

REVERSE GEOMETRY SHOULDER REPLACEMENT

The reversed geometry total shoulder replacement is designed for use in shoulders that have massive rotator cuff deficiency +/- arthropathy, previous failed rotator cuff surgery or complex trauma.

It changes the normal orientation of the shoulder such that the socket (glenoid) is replaced with an artificial ball, and the ball (humeral head) is replaced with an implant that has a socket into which the ball rests. The design changes the mechanics of the shoulder by medialising the joint centre of rotation, which facilitates deltoid recruitment providing an improvement in function and stability, particularly when using the arm in front of the body.

Where possible, the subscapularis tendon will be reattached.

Post operative guidelines

Day 1

- Mastersling in situ, body belt removed, but sling may be used for up to 3 weeks
- Finger, wrist and elbow exercises taught
- Scapula setting
- Pendular exercises, both flexion / extension and small circles
- Discharge home when comfortable (can be 2 - 3 days after surgery)
- Patients may find the shoulder more comfortable if the arm is supported on a pillow when supine lying
- **N.B. weight bearing through the arm is contra-indicated for 6 weeks, i.e. no pushing through the arm to stand from a chair as this risks dislocating the shoulder**
- **Do not pull on the operated arm**

2 - 3 weeks

- Commence formal physiotherapy
- Passive flexion in scapula plane, in supine
- Start to wean out of sling when at home, but may continue to be worn at night or when outdoors
- Encourage use of the arm close to the body for light activities at waist level e.g. eating, writing.
- Can also exercise in water (not swimming) from 3 weeks – hydrotherapy if appropriate
- **Caution re: forcing the movement of hand behind back / medial rotation** – this is due to either the repair or the lack of subscapularis over the anterior joint. There is a potential risk of dislocation.
- **Aim for a maximum of 30° lateral rotation** – this protects the joint by reducing the risk of posterior scapular notching. The movement will be limited due to infraspinatus deficiency.

4 - 5 weeks

- Start anterior deltoid exercises, progressing supine exercises as able.

From 8 weeks

- Progress anterior deltoid exercises from supine lying into long sitting at 45° when able and eventually to standing
- Introduce the use of a theraband over the top of the door to encourage deltoid activity and to facilitate recovery of flexion

Return to functional activities

- *Driving* can resume driving when they have control of movement, usually from 6 - 8 weeks
- *Work* light duties / sedentary work at 6 - 8 weeks
Manual work - to be determined by the Consultant
- *Lifting* can resume light lifting at waist level at 6 - 8 weeks
Heavy lifting - from 3 months