

PATIENT INFORMATION

Robotic Assisted - Partial Knee Replacement

This information is designed to give you a clear understanding of robotic-assisted partial knee replacement surgery and what to expect. It is a guide only and your AOS surgeon will talk you through what is most relevant to your situation.

Should I have a partial knee replacement?

Partial knee replacement replaces only the worn part of the knee while retaining the healthy parts. In general, patients must have pain and arthritis localised to one part of the knee. Further criteria include intact ligaments (the ACL must be functional) and no major knee deformity. Strict patient selection criteria are essential for a good long-term outcome and can be discussed further with your surgeon.

Surgery is considered when pain related to knee arthritis is present and non-operative measures such as pain relief and weight loss are insufficient.

The aims of partial knee replacement are to relieve pain and improve mobility and function.

Many people have significant arthritis on their X-rays but should not consider surgery unless the knee is painful.

How is the knee replaced?

Following your appointment, a specialised CT scan is arranged to map bony anatomy and alignment. This scan is used to develop a detailed pre-operative surgical plan including implant sizing and positioning. During the operation, the surgeon-controlled robotic arm assists with implant positioning to achieve the planned result. The robotic arm is held by the surgeon and provides live visual and haptic (tactile) feedback.

What to expect from surgery

Patients generally do best when they have a clear understanding of their recovery and realistic expectations of rehabilitation. Partial knee replacement has good outcomes, though a full recovery can take up to 12 months. Every patient is different and two patients with the same procedure can have very different recovery experiences.



Image: The Mako robotic arm (patients.stryker.com)

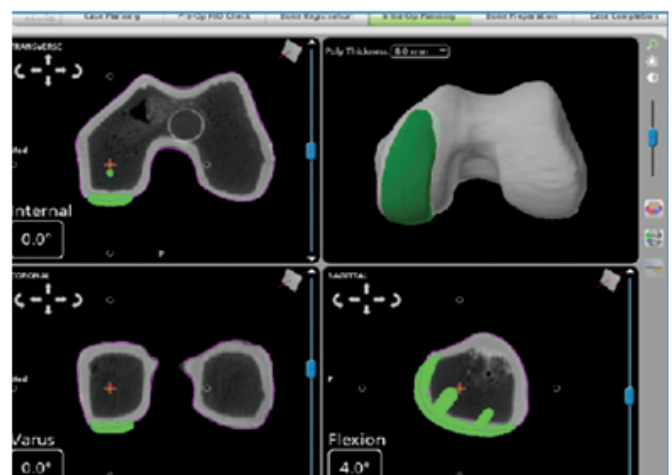


Image: 3D Pre-operative plans for a partial knee replacement (patients.stryker.com)

Joint replacements are designed primarily to relieve pain and restore function. They are well suited to low-impact activities such as walking, swimming, golf, bowls, and cycling. They are not designed for repetitive high-impact activities such as running, jumping, or kicking. Using the joint for these activities will accelerate wear and may cause damage. Most patients are not comfortable kneeling on the operated knee following surgery.

In general, partial knee replacement has a more straightforward recovery than total knee replacement. Most patients can stop using a walking stick within a few weeks of surgery. Recovery timeframes do vary between individuals.

How long will my partial knee replacement last?

A number of factors affect long-term outcome, including weight, activity levels, and bone quality. Approximately 80 to 90% of partial knee replacements are functioning well 10 years after surgery.

Preparing for surgery

Every patient is unique. Your surgeon will discuss the suitability, benefits, and risks of the procedure as they apply to your individual situation. Blood tests, urine tests, an ECG, and X-rays will be requested before your operation.

Risks to be aware of

Operations are safer than ever, but some small risks are unavoidable. These include:

- Risks of anaesthesia
- Infection (approximately 1 in 100 patients)
- Bleeding or blood loss requiring transfusion
- Nerve or major blood vessel injury (some numbness around the scar is normal)
- Blood clots — deep vein thrombosis or pulmonary embolism
- Instability
- Stiffness
- Fracture
- Ongoing joint discomfort
- Progression of arthritis in other parts of the knee
- Wear and tear of the prosthesis over time

What is the recovery after surgery?

Swelling

Swelling is normal after surgery. It is greatest in the first six weeks but will persist to some degree for up to six months. You may notice swelling worsens throughout the day due to gravity and activity.

Swelling

Swelling is normal after surgery. It is greatest in the first six weeks but will persist to some degree for up to six months. You may notice swelling worsens throughout the day due to gravity and activity.

Discomfort

Pain is a very individual experience. Some discomfort after major surgery is unavoidable, but a range of measures are used to keep you as comfortable as possible, including the latest techniques for reducing pain after joint replacement surgery.

Constipation

Medications, changes in diet, and reduced activity can predispose patients to constipation. You will receive medication to help with this in hospital. After discharge, simple pharmacy stool softeners can help if needed.

Wound care

Dissolvable sutures are used routinely. A sterile waterproof dressing will be placed on your incision in the operating theatre and should remain in place for two weeks. It is then reviewed by the AOS team at your two-week check. If you notice persistent discharge or ooze from your wound after leaving hospital, or have any problems with your dressing, contact our rooms on 08 8267 8243.

Blood clot prevention

A combination of techniques is used to reduce the risk of blood clots, including early mobilisation and exercises after surgery, pneumatic foot pumps, compression stockings for six weeks, and blood-thinning medication via injection or tablet.

Physiotherapy

Post-operative physiotherapy begins within 24 hours of surgery and in some cases on the day of surgery. Walking and gentle exercises are important during recovery. The hospital physiotherapist will provide written exercises and refer you for ongoing outpatient physiotherapy. Physiotherapy once or twice per week is particularly beneficial in the first six weeks after surgery.

Hydrotherapy

Hydrotherapy and swimming in public pools are not recommended until six weeks after surgery.

Showering

You may shower with the clear waterproof dressing intact. If the dressing comes off or water reaches your incision, contact our rooms or arrange for a new dressing to be applied. Avoid soaking the incision in a bath, pool, or spa for the first six weeks.

Sexual activity

You may resume sexual activity as soon as you are comfortable.

Travel

Avoid flying in the first six weeks after surgery. If you need to fly, wear compression stockings, walk up the aisle regularly, and keep your calf muscles moving while seated to help prevent deep vein thrombosis. If an unexpected long-haul flight is necessary during early recovery, contact our rooms as additional blood-thinning medication may be required.

How long will I be in hospital?

Most patients are in hospital for one to two nights. Discharge timing is based on your pre-operative function, home support, and early post-operative progress. The main milestones before discharge are:

- Walking short distances with a walking aid
- Toileting independently
- Getting in and out of bed independently
- Managing stairs if required at home

There should also be no ongoing ooze from the incision. Occasionally patients require additional support at home or a short inpatient rehabilitation stay. Having someone visit briefly each day at home may be sufficient. Some preparation at home before surgery, such as freezing meals, will help.

Going home

- Keep your dressing intact until your two-week check. You can shower with the clear waterproof dressing in place.
- Take oral pain tablets as directed
- Ice the joint regularly throughout the day — ice cubes wrapped in a tea towel. Do not apply ice directly to skin.
- Walk as much as is comfortable
- Wear compression stockings for six weeks
- Take blood-thinning injections or tablets as instructed

- Complete your exercises as directed — aim for a straight knee and to bend more than 90 degrees
- Physiotherapy once per week is beneficial in the first six weeks
- Avoid kneeling on the operated knee
- Avoid resting or sleeping with a pillow under your knee

Post-operative follow up

- Two weeks — wound and progress check with the AOS team
- Six weeks — X-ray and progress check with your surgeon
- One year — X-ray and progress check with your surgeon

Further reviews may be required in some cases.



Dr George Awwad

Orthopaedic Surgeon
Hip, Knee, Robotics, Sports

P 08 8267 8243 **F** 08 8267 8278
drgeorgeawwad.com.au

