



## Reverse geometry shoulder replacement

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**This leaflet gives advice and exercises following reversed geometry shoulder replacement. If you have any questions or concerns, please speak to your physiotherapist.**

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### Introduction

The reverse geometry total shoulder replacement is designed for use in shoulders that have a deficient rotator cuff, arthritis or complex fractures. It changes the orientation of the shoulder such that the normal socket (glenoid) is replaced with an artificial ball, and the normal 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 allowing pain relief and an improvement in function and stability, particularly when using the arm in front of you.

Following your operation you will have a scar approximately three inches long on the front of your shoulder.

Your arm will be supported in a sling and a physiotherapist will teach you how to take it on and off to do your exercises. You will be in hospital overnight.

### General guidelines

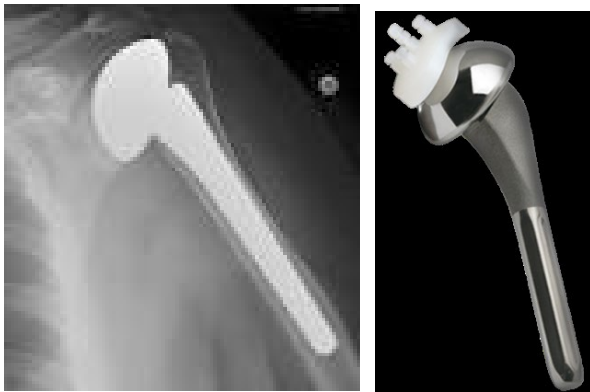
- **Pain:** A nerve block may be used during the operation which means the shoulder and arm will remain numb for a few hours. The shoulder will be sore when this wears off and this may last a few weeks. It is important to continue to take the painkillers. Ice packs may also help reduce the pain. Wrap frozen peas/crushed ice in a damp cold towel and place on the shoulder for up to 10 minutes. Allow at least 20 minutes between each ice pack.
- **Wearing a sling:** You will return from theatre wearing a sling. This is used for 2-3 weeks following your operation. It is important that you remove the sling to exercise. You can stop wearing the sling when advised to do so by your physiotherapist.
- **The wound:** Keep the wound dry until it is healed. This normally takes 10 to 14 days. Your stitch is dissolvable and needs only to be trimmed by your practice nurse approximately 10 days post-op.
- **Driving:** This is usually possible after about 6-8 weeks, but will depend on your recovery.
- **Follow up appointments:** Outpatient physiotherapy will be arranged on discharge and will be done at your local physiotherapy department.  
You will have an appointment to be reviewed at the shoulder clinic approximately three months after your procedure. You will be reviewed by your surgeon/ specialist physiotherapist who will check your progress and have an x-ray.

- **Progression:** This is variable and dependent on the amount of movement and the strength of your muscles prior to surgery. Following discharge your pain will slowly decrease and you will become more confident. You will be able to use your arm in front of you for light activities. After six weeks your strength will start to improve.  
NB. Avoid pushing down through the arm for 6 weeks e.g. pushing yourself out of a chair, out of bed or leaning on a walking stick.  
It is important to continue your exercises, as improvement in strength and range of movement will continue up to 18 months post-surgery.
- **Posture:** Before starting any activity/exercise it is important to position your shoulders correctly. This allows normal shoulder function. Gently move your shoulder blades down and in towards the spine but not in a braced back position.

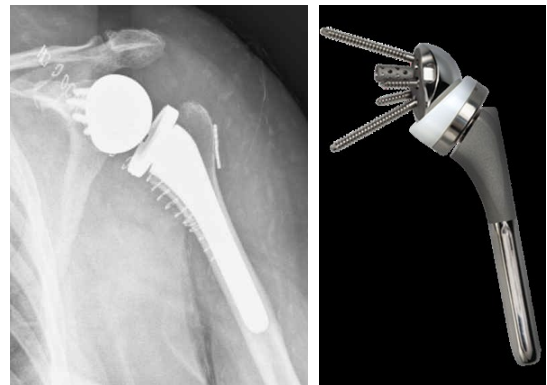
### About the reverse geometry shoulder replacement

This operation swaps the normal arrangement of the ball and socket as shown in the pictures below. This changes the mechanics of the shoulder in order to allow the deltoid muscle, which is now the main muscle for lifting the arm, to work better.

#### *Standard shoulder replacement*



#### *Reverse shoulder replacement*



The main reason for doing the operation is to reduce the pain in your shoulder and restore function for daily activities. Ultimately, you may also have more movement in your shoulder, but this depends on how stiff the joint was before the operation and on the strength of the undamaged muscles, mainly the deltoid, around the shoulder.

## Exercises

From Day 1 - as pain allows

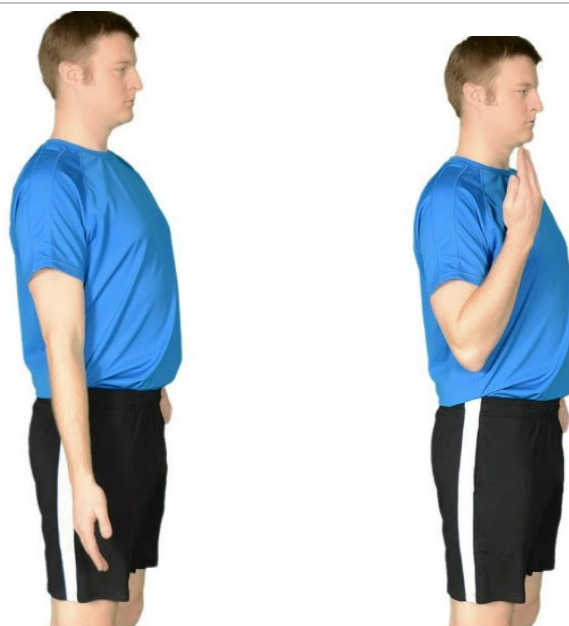
### Postural awareness:

- Standing or sitting – Pull the shoulder blades gently back and down, with the chest bone (sternum) naturally coming forwards, as if taking a deep breath in.



### Elbow exercises:

- Standing – Bend and straighten the elbow fully, using your good arm to assist if needed.
- Standing or sitting – With a bent elbow turn the forearm over in a clockwise and anti-clockwise direction (palm up, then palm down).



**Wrist and hand exercises:**

- Bend the wrist forwards and backwards, then side to side.
- Circle the wrist in a clockwise and then in an anticlockwise direction.
- Squeeze and make a fist. You can use a small ball if you have one.



- Standing with your good arm holding onto a chair.
- Bend forwards and let your operated arm come away from your body. Slowly move the arm in a 'pendular' motion forwards and backwards, left to right and around in circles.



**From 1 week**

- Lying on your back – Using the good arm to assist (to do most of the lifting), help the operated arm up to a vertical position.
- DO NOT go any further than vertical.



Compassionate

Aspirational

Resourceful

Excellent

- Standing or sitting – Tucking your bent elbow into your side, turn your arm away from your body unassisted.
- Go to a MAXIMUM of 30 degrees away from the body.






### From 4 weeks

- Lying on your back – Try and lift the operated arm up to vertical and slowly lower back down.
- DO NOT go any further than vertical.



- Standing or sitting – Tucking your bent elbow into your side, turn your arm away from your body unassisted.
- Go to a MAXIMUM of 30 degrees away from the body.



<ul style="list-style-type: none"><li>• Standing – Arm at your side, elbow bent to 90 degrees.</li><li>• Stand next to the wall and push your hand against the doorframe as if you are turning the arm outwards.</li></ul>	
<ul style="list-style-type: none"><li>• Standing – Arm at your side, elbow bent to 90 degrees.</li><li>• Stand with your back to the wall and push your elbow backwards against the doorframe.</li></ul>	
<ul style="list-style-type: none"><li>• Standing – Have your arm at your side, elbow bent to 90 degrees.</li><li>• Stand next to the wall and push your hand against the doorframe as if you are turning the arm inwards.</li></ul>	

## Resuming normal activities

Timings for returning to functional activities are approximate and will differ depending upon the individual. However, the earliest that these activities may commence are:

- **Driving:** after 6 - 8 weeks or when safe.
- **Swimming:** Breaststroke: 6-8 weeks; Front crawl at 3 months.
- **Golf:** From 3 months.
- **Contact sports:** From 3-6 months (football, martial arts, horse riding, racquet sports).
- **Return to work:** light work (no lifting) from 6 weeks, medium work (light lifting below shoulder level) from 8 weeks, heavy lifting from 3 months

**Note:** These are guidelines only.

Images courtesy of <http://simpleset.net>

## Useful numbers and contacts

Royal Berkshire NHS Foundation Trust  
**Orthopaedic Physiotherapy Department**  
Royal Berkshire Hospital  
London Road, Reading RG1 5AN  
Tel: 0118 322 7812 / 7811  
For questions or concerns please contact: [rbft.physiotherapy@nhs.net](mailto:rbft.physiotherapy@nhs.net)

Visit the Trust website at [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

**Please ask if you need this information in another language or format.**

RBFT Orthopaedic Physiotherapy Department  
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