

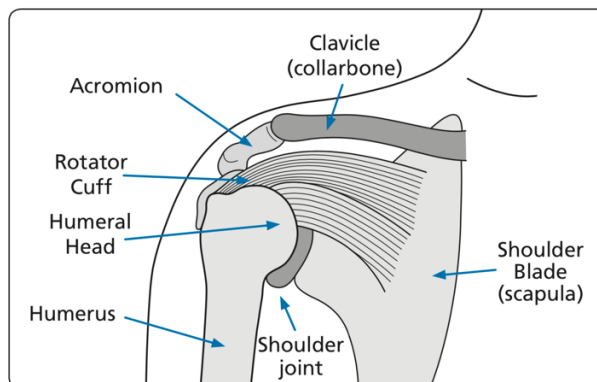
Reverse Shoulder Replacement

The Shoulder

The shoulder joint is a ball and socket joint. Most shoulder movement occurs where the ball at the top of your arm bone (the humerus) fits into the socket (the glenoid), which is part of the shoulder blade (the scapula).

Your shoulder is the most mobile joint in your body and is therefore dependent on strong muscles to move and stabilise it. The most important muscles for this purpose are the rotator cuff muscles.

The rotator cuff is a group of muscles closely wrapped around the top of your humerus. These muscles come from your shoulder blade and their tendons form a cuff which covers the joint. These tendons keep the joint in the right position and control shoulder movements but they can be damaged through general wear and tear, or after an accident/fall. If these tendons are damaged then this can result in poor positioning of the humerus and ultimately damage the joint (arthritis). This can lead to pain and weakness and you may not be able to use your arm fully.



Why does the joint need replacing?

The most common reason for replacing the shoulder joint is arthritis, either osteoarthritis (wear and tear) or rheumatoid arthritis. It may also be necessary following a fracture or bad accident. With all forms of arthritis the joint becomes painful and difficult to move. When arthritis is combined with a rotator cuff tear, this means that a standard shoulder replacement will not work.



Shoulder Osteoarthritis

What is a reverse shoulder replacement?

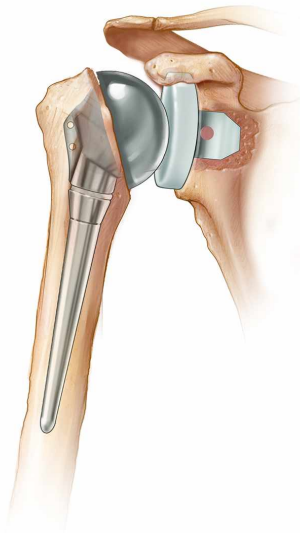
During a reverse shoulder replacement, both the head of the humerus and the socket are replaced with artificial surfaces (metal and durable plastic). However the relationship between the ball and socket is reversed (the ball becomes the new socket and the socket becomes the new ball). This enables the stronger muscles around your shoulder, particularly the deltoid muscle, to compensate for the rotator cuff and move your arm leading to less pain and improved movement.

Candidates for Surgery

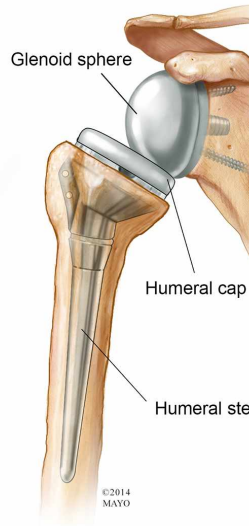
Reverse total shoulder replacement may be recommended if you have:

- A completely torn rotator cuff that cannot be repaired
- Rotator cuff tear arthritis
- A previous shoulder replacement that was unsuccessful
- A complex fracture of the shoulder joint
- A chronic shoulder dislocation
- A tumor of the shoulder joint
- Severe arthritis

Total shoulder arthroplasty



Reverse shoulder ar



General complications of any shoulder surgery

Pain levels felt after surgery vary depending on the type of surgery, individual pain thresholds, the nature of the problem for which surgery was done and various other factors.

Stiffness after shoulder surgery is not uncommon and occurs as a result of pre-existing pathology, surgical scarring and prolonged post-operative protection in a sling. Shoulder movements after shoulder replacement may not completely return to normal even after a successful replacement and the expected range would be discussed with your surgeon, depending on the condition and type of replacement being performed.

Bleeding during or after surgery (less than 1%). It is common to have some oozing from the wound after surgery. It is uncommon to need a blood transfusion after shoulder replacement surgery.

Infection of the wound is rare at less than 0.5%, however early diagnosis of postoperative infection has a significantly better outcome compared to delayed diagnosis. After your operation, you should ring the rooms and your GP immediately if you get a temperature, become unwell, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics but very occasionally the wound may need to be drained or you may need another operation.

Unsightly scarring of the skin (less than 1%). Most surgical scars have disappeared to a thin pale line by one year after surgery. If you are concerned about your scar you must discuss it with your surgeon or therapist, as there are many treatments to improve scar healing.

Nerve injury is rare with most shoulder operations (less than 0.5%), but some larger operations have a higher risk, such as revision shoulder replacements, and complex fracture surgery.

Vascular injury is again very rare (less than 0.5%) after shoulder surgery. Certain shoulder fractures, previous vascular surgery to the same arm, and revision surgery have a higher risk of vascular injury.

Anaesthetic related complications such as sickness and nausea are relatively common. Heart attacks, lung infection or neurological problems such as stroke are much rarer. (Less than 1 person in 1,000).

Complications specific to shoulder replacement

Almost all joint replacements have a limited lifespan. Even though the majority of patients who undergo shoulder replacement do not need a revision operation, it is worth considering loosening and wearing out of the implants; although this is not normally the case for several years after the surgery.

The chances of needing to have the shoulder replacement re-done or revised, are higher and the lifespan of the implant is lower, in patients where there is already bone loss prior to replacement and in younger patients. The lifespan of the implant is also lower in revision surgery.

The outcomes and results following revision surgery are, in general, less favourable compared to initial surgery. Similarly complication rates and risks are usually higher in revision surgery.

Dislocation of a shoulder replacement is very uncommon but may need further surgery.

Fractures of the bones during or after a shoulder replacement are also very rare, but may need further surgical treatment.

Fractures of the shoulder blade can occur in 1-5% of reverse shoulder replacements. This often presents with pain over the top or back of the shoulder between 3-6 months after the operation. If you get this pain it is important to place yourself in a sling and seek immediate review by Mr Mattern.

Whilst the reverse shoulder replacement often restores lifting of the arm, rotation of the arm can be more variable. Most patients find it difficult to get their arm behind their back.

More information is available at the following website:

<https://limacorporate.com/patients/category/3/shoulder.html>

REHAB PROTOCOL REVERSE TOTAL SHOULDER REPLACEMENT

	Post op
Day 1-3 Weeks	• Sling 3 weeks, can remove for ADLs at 2 weeks • Advice on sling management and axillary hygiene • Postural education and scapula setting • Gentle active assisted exercises within safe zones • Neck, elbow, wrist & hand exercises
3-6 Weeks When instructed to wean from sling	Patient must be comfortable with above phase before progression • Progress AAROM care to protect external rotation • Begin proprioceptive exercises • Commence anterior deltoid rehab as comfort allows in supine
6 Weeks +	• Progress anterior deltoid rehabilitation • As comfort allows gently stretch into functional range • Progress to active movement and focus on ADL activities and conditioning as able

Milestones	
Week 3	Comfortably out of sling for ADLs
Week 6	Sling discarded, increasing active and passive movement
Week 12	Improving strength

Return to Functional Activities

Driving	6 weeks as comfort allows
Swimming	6 weeks
Lifting	3 months +
Work	Sedentary – 3-6 weeks Manual - 3 months +

Clinician Note

With a reverse geometry total shoulder replacement the amount of rotation required post-surgery is reduced. Focus should be on functional range and strength and the ability of the external rotators to maintain the hand and wrist over the elbow during functional activities.

PHYSIOTHERAPY FOLLOW UP RECOMMENDED WITHIN 2 WEEKS