

## **INFORMATION ON TOTAL SHOULDER REPLACEMENT: Dr Katherine Gordiev**

### **INTRODUCTION**

Arthritis of the shoulder can be the cause of significant pain and disability. Shoulder replacement is performed for arthritis of the shoulder arising from numerous causes, typically after a course of non-operative treatment has failed to relieve the symptoms.

### **ARTHRITIS**

Refers to the damage to cartilage and inflammation of the lining of a joint. Often spurs develop and the cartilage lining of the joint is worn out. Sometimes the underlying bone can also be worn.

The causes of arthritis include:

- Osteoarthritis
- Inflammatory conditions such as Rheumatoid arthritis
- Gout and other crystal deposition disorders
- Trauma/ Fractures
- The presence of longstanding large rotator cuff tears
- Infection
- Avascular Necrosis
- Haemophilia
- Others

### **INDICATIONS**

After a thorough history, examination, and review of imaging, the surgeon may recommend an operation when a patient has exhausted all non operative avenues of treatment, and is still experiencing significant pain and disability. Typical problems include significant night pain, and inability to perform basic activities of daily living or work without pain.

### **NON-OPERATIVE TREATMENTS**

These are typically tried first and may include:

- Activity modification
- Physiotherapy
- Paracetamol
- Anti-inflammatory medications
- Joint supplements such as Glucosamine
- Cortisone injection into the joint

### **BENEFITS**

The purposes of joint replacement surgery are the relief of pain and the improvement of function.

### **PREOPERATIVE PREPARATION**

- Surgical consultation
- Discussion with GP, family, physiotherapist, and/ or to other patients who have had the operation
- Medical assessment by GP / Anaesthetist / Preadmission clinic / Blood tests
- It may be necessary to omit certain medications, eg Warfarin, Plavix
- Avoidance of cuts and scratches leading up to the surgery
- Consideration and discussion of Interscalene block
- Arrangements for time off work, off driving, home assistance as necessary

## THE PROSTHESIS/ IMPLANT

Your surgeon will select the make and design of the implant that best suits the patient's needs. Your surgeon will discuss these with you prior to surgery.

## DAY OF SURGERY

Usually the patient is admitted to the hospital on the day of surgery, having fasted the night before.

## SURGICAL PROCEDURE

The operation is typically performed under general anaesthetic, after the administration of antibiotics. An incision is made at the front of the shoulder extending down the arm. The incision measures approximately 10 -15 cm.

The muscle layers are spread and a muscle is usually detached to allow the arthritic joint surfaces to be replaced. The glenoid (or cup) may be resurfaced with a plastic or metallic component, and the ball is resurfaced or replaced. Sometimes cement is used to assist in the fixation. Muscle layers are reattached and closed, and the skin is stitched and dressed. A sling is applied.

## POSTOPERATIVE MANAGEMENT

The usual length of stay is 2 or 3 nights in hospital, but individual circumstances may vary.

### Pain management

This is supervised by your Anaesthetist, and may consist of a combination of:

- Interscalene block
- PCA pump (Patient controlled analgesia)
- Tablets
- Injections

### Physiotherapy

The surgeon and physiotherapist will see you post operatively and instruct you on the nature of your rehabilitation and exercise program. A sling is typically worn post operatively, but the duration of this will vary according to your surgeon and individual circumstances. Hydrotherapy can be extremely beneficial and is encouraged.

## DRIVING

It is generally preferable to wait 4 to 6 weeks before driving an automatic car, and longer for a manual car, but individual circumstances may vary.

## SPECIAL PRECAUTIONS

It is important to avoid heavy lifting, reaching pushing or pulling for at least 6 weeks post operatively. Patients may require antibiotic cover for dental or other procedures for some months or years following their joint replacement.

## RISKS AND COMPLICATIONS

Every effort is made to anticipate and prevent complications, and to treat them promptly should they occur.

The following list of complications is not an exhaustive list of all reported complications of this surgical procedure. It is a guide to the common risks of the procedure. Certain

behaviors, for example smoking, and many medical conditions, are known to increase the risk of both anaesthetic and surgical complications.

Local anaesthetic complications and general anaesthetic will be discussed in more detail with your Anaesthetist.

Operations have general complications including infection, bleeding, and nerve or vessel injury resulting in temporary or permanent paralysis. Other complications include, skin, bone, tendon, ligament and muscle healing problems, failure or recurrence of the problem, reflex sympathetic dystrophy, deep vein thrombosis, pulmonary embolism, and dislocation of the prosthesis. Over many years of use, a joint replacement may become worn, loose or painful.

#### SUMMARY

Shoulder replacement is performed when non-operative measures for arthritis fail. Its aim is to provide pain relief and restoration of function, and to permit renewed participation in work and recreational activities.