

Total Shoulder Replacement Procedure

A total shoulder replacement procedure is carried out under general anaesthesia (in addition a regional anaesthetic and/or nerve block may also be used) and generally takes around 90 minutes. It is normally conducted using conventional open surgical techniques.

During the procedure, the surgeon replaces the natural ball joint (which is located on the head of the humerus bone) and the natural socket (the 'glenoid') with artificial components. After the components are put in place, the wound is closed with absorbable sutures.

A technique called 'patient specific technology' allows an accurate 3D model of the natural joint and patient-specific 'jigs' (used to help correct positioning of the artificial joint) to be made using a CT or MRI scan. This then allows the surgeon to make very precise cuts to the bone and accurate location of the socket ('glenoid'). Accurate positioning of the artificial joints (to mimic as closely as possible the form of the natural joint components) may contribute to a better outcome for the patient.

POSTOPERATIVE INSTRUCTIONS

Most total shoulder replacement procedures require a hospital stay of 2-3 days. The day after surgery your surgeon and your physiotherapist will run through the sorts of exercises you will need to complete once you are home in order to speed your recovery. They will also explain what you should do and what you should avoid doing during recuperation.

Pain Management

You will be advised on the most suitable pain medication. For the first 14 days after surgery you should also apply an ice pack for 10 minutes five times every day. You should continue to wear your sling for at least a month after surgery, removing it only for your daily exercise regime (3x 15-20min exercise sessions every day) or when taking a shower. The wound dressings are waterproof and when you are showering it is advisable to keep the affected arm at your side.

To learn more about postoperative recovery and rehabilitation, see the following guide on **Total Shoulder Replacement Rehabilitation Protocol**.

RISKS

As with all surgical procedures there are some risks associated with total hip replacement. These are:

- Infection
- Bleeding
- Nerve injury causing numbness or weakness in the shoulder area
- Blood clot (DVT or embolism).

Risks specific to this procedure include:

- Loosening of the artificial joint
- Dislocation of the artificial joint
- 'Frozen shoulder' - a condition where the shoulder becomes stiff and painful.

Total Shoulder Replacement Rehabilitation Protocol

The following is a brief guide to rehabilitation after a total shoulder replacement procedure.

- These rehabilitation timelines are approximate and actual progression depends on individual recovery. Total recover can take 10-12 months, but significant functional gains can be expected by 12 weeks.
- You will need to wear a sling for 4 weeks, including at night. Please remove the sling for shower and for exercises 3-5 times daily for 15-20 minutes each time.
- Please follow the advice and exercises demonstrated by your surgeon and your physiotherapist to give yourself the best possible chance of recovery and a good outcome.
- Your therapist will incorporate these exercises into your daily home exercise regimen.
- We encourage hydrotherapy commencing 2-3 weeks after surgery. The warm water and buoyancy allows for comfort and less pain during exercises and muscle relaxation.
- Do not perform forceful exercises. Perform exercises within the limits of pain and allow for a gradual return of movements over time.
- For the first 2 weeks – Apply icepacks 3-5 times daily for 10 minutes each time.
- Remember to take pain medication as advised to assist with exercises and keeping you comfortable.

FIRST 6 WEEKS

- Five times daily exercises out of sling.
- Self-stretching shoulder exercises as per protocol.
- Passive and gentle active-assisted forward elevation and rotations to neutral position only from the mainstay.
- The physiotherapist will see you in the hospital before discharge. Please follow their advice and the self-stretching exercises in the sheet will be incorporated in your home exercise regimen.
- Pendulum, stick-assisted and pulley exercises as tolerated.
- Start scapular retraction and shoulder shrugging as soon as able.
- Elbow, wrist and hand exercises.
- Can start ADLs (activities of daily living like eating, writing, typing, etc.) after 2 weeks with above limitations in movement.
- Maximum weight you can lift is a cup of tea.

6 TO 12 WEEKS

- Gradually progress with ADLs.
- Progress with Active-assisted exercises. Can start active ROM exercises. No restrictions to range.
- Start gentle isometric rotation and isometric deltoid exercises (only 25-30% strength).
- Also start core strengthening and scapular stabiliser strengthening as able.

AFTER 12 WEEKS

- Start rotator cuff and deltoid strengthening exercises.
- Progress with ROM.
- No restrictions to activities.
- Please remember – No forceful stretching. Allow movements and strength to return gradually.