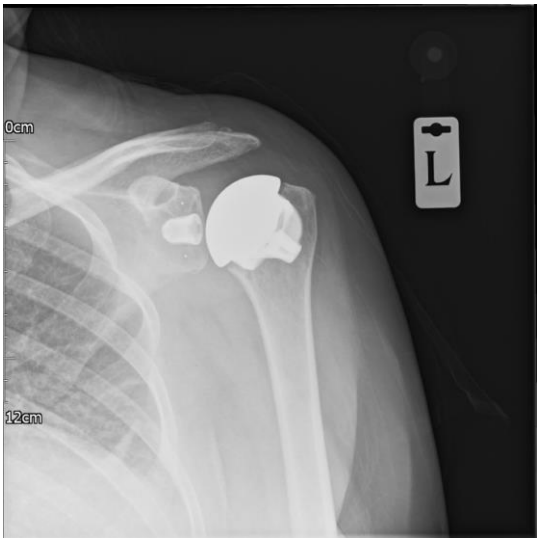
Information for Patients

NHS
Dorset County Hospital
NHS Foundation Trust

Trauma and Orthopaedics

Preparing you for Shoulder Replacement Surgery at Dorset County Hospital NHS Foundation Trust

A Patient's Guide



Contents

Page Number

1. Welcome to Dorset County Hospital

This booklet details shoulder replacement surgery at Dorset County Hospital. It is intended to be for patients who have decided to have surgery after discussing the options, benefits and possible risks with their consultant or Surgeon.

We have developed this guide to help answer any questions that you may have about your operation and recovery afterwards. It will be useful during each of your hospital visits so please bring it with you.

This booklet is a general guide and there may be alterations in your management made by your surgeon, anaesthetist or therapist. These alterations should take priority.

All members of the Orthopaedics Team are committed to providing you with the highest standard in care and we look forward to welcoming you.

The normal shoulder

The shoulder joint is a ball and socket joint made up of two main parts - the glenoid (socket) and humeral head (upper arm bone which makes up the ball). The glenoid (socket) and the humeral head (ball) are coated with a smooth layer of cartilage which protects the shoulder joint. The shoulder joint is the most mobile joint in the body and relies on strong muscles and ligaments to move and stabilise it. The most important muscles are the rotator cuff muscles. They originate from the shoulder blade and their tendons form a hood covering the ball of the shoulder joint.

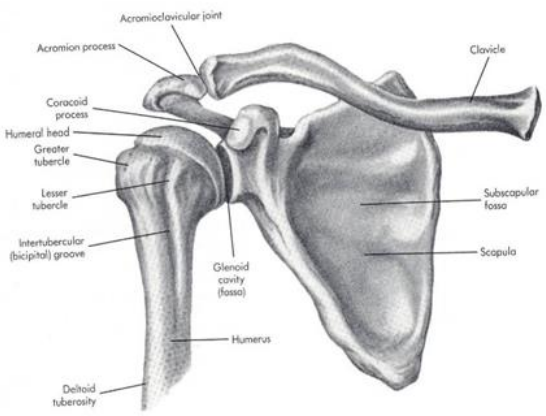
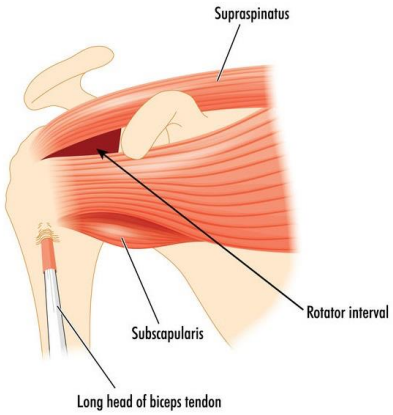


Diagram of Normal Shoulder



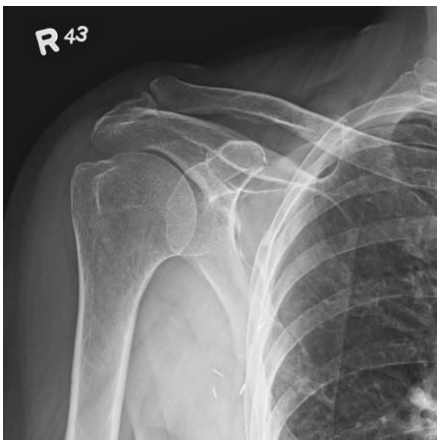
The Rotator Cuff

The arthritic shoulder

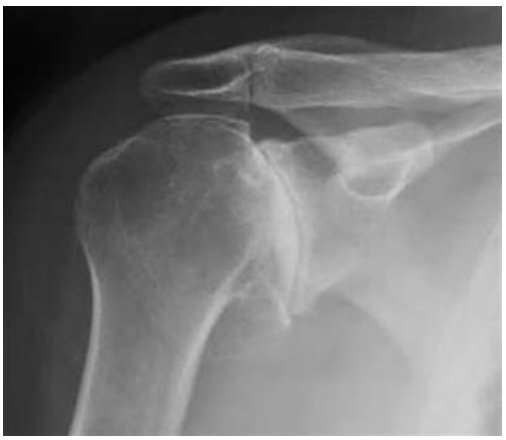
Arthritis of the shoulder gradually wears down the cartilage covering the bones over time. The most common form of arthritis is osteoarthritis. When exposed, the bones can rub against each other which may cause them to change shape. This can cause severe pain and stiffness.

The more the arthritis advances, the sooner the pain occurs, ultimately even at rest and night. When the arthritis becomes advanced, patients mostly suffer with constant severe pain, stiffness and swelling. The causes of osteoarthritis are unknown in most cases, but there are factors that can contribute to osteoarthritis, such as trauma, age, genetics and obesity.

Inflammatory conditions such as rheumatoid arthritis can also be a source of pain. Arthritis can affect different areas of the shoulder. If there is significant wear in most of the shoulder, a total shoulder replacement may be needed.



X-ray of Normal Shoulder



X-ray of Arthritic Shoulder

Expectations

Your shoulder replacement has been designed to help with your pain. This should result in you being able to move your arm more comfortably and to perform daily activities more easily. Although the main aim of the operation is to relieve pain, it may be several weeks before you begin to feel the benefit.

After your operation you will be in a sling for comfort and to protect your shoulder. The surgical team and physiotherapists will advise you on how long you should wear the sling for.

The activities which are important to you should be discussed with your surgeon prior to undergoing surgery. The return to your normal activities is influenced by pain, strength, and movement in the operated shoulder. The amount of movement in the new shoulder will vary from person to person. This is often influenced by how stiff your shoulder was before surgery.

The return to work may vary between 2-6 months depending on the job you perform. You will be able to do light lifting like holding a cup at 3 weeks, moderate lifting below shoulder level between 2-3 months and lifting above shoulder level after 3 months.

It is illegal to drive with a sling. Driving should be avoided until at least 6 weeks after surgery and you should check with your insurance provider too. Your consultant will let you know when you are able to drive.

It may take up to one year for the shoulder replacement to be at its best and your body to be fully used to it. 4 - 6 weeks post operation, you should be able to perform gentle everyday activities.

2. Preparing for your operation

The weeks and months leading up to your surgery are as important as the operation day itself. After your surgery you will either be returning home the same day or staying one night at the hospital. You should, therefore, plan and think how things will be for you when your return home. It is important that you attend all your appointments before your surgery date.

Transport

You will need to arrange for a family or friend to collect your after your surgery. The hospital does not provide transport back to your home.

Assistance after your surgery

Many patients having joint replacement have lived with joint pain for some time and will have adapted to certain situations at home already. However, when recovering from your surgery, you may also find you need some help with general tasks such as cooking, shopping and cleaning initially. You will need to organise this help before your operation date.

If you are going home on the day of surgery, you will need someone who can stay with you at least for the first day.

Care support

Very few patients need additional care support at home. If your personal choice is to have this, you will need to organise this privately. The NHS can only provide additional care based on assessed need and cannot arrange convalescent care.

Preparing your home

Preparing your home environment in advance is helpful for when you are discharged home:

- Freeze some simple to cook meals or have some ready meals available.
- Move regularly used items which are heavy or out of reach to more accessible areas – eg move saucepans up from low shelves or cupboards.
- Avoid potential trip hazards by removing loose rugs and obstacles from the floor such as excess furniture or things that could be easily tripped over.
- Make arrangements for someone to care for any pets, including walking dogs, after surgery.

Mobility

If you are currently on a walking aid which requires you to use your operated shoulder, you need to consider whether you could use your walking aid in the other hand or whether an alternative walking aid may be required. You may need to discuss this with the physiotherapist on your admission.

Personal care

Getting washed and dressed needs to be done carefully. Sitting down is usually best as you can support your arm on a pillow while it is out of the sling. Loose clothing with front fastenings is usually easiest to put on. When getting dressed, dress your operated arm first. When getting undressed, this arm comes out last.

Pre-assessment

The Pre-assessment process is very important as it allows the hospital to plan your care.
You will be asked to provide some information about your general health and current medications.
You may need to provide this information via:

- A computer or mobile app
- Telephone consultation
- Video consultation
- Face to face.

This allows us to inform you about your procedure and provide essential information about fasting times and instructions for your medications.

Pre-assessment appointments

At your appointment we will check various medical details such as:

- General Health status
- BP
- Your blood count to see if you are anaemic
- Your kidney function, and
- How well you are controlling your Diabetes if you are diabetic.

You should aim to control these conditions as well as possible before your operation to reduce complications. It is useful for any long-term medical conditions to be reviewed by your GP or practice nurse in case they can be improved.

Medications

We will review your medications. It is fine to continue most of these and take them on the day of surgery. However certain medications you may need to stop before surgery such as:

- Blood thinning medications
- Some blood pressure medications.

You will receive clear instructions about this and when you should re-start them after your surgery.

Aspirin

If you have been prescribed Aspirin by your GP or hospital doctor, you should continue to take these medicines up to your operation. If you are taking this medicine on a non-prescribed basis, please stop seven days before the operation.

Pre-operative drinks

For your wellbeing, help give you energy, keep you hydrated and prevent dizziness on the day of surgery, the hospital may give you some special pre-operative drinks. They are suitable for most patients. If we are unable to issue you with these drinks, there will be some for you to take on the day before surgery and some different ones to take after your surgery. These are often easier to take chilled and through a straw provided.

Keep fit and healthy

The fitter you are for your surgery, the less likely you are to have complications during or after your surgery. You should seek to make some lifestyle improvements:

- Stop alcohol a month before surgery.
- Stop smoking.
- Improve your fitness through strengthening exercises and walking/cycling/swimming.
- Lose weight.

Strengthening and training exercises

The exercises in section 5 of this booklet are to be completed both before and after surgery. Doing these exercises will strengthen your muscles and help you recover more quickly after surgery.

Pack a small bag to bring to hospital containing:

- All medications in their original packets in a clear plastic bag.
- Loose, comfortable clothing that are easy to put on and take off - your legs may swell.
- Slippers.
- Footwear with a back and which are easy to put on and take off. No flip flops/mules.
- Phone, charger, headset and music device to listen to.
- Glasses and hearing aids.
- Walking aids - please ensure they are labelled.
- Something to read to occupy you in case you have to wait.

Please avoid bringing large items and minimise high valuables or cash.

Patient Reported Outcome Measures (PROMS)

There is a national arrangement to collect scores about the function of your shoulder and your general health before surgery, and then six months and one year after the surgery. Please complete the patient reported outcome measure (PROMS) questionnaires accurately but bear in mind that your shoulder will not be at its best until 6 to 12 months after your surgery.

The PROMS score that is used is the Oxford Shoulder Score. Your clinician will go through this with you at your outpatient appointment. If you need help to fill the questionnaire in, please ask one of the orthopaedic team. If you have concerns or problems about your shoulder, please raise these with your surgeon. Questionnaires are not meant to be used as a way of raising concerns but to assess the quality of care from the patient perspective.

The National Joint Registry (NJR)

The NJR collects information about the shoulder replacement operations from hospitals in England, Wales and Northern Ireland to monitor the results of joint replacements. The registry helps find out which are the best performing implants, and which are the most effective types of surgery. You will be asked if you consent to your details being put on the register and to sign a consent form for this.

3. Day of your operation

You will be given a specific time to arrive. This can be from 07:30 in the morning or later depending on your operation time.

Skin preparation

The night before or on the day of surgery, please take a bath or a shower and wash your entire body. Please avoid wearing make-up or unnecessary jewellery.

Eating and drinking before your operation

You must follow the instructions for fasting and times to take any preoperative drinks correctly, as it is very important. Your operation may be at risk of being cancelled on the day if not followed:

- No food or very milky drinks within 6 hours and clear fluids till 1 hr before
- Drinking sips of plain still water is encouraged up to the time of your operation.

Arriving at the hospital

When you arrive, you will be met by a member of staff usually on the Surgical Admission Lounge (SAL). They will book you in and confirm some details with you. One of the nursing team will run through some additional questions. It is important that you remain warm. Staying warm is good for your comfort and can also lower risks of post operative complications. Please let the nursing staff know if you feel cold.

Confirming your consent

A member of the surgical team will confirm with you the operation that they are planning to perform and check your consent with you. They will mark an arrow with a pen on the arm that is going to be operated upon.

Meeting your anaesthetist

Before your operation you will meet your anaesthetist. They will explain the type of anaesthetic that is going to be used and answer any questions you may have about the anaesthetic.
In shoulder surgery, this is often a nerve block anaesthetic with sedation. The nerve block is an injection given in the lower part of the neck that makes your operated limb numb from the shoulder to the hand, which can last for up to 24 hours. You may wake up with the limb numb and not able to move the whole operated limb due to the effect of the block anaesthetic given to you. The freezing effect and limited sensation can also last up to 24 hours. You may not have sensation to hot or cold.
You must take care to protect your arm from injury during this period.
Your anaesthetist will also give you some pain relief tablets to help manage your pain after the operation. Further information can be found at the following link:

https://rcoa.ac.uk/patient-information/patient-information-resources

Getting ready for your operation

When it is time for your operation, you will be asked to change into a theatre gown. You will then be taken to the operating theatre. Here you will be met by your anaesthetist and the operating department practitioner (ODP), who works with the anaesthetist, helping to look after you. They may have a trainee anaesthetist with them.

Routine checks

Some routine checks will be carried out to confirm your identity and to check if you have any allergies. We will also again confirm your operation with you, and the side on which you are having the operation.

Attaching monitoring equipment and a drip

One of the team will attach some standard equipment to monitor your heart, blood pressure and oxygen levels while you are having your anaesthetic and operation.

Your anaesthetist will also give you various medicines through a drip in the back of your hand. These include antibiotics, anti-sickness and fluids.

The operation

The surgery is performed through an incision on the front of the shoulder. A total (anatomic) shoulder replacement involves replacing the upper part of the humerus bone with a metal ball and the socket with a plastic or metal and plastic socket. In a reverse shoulder replacement there is a plastic ball (glenosphere) in place of the socket and a metal liner on top of the humerus bone in place of the ball. The artificial shoulder (prosthesis) replaces damaged cartilage and bone. The prosthesis consists of metal alloy and high-density plastic components that are designed to be durable.

Closure and dressing

After your operation your wound will be closed and covered with a dressing. You will be given spare dressings if required. The wound will need to be checked around 12 days after your operation and the sutures removed or trimmed. This will normally be with your practice nurse or district nurse. Glue may be used in addition to sutures.

Recovery

After the operation you will be taken to the recovery room which is near the operating theatre. You will be given a post-operative drink. This energy drink helps support your immunity and healing abilities. It will also give you some energy and balanced nutrients which will help you get up and mobilising.

X-ray

You will have an x-ray whilst in hospital to check your shoulder replacement.

Physiotherapy

Initially you will be given as much help as you need, and, as you improve, you can start the exercises on your own. When you are ready, the physiotherapists will progress with your exercises.

It is important you practice the exercises, especially managing the day-to-day activities so that the physiotherapists will know you will be able to manage safely when you get home. The physiotherapists will show you the correct way to do this. You should complete all the exercises 4 times each day until you attend for your outpatient physiotherapy appointment. It is a good idea to take some painkillers before doing your exercises.

Physiotherapy is important to get the most from your shoulder after the operation. The first stage is to get your shoulder moving again. It is normal for you to feel aching, discomfort or stretching sensations when doing these exercises. However, if you experience intense and lasting pain (more than 30 minutes), it is an indication to change the exercise by doing less forcefully or less often.

Please be guided by your level of discomfort; we do not expect you to get full range of movement on the first day. Do short frequent exercises for 5-10 minutes, 4 times a day rather than one long session.

You will be shown these exercises by the physiotherapist when you are in hospital, and they will tell you when you should start them.

Sling

You will return from the theatre wearing a sling; this is to protect the shoulder while it heals. When you are wearing the sling, ensure your forearm is well supported and do not allow your hand to be lower than your elbow. The surgeon or physiotherapist will advise you on how long you are to continue wearing the sling; however, this is usually for 3-6 weeks. You can generally take your sling off to wash and dress but you should use your good arm to do most of the work. Except to wash and dress, the sling must be always worn, including in bed. You will be shown how to remove the sling safely.

Sleeping

Sleeping can be a little uncomfortable if you try to lie on your operated shoulder. We would recommend that you lie on your back or on the opposite side as you prefer. Ordinary pillows can be used to give you comfort and support. The sling should be worn all the time, even during the night when you are sleeping.

Lying on back with sling

Lying on non-operated side with sling

Mobilising after surgery

Most patients will go home on the day of surgery. You will be given additional pain relief if required. You will be seen by the therapy team who will advise on how to exercise the replaced shoulder and how to cope with being in a sling at home.

Your stay in hospital will be as long as needed to ensure:

- It is safe for your to be discharged.
- Your pain is under control.
- The physiotherapy/therapy team have seen you and started therapy.

If you do not have anyone at home, this **should be highlighted in pre-assessment** so that an assessment of your ability to manage after your operation can be undertaken. Sometimes plans for extra help at home after the operation may be wise and your GP might be able to help with arranging this.

4. Going home after your surgery

We aim for you to be discharged home on the day of your operation or the next day.

Before leaving the ward, you will be given:

- Painkillers
- A telephone number of the ward which you can use to contact if you have any questions or problems once you are home.
- A letter to take to your GP about your hospital stay.
- A letter to your GP/District nurse who will check your wound and remove any clips (12-14 days post operation) once you are home. Some surgeons will use stitches that dissolve by themselves in which case your dressing will be changed.

Keep the wound dry until it is well healed. The dressings are showerproof, but you should avoid soaking the area. You will be seen in the orthopaedic clinic around 6 weeks after your operation to check on your progress.

The physiotherapy team will also see you regularly after you are discharged home. **Please discuss any queries you may have with the nurses in the ward before you go home**.

Advice for activities for daily living

Washing

Your dressing over the wound will be waterproof. Do not have a bath until the wound is fully healed; you should contact your local nurse if you have any doubts.

Getting on and off seats

Raising the height can help eg extra cushion, raised toilet seat, chair or bed blocks.

Getting in and out of the bath

Using bath boards may help (initially you may prefer to strip wash). Please remember that your dressing is only showerproof and should not be soaked or submerged unnecessarily.

Hair care and washing yourself

Long handle combs, brushes and sponges can help to stop twisting your arm out to the side.

Dressing

Wear loose clothing, either with a front fastening or which you can slip over your head. For ease, also remember to dress your operated arm first and undress your operated arm last.

In addition, dressing sticks, long handled shoehorns, elastic shoelaces, sock aids and a ‘helping hand’ can help.

Eating

Use your operated arm as soon as you feel able to cut up food and hold a cup. Non-slip mats and other simple aids can help.

Household tasks and cooking

Do light tasks as soon as you feel able eg lift kettle with small amount of water, light dusting, ironing, rolling pastry. Various gadgets can help you with other tasks.

Return to work

Return to work depends very much on your specific job and whether you need to drive. It is illegal to drive while in a sling. If you can get to work, desk workers can return as soon as you feel able, sometimes after about 6 weeks although you will have to be able to work one-handed. Most people need about 10-12 weeks off work, although heavy manual labour will require about 6 months off work. Prolonged, heavy overhead activity may never be possible. You will usually be signed off work for 6 weeks and this can be reviewed at your first clinic appointment. Your employers need to know this.

Driving

It is illegal to drive while wearing a sling. You may start to drive once the sling has been discarded; this period is very variable but is normally around 6 weeks after the operation. You should be able to safely control the car. You may find it is more difficult if your left arm has been operated on because of using the gear stick and handbrake. Check that you can manage all the controls and it is advisable to start with short journeys. The seat belt may be uncomfortable initially, but your shoulder will not be harmed by it. Ultimately it is your responsibility to ensure you are safe to drive and it is sensible to check with your insurance provider.

Return to leisure activities

Your ability to start these activities will depend on pain, range of movement and the strength that you have in your shoulder after the operation. Please discuss with the therapists and doctor regarding the activities you are interested in. Start with short sessions and gradually increase:

- Swimming: Breaststroke after 12 weeks, freestyle after 16 weeks. You may have difficulty with vertical steps into the pool.
- Gardening: Light tasks eg weeding after 10-12 weeks. Avoid heavier tasks, for example digging.
- Bowls: After 3 months.
- Golf: After 3-4 months.
- Tennis, badminton, or squash: After 4-6 months.

These are approximate and will differ depending upon each person’s individual achievements. However, they should be seen as the earliest that these activities may commence.

DOs and DON'Ts

- During the first 6 weeks, avoid taking your arm out to the side and twisting it backwards. For example, when putting on a shirt or coat put your operated arm in its sleeve first. Try not to reach up and behind you (eg for the seat belt in the car). Avoid forceful movements of the arm across the body as well. It is normally too painful or difficult to do.
- During the first 3 months, avoid leaning with all your body weight on your arm with your hand behind you. For example, leaning heavily on your arm to get out of a chair.

Pain

Pain is the biggest issue. It is something you should expect after your operation, but it is key that you do not stop doing your exercises. Please make sure you follow the pain management programme you were discharged with to help control your pain.

Sleepless nights

It is common for people to experience some disturbance in their normal sleep pattern in the first few weeks after an operation. Please do not worry as this usually improves with time.

What to look out for

Deep vein thrombosis (DVT) **-** Blood clots can occur after joint replacement surgery. If your leg becomes hard, swollen or hot and painful, especially in the calf area, this could be a sign of a blood clot. Please seek medical advice if you get these symptoms.

Infection - is rare. However, if your joint replacement scar becomes hot, red and/or increasingly swollen, or if you feel unwell, please seek medical assistance.

Support after discharge

Even though you may be discharged after your operation, you are not alone. There is always someone available who you can contact for advice. You will be given information about whom to contact should you require any help. You will receive a routine follow-up telephone call to check on you the day after your discharge. If you would like more information before your operation or have any questions in the first 7 days after you have been discharged home, please ring Ridgeway Ward and one of the nursing staff will be able to advise you directly or contact your surgical team.

For therapy-related queries please contact Ridgeway ward 01305 255561 or 01305 255562.

If you are unable to contact the above numbers, please contact your surgical consultant's secretary who will be able to assist you in contacting a member of the team.

5. Exercise and physiotherapy advice for your shoulder replacement surgery

You need to start these exercises immediately after your operation and continue regularly until your physiotherapist progresses you onto the advanced exercises.

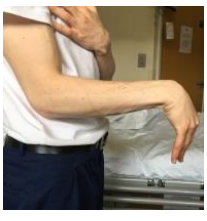
The exercises are designed to maintain and increase motion. It is important to note that in each exercise, the operated arm is assisted by the good arm, by gravity or by a pulley (see below). This assistance is necessary for maximum early return of the motion while avoiding excessive strain on the repaired muscles. Follow the sequence of exercises from one to four initially, and then exercises 5 and 6 from 2 weeks after surgery, or when told to do so. All exercises should be done four times daily in five-to-ten-minute sessions until you attend for your outpatient physiotherapy appointment.

Exercise 1: Elbow flexion/extension

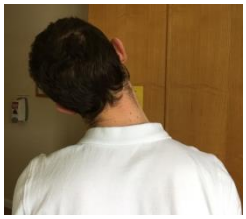
You should take your arm out of the sling every two hours to bend and straighten your elbow fully 10 times. This will stop it from becoming stiff whilst you wear the sling.

Exercise 2: Wrist and hand

Make a fist with your fingers and then open your hand. Repeat 10 times every hour. Keep your wrist moving also by pronation and of forearm as illustrated.



Exercise 3: Neck side flexion



Facing forwards, gently take your right ear down towards your right shoulder. Hold for five seconds and slowly return your head to the starting position. Next, take your left ear towards your left shoulder and hold for five seconds before slowly returning to the starting position. Repeat these three times to each side.

Exercise 4: Pulleys

Using a pulley system (you can improvise by asking someone to place a dressing gown belt through a coat hanger over the top of a door), using your strong arm to help raise your operated arm. Only move your arm as far as you feel comfortable. Repeat this for up to five minutes.

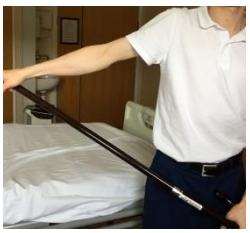
From 2 weeks unless advised otherwise

Exercise 5: Assisted flexion

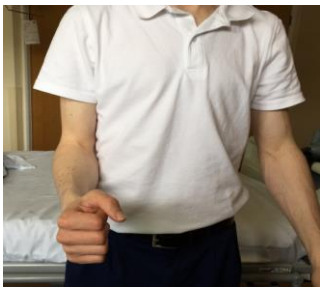
Lying on your back, support your operated arm with your other arm and lift it up as far as tolerated. Try not to arch your back. Repeat this 10 times as far as is comfortable.

Exercise 6: Assisted abduction

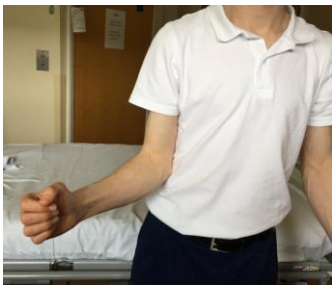
Standing up, hold onto the ends of a long stick (a walking stick, a broom handle, a golf club or a long umbrella could be used). Use your good arm to push the stick and your operated arm out and up away from your side. Repeat these 10 times as far as is comfortable.



Note - avoid external rotation greater than 25 degrees until 6 weeks.



X



Breathing exercises

Take 3 slow deep breaths every 30 minutes. Breathe in slowly, hold for a few seconds and gently breathe out.	

Rest is as important as your exercises in promoting healing and managing pain and swelling. Alongside your exercises, ensure you have a period of rest daily. This should be a period of approximately 30 minutes lying down, at least for the first 3-4 weeks post-operatively.

6. Frequently asked questions

What is this operation for?

Shoulder replacement (Arthroplasty) is usually a good option for people when the joint is badly damaged and there is pain and loss of movement. Replacing the worn surfaces with a metal ball and plastic socket aims to reduce pain and increase the movement of shoulder joint.

The main indication for shoulder replacement is pain that has not been controlled by non-operative means, such as pain killers or injections.

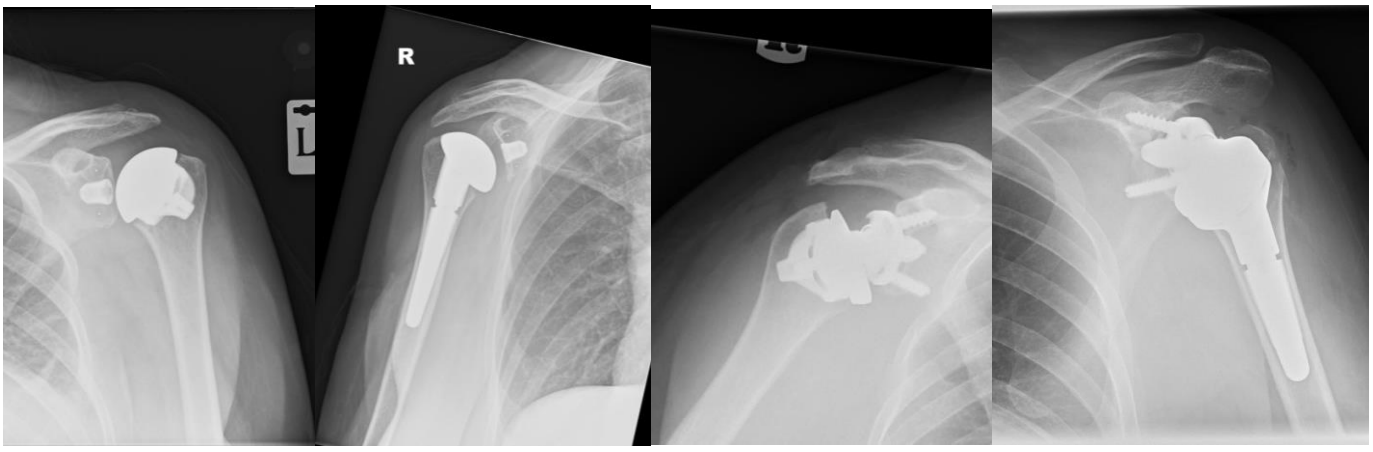
When is a shoulder replacement appropriate?

The most common cause of replacing the shoulder joint is for arthritis; either osteoarthritis (wear and tear) or rheumatoid arthritis. It may be also necessary following a fracture or bad accident. With all forms of arthritis, the joint becomes painful and difficult to move. Sometimes the deep layer of muscles (the rotator cuff), which help control movement, can also be worn or damaged.

The aim of shoulder replacement is to reduce pain in the shoulder. It may also improve movement in the shoulder. This depends on how stiff the joint was before the operation and if the muscles around the shoulder are damaged and unable to work normally. There are two main types of shoulder replacement: Anatomic (A) and Reversed (B).

A A total shoulder replacement (Arthroplasty) is when the round end of the shoulder joint (Ball) is replaced with an artificial round metal head and the socket is replaced with a smooth plastic socket.

B A Reverse geometry shoulder replacement is typically used when there is severe arthritis and/or an un-repairable rotator cuff tear.



A. X-ray of Total Shoulder Replacement

B. X-ray of Reverse Geometry Shoulder Replacement

What are the risks of surgery?

A total shoulder replacement is a major operation and, as with any operation, there are risks. Risks are specific to everybody. Your surgeon will discuss your risks with you when discussing surgery and are listed below:

Term	Numerical Ratio	Equivalent
Very Common	1/1 to 1/10	A person in a family
Common	1/10 to 1/100	A person in a street
Uncommon	1/100 to 1/1000	A person in a village
Rare	1/1000 to 1/10,000	A person in a small town
Very Rare	Less than 1/10,000	A person in a large town

Common Risks

Loosening

Over time your shoulder replacement may become loose and require further surgery. The lifespan of a shoulder replacement is variable, but we generally expect it to last for around 10 years. The socket (glenoid) component usually wears out first.

Dislocation

Sometimes the shoulder replacement can come out of joint or dislocate. This is more likely to happen soon after surgery. Your sling will protect your shoulder and you will be given advice on preventing this.

Stiffness

Stiffness after your operation is to be expected. Exercises and physiotherapy will help with this.

Poor wound healing

Occasionally surgical wounds do not heal as well or as quickly as we would like them to. Occasionally further surgery may be required to help with this.

Uncommon risks

Rotator cuff tear

The rotator cuff is likely to undergo wear as part of the physiological process of age. If the tear becomes symptomatic, then it may require further surgery.

Fracture around the implant (Peri-Prosthetic Fracture)

Rarely a fracture can occur around the shoulder during or after surgery. This may result in a change to the type of operation performed or further surgery.

Nerve injury

Nerve injury is uncommon after total shoulder arthroplasty. The risk factors associated with increased risk are the amount of stiffness one has before surgery. If the shoulder is stiff, the surgeon must release the soft tissues for replacement and the risk of nerve injury increases as the nerves are very close to the operating area. The risk is increased further if there has been previous open shoulder surgery which increases the amount of scar tissue formation around the shoulder and alters the anatomy. The nerve injury can be temporary, and it can recover. If it does not recover, you may require further investigations to confirm the diagnosis and may require referral to a specialist centre.

Infection

With any surgery there is a chance of infection, despite all possible precautions being taken during your operation. To reduce risk of infection, you will be given antibiotics before and after surgery. If you notice any swelling, discharge or itching around your wound when you are home, you should call the ward you were discharged from or notify your doctor. It is important to treat any signs of infection quickly, as an infected joint replacement that has not been treated may require another operation, and potentially, the removal of the implant.

Complex Regional Pain Syndrome (CRPS)

Complex regional pain syndrome (CRPS) is a condition of intense burning pain, stiffness, swelling and discoloration that can affect the shoulder. Most of the cases resolve with non-surgical treatment with active exercises of the affected limb. If the condition does not respond to non-surgical treatment, the surgeon will discuss surgical treatment.

Implant failure

Occasionally, implants, as with all mechanical devices, can fail.

Medical risks - Heart attack, Strokes and Death

Rare risks

Bleeding

With all major surgery, there is a risk of bleeding. Very occasionally this can result in the need for further surgery or a blood transfusion. Medications that thin the blood increase the risk of bleeding.

Blood clot in the leg (Deep Vein Thrombosis – DVT) – see below.

Persistent pain - Some patients experience ongoing pain after surgery. This may never completely go away.

Loss of movement

The amount of movement after surgery is variable and difficult to predict. It is possible that you may have less movement after surgery than you did before.

Revision surgery

Some shoulder replacements may need further surgery to change all or part of the replacement. This is usually performed when the shoulder replacement has worn out. With the current implants this is around 10 years.

Anchor problems

Sometimes the muscle repair at the front of the shoulder (subscapularis) is reinforced using a stitch anchor to secure it to the bone. These anchors can very occasionally cause problems.

Worsening of symptoms

Whilst very rare, it is possible that your symptoms and/or your function is worse following surgery than it was before.

What should I do if my health changes?

It is important that you notify the Pre-assessment unit of any changes to your health status in the time following your initial appointment. If you have an admission date for surgery, please also be aware that coughs, colds, and chest infections may affect your fitness for surgery.

The direct telephone number for Ridgeway ward is 01305 255561 or 255562.

Our ward clerk and nurses are available to take calls but be aware, only general enquires may be answered without breaching patient confidentiality.

What is a DVT? (Deep Vein Thrombosis)

DVT is a common medical condition that occurs when a thrombus (blood clot) forms in a deep vein, usually in the legs or pelvis, leading to either partially or completely blocked circulation. A DVT, in some cases, can cause a serious problem known as a Pulmonary Embolus (PE).

What is a PE? (Pulmonary Embolus)

If the clot or a DVT in the leg breaks off and travels to the lungs, it will cause a Pulmonary Embolus. PE may result in breathing difficulties and may be fatal. Signs of PE are:

- Shortness of breath
- Chest pain
- Coughing up blood-streaked mucus.

If you experience any of these symptoms, you should seek immediate medical help.
DVT and PE are known under the collective terms of venous thromboembolism (VTE).

Why can a blood clot form?

- There are two factors that may trigger a clot to form:
- Changes or damage to the blood vessels – if there is pressure on a vein, a clot can form. This may be due to immobility, surgery or long-distance travel.
- Problems with the blood – this may be inherited (you are born with the condition), caused by some drugs or conditions such as pregnancy. If you are dehydrated, the blood can become more ‘sticky’ which can increase the risk of the blood forming a clot.

Who is at risk?

- These are several factors that increase the chances of developing VTE. These include:
- Having had a previous DVT or PE
- Major surgery, particularly orthopaedic operations such as joint replacements
- Aged over 60 years, family history of DVT or PE
- Advanced cancer and chemotherapy treatment for cancer
- Faulty blood clotting ie thrombophilia
- Recent medical illness (such as heart attack, lung disease, kidney failure or disease or inflammatory conditions such as inflammatory bowel disease)
- Smoking
- Being obese (very overweight)
- Pregnancy and recent delivery
- Paralysis or immobility of the legs, including staying in bed for a long time
- Some types of Hormone Replacement Therapy (HRT) or contraceptive pill.

How is VTE prevented in hospital?

Not all VTE can be prevented, but the risk of developing a clot can be significantly reduced.
We will make sure you stay well-hydrated, and we routinely use 'calf pumps' to keep the blood in your legs flowing. In addition, your individual risk of VTE will be assessed by a doctor, either in the pre-assessment clinic or when you are admitted to hospital.

If you are at high risk of VTE, you will be prescribed a blood-thinning medicine, in accordance with national guidelines. If you are prescribed a medicine that needs to be injected, you or a relative will be taught by the nursing staff to inject the medicine before you go home.

What can I do to help myself?

Whilst the doctors can do something to reduce your risk, there are some very important and simple things that you do to help reduce your risk:

- Make sure that you get up and about as soon as possible.
- Exercise your legs whilst in bed.
- Make sure you drink plenty – water is particularly good for you.
- Stop smoking.
- Consider stopping contraceptive or hormone replacement therapy; talk to your doctor.
- Lose weight.

Are there any alternatives to shoulder replacement?

You may have undergone a regime of conservative measures such as painkillers, injections, exercise and physiotherapy to help improve your pain and function. However, if these have failed, shoulder replacement surgery can be recommended.

Will I be completely pain-free and get full range of movement in my operated shoulder?

Shoulder replacement is an operation to relieve your pain and should take away most, if not all, of the pain that you have in your shoulder. It may take several weeks before you feel the full benefit of your new shoulder, so please do not be disappointed if it is still painful after the operation.

It is unlikely that you will have as much movement as a normal shoulder after having a shoulder replacement, but the physiotherapists will help you to try and get as much movement as possible from your new joint. Some people do find that they get more movement form their new joint, but this depends upon how stiff your shoulder was before the operation.

How soon can I travel after my operation?

Flying is not recommended for at least three months after your operation due to risk of blood clot. Some consultants vary with this advice. Please contact your consultant via their secretary if you need to fly before the timescales advised.

About this leaflet:

Authors:	Stacey Markham, Ward Sister, Ridgeway Ward Leisa Shillito, Physiotherapist Matthew Barrett, Orthopaedic Consultant Susie Baker, Consultant Anaesthetist *Adapted with kind permission of SWOAC and RBH for local use at DCHFT.*
Written:	November 2022
Updated & Approved:	March 2024
Review Date:	March 2027
Edition:	v2

If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk

INTEGRITY | RESPECT | TEAMWORK | EXCELLENCE

Williams Avenue, Dorchester, Dorset DT1 2JY
Tel: 01305 251150
www.dchft.nhs.uk