have a roughened surface that allows the bone to slowly grow onto the prosthesis so that it becomes permanently fixed to your bone.

Occasionally other procedures are required at the same time to lengthen a tight Achilles tendon, stabilise ligaments or realign / fuse surrounding bones or joints.

When you wake up your leg will be in a plaster splint. An anaesthetic nerve block is usually placed into your leg during surgery to help reduce pain after surgery.

## RECOVERY

Usually 3-4 days are spent in hospital until pain has subsided and you have learnt to hop on crutches or a frame.

The first 2 weeks at home are spent with the leg elevated recovering from surgery. This is critical to minimise swelling and give the wound the best chance of healing well.

After 2 weeks the cast and sutures are removed. You then may be placed into a moon boot or further cast depending on your surgery.

At 6 weeks full weight bearing is usually allowed and physiotherapy begun. Your moon boot may still be required for some support for a few more weeks.

By 2-3 months you will be walking well. It is not uncommon to have some 'inflammation' phase around 3 months –this will generally settle.

More full recovery of swelling, strength and general comfort in your ankle will take 6+ months.

## RISKS

Possible risks of the surgery include: Anaesthetic risks, infection, fracture, DVT (blood clots), nerve damage, bleeding/ bruising, stiffness, scarring, loosening of the replacement, pain, failure of the prosthesis and need for further surgery.

Further information can be found at the website – [www.tornierankle.com](http://www.tornierankle.com)

*This is the company site for the prosthesis that Mr Tymms currently uses. It is called the 'Salto' ankle replacement. The website is of the American 'version' of the replacement.*

*This replacement has been used extensively in Europe and the USA and has some of the best studied results of the modern ankle replacements. Mr Tymms has some of the most experience in Australia with use of this replacement.*

### RECOVERY TIMES

|   |           |
|---|-----------|
| Hospital stay                           | 3-4 days  |
| Rest & elevation                        | 2 weeks   |
| Plaster = crutches (non-weight bearing) | 2 weeks   |
| Cam walker                              | 6-8 weeks |

### TIME OFF WORK

|               |            |
|---------------|------------|
| Seated        | 3 weeks    |
| Standing      | 6-12 weeks |
| Good Recovery | 3-6 months |

These notes have been prepared by orthopaedic surgeons at OrthoSport Victoria. They are general overviews and information aimed for use by their specific patients and reflects their views, opinions and recommendations. This does not constitute medical advice. The contents are provided for information and education purposes only and not for the purpose of rendering medical advice. Please seek the advice of your specific surgeon or other health care provider with any questions regarding medical conditions and treatment.