

#### Introduction

This leaflet will briefly outline what a Shoulder replacement will involve for you as a patient and mention some risks and complications of this type of surgery.

# What is a total shoulder replacement?

The operation replaces a painful diseased Shoulder with a new pain free artificial Shoulder joint. The most common indication for this operation is for osteoarthritis of the Shoulder. The type of shoulder replacement depends on the pattern of wear and whether your rotator cuff of tendons and muscles are intact before the replacement. Some patients suffer from Rotator Cuff Arthropathy. This is where the rotator cuff ruptured years ago and the bone of the humeral head has rubbed into the bone of the acromion. This is treated with what is called a reverse shoulder replacement.

Figure 1 Rotator Cuff Arthropathy and the Reverse TSR. A complex operation only performed by experienced shoulder surgeons.



Most causes of gleno-humeral osteoarthritis usually need a less complex hemiarthroplasty (half a shoulder replacement) or a Total Shoulder Replacement (TSR). Your SOC shoulder surgeon will advise which is best for you.

Figure 2 A patient with severe pain from osteoarthritis and a shoulder replacement by <u>Bristol Shoulder</u> <u>Surgeon</u> Mr Philip McCann



### I think I might have Shoulder pain. What should I do?

If you think you have Shoulder osteoarthritis from injury, rheumatoid arthritis or another cause like avascular necrosis you will have pain, loss of function, a stiff shoulder and difficulty sleeping. Poor sleep is an indication for referral for further investigation. If you now want to see one of our Shoulder consultants who will take a history from you and examine you to confirm your suspicion then telephone Jane our practice manager to make an appointment **0044 (0)117 3171796** She will direct you to the PA of one of our excellent Shoulder surgeons. The shoulder surgeon's PA will assist you by offering you an appointment and advising on preparation for the appointment.

#### What if I do have Shoulder osteoarthritis?

Most patients do not need surgery. Your surgeon can give you many tips and options like injection to improve your pain and function without a Shoulder replacement. Some patients choose to have surgery when the options and risks and benefits are discussed with them.

### What is done when patients undergo have Shoulder replacement?

The damaged humeral head (ball) and worn glenoid (socket) are replaced with new parts (called prostheses). The Shoulder arthroplasty replacement may be fixed with or without bone cement or by a combination of these (hybrid). Some of our Shoulder surgeons offer the latest bone sparing resurfacing to younger patients with advanced osteoarthritis. The aim of the operation is to replace a Shoulder joint that is painful and stiff with one that is not painful, moves more easily and allows you to sit, walk, lie more comfortably and sleep.

## What can I do to help get the best result before surgery?

Prior to surgery there are certain things you can do to help:

- Visit your dentist for a check-up
- Try and lose weight
- Stop smoking
- Take good care of your skin
- Take as much exercise as your Shoulder allows to prepare the muscles for a quick recovery

You may be seen in a pre-assessment clinic shortly before your surgery where your fitness for surgery will be assessed. You may have blood tests and swabs at this stage.

You should have no solid food or drink for six hours before your operation. When you arrive in theatre you will be given an anaesthetic (a spinal or general anaesthetic). The surgery takes approximately 1 to 2 hours.

Figure 3 Treatment of glenohumeral osteoarthritis in a young patient of Mr McCann's with uncemented total shoulder replacement



# How long do you stay in hospital?

Postoperative regimens vary between surgeons and the type of Shoulder replacement. Normally the arm will remain in a sling for a period of two to four weeks.

A physiotherapist will usually get you walking the day after surgery. Once you are walking safely and there are no wound complications you may be discharged (usually at 3 to 5 days) with arrangements to have any stitches or clips removed and an outpatient appointment.

### What can go wrong?

Generally a total Shoulder replacement is an effective procedure that can dramatically improve your quality of life. All operations carry some risk and the most frequent and important are outlined below:-

Surgical mortality – A Shoulder replacement is a major operation at any age and a very small number of patients may not survive their surgery.

Anaesthetic – You will have an anaesthetic that carries a very small risk, depending on your level of health. The anaesthetist (a doctor) will explain the risks to you.

Dislocation – The risk of dislocation (joint coming out) is highest in the first few weeks following your operation. It is vital to adhere strictly to the advice given to you by staff on movements and positions to avoid. The risk is approximately 5 in 100 after a first Shoulder replacement and increases to over 10-20 per 100 for repeat (revision) operations.

Infection – The risk of developing an infection around a Shoulder replacement is around 1 in 100 in an osteoarthritic Shoulder and 2-4 per 100 in rheumatoid arthritis. The following measures and others are used to reduce this risk: a) antibiotics at the time of surgery; b) surgery is performed in a laminar flow theatre used only for orthopaedic operations. c) Staff and patients are regularly checked to exclude COVID19 d) patients are checked for MRSA and MSSA at preoperative assessment.

If an infection does become established and does not respond to antibiotics the Shoulder replacement may be removed. It is usually possible to reinsert another joint when the infection has cleared.

Thromboembolism – Blood clots may develop in the veins of your arm or leg during or after surgery. Part of a clot may break off and travel to your heart or lungs. This can be fatal but is extremely. This risk is increased if you are female, overweight, have varicose veins, high blood pressure, diabetes, smoke, had previous thrombosis or have heart disease. Recognised ways to reduce blood clots are exercise, and blood thinning agents, all of which are used at the Hospital.

Loosening, wear and fractures – The overall rate of loosening of Shoulder replacements are approximately 4 to 8 in 100 at 10 years. These rates are higher in younger, or more active people and in patients under 50 years old. For this reason some surgeons may use different types of prostheses in younger patients.

Patients with osteoporosis, rheumatoid arthritis and neurological disorders may suffer fractures in the bones around the prosthesis which may require further surgery.

Injury to nerves and blood vessels – The risk of a nerve or vessel injury is less than 1 in 100 cases after a first replacement but increases in revision operations. Injury may result in paralysis,

weakness, numbness or pain in the arm and hand which is usually temporary but may be permanent.

Shoulder swelling and pain – It is necessary to manipulate the arm during the operation and this may cause some swelling, stiffness and pain in the shoulder. This usually settles over a few weeks.

We hope this information sheet has answered any questions you might have. If you have any further queries please feel free to discuss them with any of the medical or nursing staff either in the Clinic or on your arrival in Hospital.

## How long does a Shoulder replacement last?

Most total Shoulder replacements will last your lifetime. They are a proven cost effective way of improving a patient's quality of life.