Unicompartment Knee Replacement

A unicompartment knee replacement (UKR), also known as a partial knee replacement, is designed to replace the worn surfaces of the knee joint. This is done using a metal and plastic device fitted onto the surfaces of the femur and tibia. Some bone is removed to allow the implant to fit correctly. The implant is fixed either with cement or by allowing bone to grow into it.

Unlike total knee replacement, an UKR replaces only one side of the knee joint. This enables the other compartment and all ligaments to remain intact. By retaining all of the undamaged parts, the joint may bend better and function more naturally.

However, not all patients are candidates for UKR. In most situations a patient will only be suitable if the arthritis is isolated to the medial compartment (inner side) of the knee, the ligaments are intact and the knee bends well.

The Operation

The operation is usually performed under a general or spinal anaesthetic. It requires an incision over the front of the knee, releasing some of the muscles around the knee to expose the joint surface. Most patients spend 3 to 5 days in hospital.
Results

Most patients (95%) are relieved of most of their pain. **Most patients (90%) regain the movement they had in their knee prior to surgery. The aim is to get at least 0-95 deg of movement.**

Risks

Pain, infection, bleeding, bruising and anaesthetic complications can occur with any kind of surgery. After unicompartment knee replacement surgery there is particular concern with the following types of problems:

- Deep infection around the implant is very rare (about 1%) but if this occurs it is very serious, will require more surgery and the knee may be made worse.
- Small blood clots are very common, major life threatening blood clots are very rare (0.1%). You will be given medication and exercises to reduce this risk.
- Anaesthetic problems are rare, my anaethetist will outline these risks in detail prior to your surgery.
How long do replacements last?

The implant is a mechanical device and as such cannot last forever. The plastic component will wear over time and the whole implant can slowly loosen in the bone. Factors which may make this more likely include:

- Impact activities such as running
- Obesity applies more force to the implant
- Weak bone.
- Arthritis is other areas of the knee

Overall the chances of a UKR lasting greater than 10 yrs is about 85%.

If an UKR fails a total knee replacement can be performed

Post Operative Rehabilitation

**Day 1** : Out of bed with physio.

**Day 2 - 4** : Mobility exercises, walking, stairs.  
Each day till performing most daily activities with help.

**Going Home** : This should be planned before coming to hospital.  
Assistance will be required for showering and toileting.  
Someone will need to help you for at least 2 weeks.

**2 weeks** : Post operative visit with Dr Hewitt.  
**6 weeks** : Post operative visit with Dr Hewitt, xray knee  
Aim for 0 – 90 deg bend.  
Usually able to drive

**3 months** : No further physio but still do exercises.
Life Long Precautions

No impact or jarring activities. How long your replacement will last depends on how well you look after it.

You will need antibiotic medication prior to any dental, urinary or surgical treatment.

This protocol applies to most cases, some variations will occur depending on your arthritis and surgery. If you have any questions about the surgery or rehabilitation don't hesitate to ask Dr Hewitt.

Dr Benjamin Hewitt
MBBS (UWA) FRACS (Ortho)
Orthopaedic Surgeon
Surgery of the Knee, Shoulder and Sports Injuries
ORTHOLOGY
Suite 1: 48 Outram St West Perth 6005
Phone 9322 1990
Fax 9322 1991