Total shoulder replacement, resurfacing and hemiarthroplasty

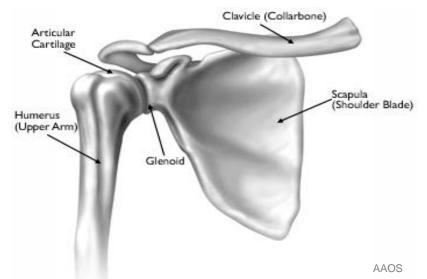
Total Shoulder

This leaflet provides information on your surgery which will help you prepare for your operation and admission to hospital. Treatment is always planned on an individual basis so your experience may differ slightly from the information given.

Shoulder anatomy

The shoulder is a ball and socket joint made of three bones; the upper arm (the **humerus**), the shoulder blade (the **scapula**) and the collarbone (the **clavicle**). The head of the upper arm bone (shaped like a ball) fits into the shallow cup-shaped socket of your shoulder blade known as the **glenoid**. Muscles and tendons surround the shoulder joint to provide stability and support. **Articular cartilage** covers the surface of the bones where they touch. It protects the bones and enables them to move freely.

Normal Shoulder Anatomy



Why do I need a Shoulder Replacement, Hemiarthroplasty or Resurfacing?

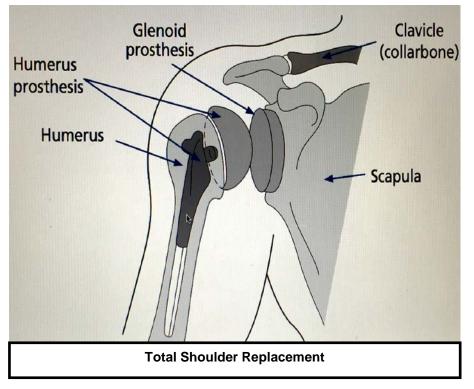
Over time, or due to damage, the cartilage covering the bones, soften and wears away. The bones then directly rub against one another leading to friction, swelling, pain, stiffness and deterioration of the bone surfaces. The most common cause of the deterioration of the cartilage is **osteoarthritis**. This is an age-related, degenerative form of arthritis that usually occurs in people over the age of 50, but may occur in younger people, too.

What does the surgery involve?

There are several different types of shoulder replacement surgery; total shoulder replacement, shoulder resurfacing, hemiarthroplasty and reverse geometry shoulder replacement. Your consultant will select the best type for you depending on the quality of bone as well as the strength of the muscles around your shoulder joint.

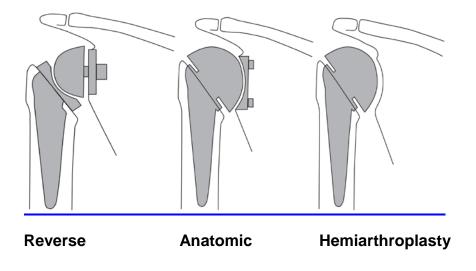
Total shoulder replacement involves the replacement of both the ball and socket of the joint. The head of the arm bone is replaced with a smooth metal ball that is fixed to a stem that sits

within the bone. The arthritic socket is also replaced with a prosthesis as shown in the image below -



Reverse geometry shoulder replacement is another type of total shoulder replacement where both the ball and socket are replaced. In this form of surgery however, the socket and metal ball are switched. The metal ball is attached to the shoulder bone and the plastic socket to the upper arm bone. The surgery is commonly advised when there is rotator cuff muscle tear along with the osteoarthritis.

When determining the condition of your shoulder the surgeon may decide that this is not the right procedure for you. Your surgeon may instead opt for a **hemiarthroplasty**, in which only the ball is replaced. Many surgeons recommend **hemiarthroplasty** when the head of the arm bone is affected but the socket is normal. In shoulder **resurfacing** the ball part of the joint is kept in place but is recovered with a metal implant.



What are the alternative treatment options?

Before you decide to have a shoulder replacement you are likely to have tried various nonsurgical measures such as painkillers, physiotherapy or other lifestyle changes. Surgery is always the last option but you can be reassured that most people are satisfied with the degree of pain relief they receive from shoulder replacement surgery.

What are the expected benefits of treatment?

Replacing the worn surfaces of the bones with prosthesis is expected to reduce the pain experienced and may also improve the range of movement of the shoulder joint. Successful replacement of the arthritic joint would therefore, mean, an increased quality of life and improved performance in daily activities.

What are the potential risks and side effects?

The operation is usually performed under general anaesthesia, in combination with local anaesthesia that is injected in and around the shoulder, and around the nerves supplying the region. The anaesthetist will generally discuss the best option for you before the surgery. The orthopaedic surgeon will explain the potential risks and complications of shoulder joint replacement. Like all surgeries, risks of shoulder replacement relate to the anaesthesia and the surgical procedure itself. Complications of surgery include:

Infection – A possible complication of any surgery. Likelihood of infection however, is about 1:1000

Bleeding – little blood loss through the procedure, transfusions are very rarely required. **Nerve injury** – although a possibility this type of injury is rare and over time, nerve injuries may improve.

- Fracture
- Dislocation
- Stiffness
- Residual discomfort
- Thrombosis
- Component loosening

While asking for consent the surgeon will discuss the benefits, possible complications and ensure that the procedure is only recommended if the benefits outweigh any disadvantages. Before surgery, you are required to sign a consent form. This ensures that you wish to undertake the procedure and have understood what it involves. It is important that you ask any questions at this stage and discuss any concerns.

What should I do before I come into hospital?

Shortly before your operation you will be asked to attend a pre-assessment medical screening appointment. This is a medical examination to make sure you are well enough for the surgery. You may also be assessed by an Occupational Therapist (OT) at the pre-assessment clinic, on the telephone or via a questionnaire. The OT will review the information you provide to highlight any functional concerns that may arise on how you may cope with daily life following the surgery. If you have any concerns regarding how you will manage after your surgery please let the staff know at the pre-assessment appointment as they can arrange for additional support for you on discharge if this is appropriate.

It is important to prepare for an operation to reduce the risks of complications. There is information about how to do this at: <u>https://www.cpoc.org.uk/patients</u>.

Transport

Patients are responsible for their own transport to and from hospital. You will be informed of your admission and planned discharge date in advance so that you can arrange for a relative, friend or taxi to transport you. In most cases it will not be appropriate to use public transport on discharge. If you are eligible for patient transport the assessment team will be able to assess your needs through a brief telephone conversation. The Patient Transport service are available on 0300 111 21 31.

The operation

The surgeon will see you on the day of the operation and mark the site for surgery. You will then be transferred to the anaesthetic room to be seen by the anaesthetist and receive the appropriate anaesthesia and preparation for surgery before being transferred into the theatre room. During the operation, the surgeon will make a cut into the skin at the front of the shoulder to access the joint. The head of the arm bone and socket are replaced with artificial components to replace the worn cartilage. Cement and screws are used to hold the components in place. The operation takes around 2 hours to perform. The arm is placed in a sling following the operation in order to protect it.

Will I have an anaesthetic?

The anaesthetist will discuss with you the general anaesthetic and you may also be given a nerve block which will numb the whole arm for approximately 12 hours after the surgery. It is normal to feel some pain following the operation. You will be provided with painkillers and antiinflammatory medication to take in the days following the surgery to help minimize the pain. In the long term, the pain should be significantly reduced in comparison to before the operation.

What should I expect immediately after my operation?

After the surgery is complete you will be transferred to the recovery department for initial observation. This is to monitor your recovery from anaesthesia. Following this, you will be transferred to the orthopaedic ward for rehabilitation and recovery from surgery. A physiotherapist will see you at this point and recommend some basic exercises.

It is normal to feel some pain following the operation. You will be provided with painkillers and anti-inflammatory medication to take in the days following the surgery to help minimize the pain. In the long term, the pain should be significantly reduced in comparison to before the operation.

How long will I be in hospital?

We aim to discharge you from hospital the day after your operation or as soon as it is safe for you to go. Prior to discharge we need to ensure that:

- You can mobilise safely
- You have adequate social support
- You understand your exercises and precautions
- Your pain is managed with effective pain relief
- Your wound is clean and dry
- Your post-operative xray is satisfactory

Aftercare

On discharge a district or practice nurse appointment will be requested to check your wound. An appointment will be made for you to see the surgeon's team for a post-operative review. This

may be sent by post or given to you on discharge from the hospital. Please discuss any queries and concerns you have regarding the procedure and your recovery at this point.

Post Operative Therapy

In order to get the most out of your shoulder following the operation, physiotherapy will be recommended. You will receive information about your first physiotherapy appointment in your local community before leaving the hospital. It is recommended to undertake physiotherapy following surgery as this aids the recovery process and may ensure increased functioning from your shoulder.

It is also important to carry on wearing your sling for approximately 3 to 6 weeks for rest and support. The ward staff will show you how to get the sling on and off safely. You will be unable to use your arm for all your activities of daily living during this time and your therapist will advise you on what you can and cannot do.

Following a shoulder replacement the surrounding muscles and tissues need time to heal and it is important you avoid some movements to reduce the risk of dislocation. Your consultant will clearly state your restrictions in the operation record and the physiotherapists will go through appropriate exercises with you before you leave the ward and a follow-up appointment will be made for you to progress your rehabilitation with the physiotherapy team starting one to two weeks after you leave hospital.

Personal Care

You should not get your surgical wound wet until you have had it checked 1 to 2 weeks after your operation. You can wash under your arm by sitting and resting your forearm on a firm surface in front of you then moving your body slightly away so you can reach under your armpit. We advise that you wear a loose fitting shirt or blouse that opens completely at the front to make dressing easier. You should put your operated arm into the sleeve first. Make sure you wear clothing that is easy to take on and off to your follow-up appointments.

Sleeping

You may find sleeping uncomfortable for the first couple of weeks following surgery. We recommend that you get in and out of bed towards the non-operated side. You should avoid lying on the operated arm and use pillows under the arm for added support and comfort.

Domestic tasks

Use ready prepared meals or items that need little preparation e.g. pre-chopped vegetables. There is equipment available which can help with food preparation for example easy grip jar openers, pizza cutters. Some of these are available in large supermarkets or from the Disabled Living Foundation **www.dlf.org.uk**. Your Occupational Therapist will advise you on this if required. You should avoid heavy household duties that may put undue stress on your shoulder until approximately 12 weeks after your operation or when advised by your physiotherapist.

Returning to work

The period of time off work will depend on the type of surgery you have and your occupation. If you have a predominantly manual job, one that involves lifting and overhead activities, it is likely you are unable to return to this for at least 12 weeks. Please ensure you discuss this with your surgeon after the operation.

Driving

It is generally recommended that driving should be avoided for a period of 6 weeks. Following this, you can return to driving when you feel comfortable and confident to do so. It is important to ensure that you can perform safety manoeuvres and are comfortable in controlling your vehicle. If you have any questions please discuss this further with the consultant or physiotherapist.

Returning to leisure activities.

Generally, a period of rest of 12 weeks is recommended before returning to sporting activities, however, this will vary depending on the activity and level. Your surgeon will advise you on when it is suitable to resume your leisure activities.

Who should I contact if I have a problem after the surgery?

If you have a problem at any other time, please contact the Surgical Ward or your Consultant's secretary via the hospital Switchboard:

Conquest Hospital – Tel: 0300 131 4500 Eastbourne DGH – Tel: 0300 131 4500 Uckfield Day Surgery Unit - Tel: 01825 769999

In an emergency contact your GP or attend the Emergency Department (A&E).

Please note that this is an advisory leaflet only. Your experiences may differ from those described.

Consent

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

Who should I contact if I have any questions?

If you have any questions regarding the information in this leaflet you can contact the your Consultant's Secretary or Orthopaedic Research Unit via the hospital switchboard Tel 0300 131 4500.

Sources of information

National Joint Registry – Shoulder Replacement Edition www.njrcentre.org.uk/njrcentre/Portals/0/Documents/England/Reports/11th_annual_report/NJR %20Public%20and%20patient%20guide%20SHOULDER%20edition%20Online.pdf Shoulder Doc website www.shoulderdoc.co.uk/article/1238 The Royal National Orthopaedic Hospital https://www.rnoh.nhs.uk/application/files/2715/8072/6180/J001182_-_20-27_RNOH_Revision_19-210_Total_shoulder_replacement_WEB-Release.pdf Important information The information in this leaflet is for guidance purposes only and is not provided to replace

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 or by email at: esh-tr.patientexperience@nhs.net

Hand hygiene

The trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 0300 131 4500 Email: esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse, doctor or practitioner.

Reference

Written by: Mr Syed Naqib (4th year Medical Student), Mr Jamie Buchanan – Consultant Orthopaedic Surgeon, Orthopaedic Research Unit – Conquest Hospital

The following clinicians have been consulted and agreed this patient information: Mr Hemant Thakral - Consultant Orthopaedic Surgeon, Mr Albert Bonnici - Consultant Orthopaedic Surgeon, Mr Prabhakar Mestha – Associate Specialist Orthopaedic Surgeon Occupational Therapy Department (ESHT), Physiotherapy Department (ESHT), Surgical Preassessment (ESHT), Elective Orthopaedic Surgical wards (ESHT)

The directorate group that have agreed this patient information leaflet: Trauma and Orthopaedics – East Sussex Healthcare NHS Trust

Next review date:	December 2023
Responsible clinician:	Mr Jamie Buchanan

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