ENHANCED RECOVERY

NHS
The Robert Jones and Agnes Hunt Orthopaedic Hospital
NHS Foundation Trust

Information for patients

Hip Replacement Physiotherapy booklet

Physiotherapy

Welcome to the Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust in Oswestry

This booklet has been developed by the Robert Jones & Agnes Hunt consultant orthopaedic surgeons and physiotherapy team to ensure that you have the best outcome following your hip replacement.

By following these guidelines, we aim to;

- Get you optimally prepared for your procedure, both physically and mentally
- Get you back on your feet from day one
- Enable you to return to your normal activities as soon as possible
- Maintain a fit, healthy and active lifestyle

If you have any concerns or do not understand anything in this booklet, our physiotherapy team will be happy to help.

	Phone number	Webpage
Robert Jones and Agnes Hunt Hospital	01691 404000	www.rjah.nhs.uk
Robert Jones and Agnes Hunt Hospital (Physiotherapy Department)	01691 404545/ 404464	www.rjah.nhs.uk/Our-Services/Therapy.aspx
Enhanced Recovery	07756 876847	www.rjah.nhs.uk/patients-visitors/enhanced-recovery

Current research has concluded that exercise is an effective method to reduce pain and improve function in patients following arthroplasty surgery and that further research will not change this conclusion.

So you've been listed for surgery…

You will be asked to attend a joint school, which is an interactive class designed to help you understand and prepare for surgery. Research shows that people who take part in joint school tend to be less worried about their operation and do better after surgery.

Contents

Do I need to get fit before my surgery?

Before your operation it is really beneficial for you to try and make yourself as fit as possible. There is evidence of faster and safer recovery associated with eating a healthy diet in the time leading up to your operation. If you are overweight, it is important to lose weight in preparation for your surgery. This will reduce risks associated with infection and the anaesthetic meaning your new joint will last longer. Moderate exercise prior to your operation can help in keeping your bones strong and joints supple and regular everyday activity is useful. This should start as early as possible before surgery as the benefits may take a number of weeks to appear.

The stronger the muscles are, the sooner you will be able to get going again after surgery and your recovery will be significantly quicker. The following exercises are designed to help you with this.

You will not cause any further 'damage' to yourself by participating in an exercise programme. However, if you do have any concerns please liaise with your consultant or physiotherapy team. By developing further muscular strength you will not only improve you outcomes post-surgery but also protect your joint by providing a form of shock absorber.

Cardiovascular exercise is also extremely important as it can not only improve your health and speed up your recovery, but it can also reduce the risk of post-operative complications. If walking causes increased pain, try swimming, cycling outdoors or using a static bike, as this reduces the painful load on the joints and you can work hard whilst minimising pain.

Prehab

Preoperative exercises

When exercising there is likely to be an element of pain. However the aim is not to exceed 3-4/10 where 0/10 is no pain at all. You should however find the exercises difficult and strenuous on the muscles, approximately 7–8/10 where 10/10 is maximum effort.

You will likely need a resistance band/loop for this phase, which are readily available on line or at your local gym or sports store.

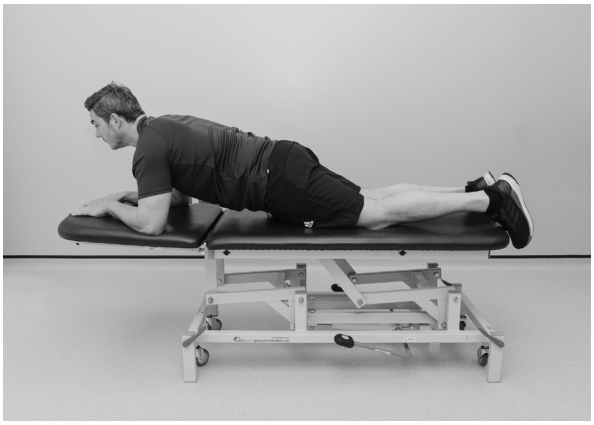
You should perform 8–12 repetitions 3–4 sets.

Bridge

Lying on your back with your knees bent, with a band around your knees, squeeze your bottom muscles and tighten your stomach muscles. Keep your feet flat, dig your heels into the floor, this will increase the activity in your hamstrings. Lift your bottom off the bed until there is a straight line between your shoulders and knees, to add a further challenge, imagine there is a nut between your buttocks which you are trying to crush. Hold for 5 seconds.

Sit to stand

In Sitting on a chair of appropriate height, with your feet flat on the ground, imagine you are trying to spread the ground apart. This will activate some of your lower limb muscles. Stand up without using your hands and imagine there is a nut between your buttocks which you are trying to crush, which will increase the muscle activity throughout the exercise. Slowly sit back down. As the exercise gets easier you can use a weight to make it more difficult.



Front plank

Lying in your front with your arms tucked in by your sides, palms facing down. Tighten your tummy muscles and lift your hips off the bed, with only your knees and forearms on the bed. Hold for 5 seconds, complete this 5 times and do 3 sets.

To make this more difficult you can try and spread the the bed apart with your hands, increasing the level of muscle activation. Furthermore, if this is easy hold the poses for longer, ensuring you are working at 7/8 out of ten on a difficulty scale with 10/10 being your maximum.

Side plank

In side lying with your knees at 90 ° in line with your hips and elbow directly under your shoulder. Raise your pelvis up into a partial side plank position without rotating at your pelvis or spine. Hold for 5 seconds, completing 5 repetitions and 3 sets.

Crab walk

With the band around your knees/ thigh assume a quarter squat position. Take medium size strides to the side and back again keeping tension on the band throughout for 10 -15 steps and then change to opposite direction. To make this more difficult put the band around your feet.

Step up

Stand facing a step of appropriate height. Put your injured leg on the step and step up, bringing the other leg through at a right angle. Keep the movement as controlled as possible with your knee tracking over your second toe.

Regular cardiovascular exercise of an appropriate time and intensity for you (aim 30–45 minutes).

Swim | X-trainer | Bike | Walking

Postsurgery

Following your surgery the therapy team will have you up and moving on the day of surgery. The main aim of rehabilitation following your procedure is to allow healing whilst maintaining your health and safety for discharge home. This time frame is purely dependent on you and there is no set time scale other than your well-being. Hip replacements have improved over the years and the post operative stability has significantly improved with the risk of dislocation much less frequent. Despite this we still advise not to push your hip into discomfort and to reduce any positions of deep flexion with rotation.

Initially we advise to avoid:

- Sitting on low seats
- Putting on shoes and socks
- Crossing or twisting your legs
- Twisting on your operated leg

Range of movement

Immediately post surgery, your physiotherapy team will provide you with exercises to get you moving. They will also provide you with information about protecting your new joint and how to maximise your potential in the initial period.

To optimise the outcome of your hip replacement, we have provided gentle range of motion exercises for the first 6 – 8 weeks. This will help to prevent stiffening of the hip joint and allow gentle activation of the muscle around the hip. This also encourages good blood circulation to promote healing and can reduce the risk of blood clots.

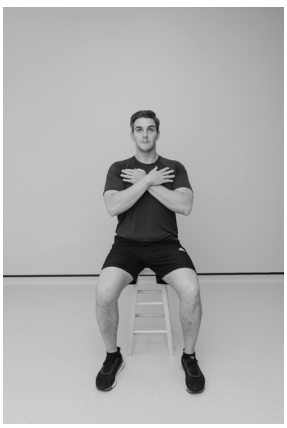
Scan the QR code to download the patient exercise sheet

Muscle activation

For each exercise hold the position for 5–10 seconds, repeating 8 –12 times, 3 sets, once or twice a day. If you find your exercises becoming easier with no increasing pain, you can try these:

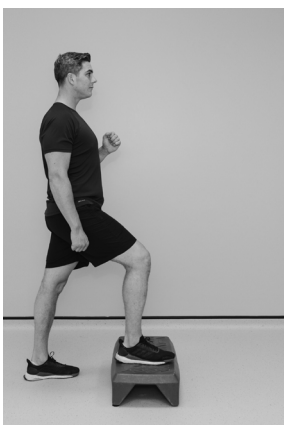
Bridge

Lying on your back with your knees bent, with a band around your knees, squeeze your bottom muscles and tighten your stomach muscles. Keep your feet flat, dig your heels into the floor, this will increase the activity in your hamstrings. Lift your bottom off the bed until there is a straight line between your shoulders and knees, to add a further challenge, imagine there is a nut between your buttocks which you are trying to crush. Hold for 5 seconds.



Sit to stand – from high chair

Sit in an elevated position with knees bent less that 90 degrees of flexion. Place your feet flat on the ground, imagine you are trying to spread the ground apart. Stand up without using your hands and imagine there is a nut between your buttocks which you are trying to crush, which will increase the muscle activity throughout the exercise. Slowly sit back down. As the exercise gets easier you can use a weight to make it more difficult.



Step up

Stand facing a step of appropriate height. Put your injured leg on the step and step up, bringing the other leg through at a right angle. Keep the movement as controlled as possible with your knee tracking over your second toe.

Cardiovascular

Whilst the main aim is to allow the operation to heal, gentle cardio vascular exercise can help this process. For each exercise begin with 2–3 minutes and slowly progress in time as it becomes easier.

Supported marching on the spot

Supported heel flicks

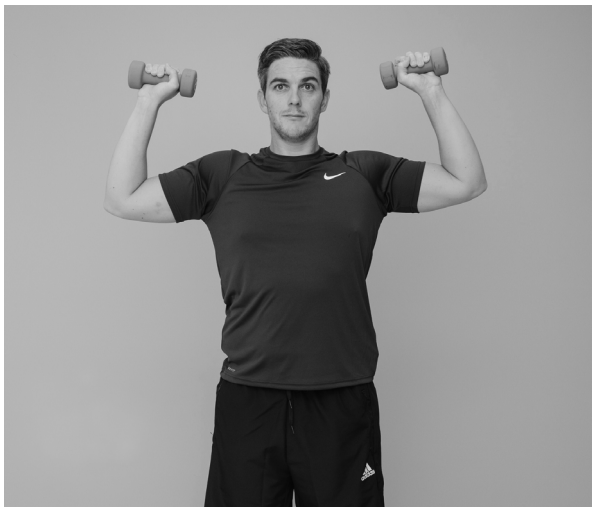
Supported side stepping

Upper body

Between exercises and periods of rest maintaining upper body strength is vitally important for normal activities of daily living. The following exercises can help maintain your upper body strength and prevent deconditioning. For each exercise use a light to moderate weight. Do 10 -15 repetitions, complete 3 sets, 3 – 5 days per week.

Bicep curl

Shoulder press



Upright row

Scaption raises

The next step: Phase two

Once you're back at home you'll have a routine check-up with your consultant and their team, usually 6 to 12 weeks after the operation, to make sure your recovery is going well. You may also be offered follow-up physiotherapy if your doctors feel that this will help your recovery on returning to your normal activities.

During the first 6 weeks, the main aim post hip replacement is to allow the wound to heal and the bone/prosthesis to set. The next step is to gradually increase your level of activity by getting the muscles to work harder around the affected area, without overloading the hip and steadily improving your fitness. You will likely need a resistance band/loop for this phase, which are readily available on line.

Muscle activation/control

Remember, Participating in an exercise program carries a certain element of risk for some people.

If you have any issues do not hesitate to contact the physiotherapy department. If you feel light headed, dizzy or have issues with your breathing please contact your general practitioner (GP) immediately.

When carrying out this exercise program you may feel some discomfort at your hip. It is important that this pain does not exceed 3-4/10, where 10/10 is the maximal and 0/10 is no pain.

Repeat each exercise below 8–12 times, performing 3 sets, 1–2 times a day.

Clam

Lying on your side with your knees bent to 90°, in line with hips and a band around both knees. Raise the top knee away from the bottom knee keeping your trunk and core still.

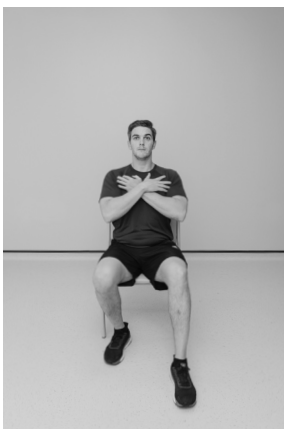
Hip abduction

Lying on your side, have your bottom knee bent to 90° and the top leg straight, with the band around both knees. Lift your top leg up and back keeping your trunk and core still.

Repeat each exercise below 8–15 times, holding the position for 5–10 seconds, performing 3 sets, 1–2 times a day.

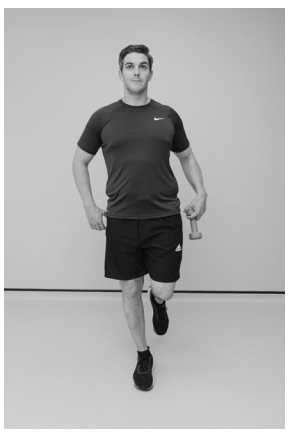
Staggered Bridge

Lying on your back with your knees bent, and your effected knee bent further back. Keep your feet flat, dig your heels into the floor. Lift your bottom off the bed until there is a straight line between your shoulders and knees, to add a further challenge, imagine there is a nut between your buttocks which you are trying to crush. If this becomes easy, lift your good leg up for a single leg bridge.



Staggered sit to stand

In sitting with your feet flat on the ground and your effected knee bent further back, imagine you are trying to spread the ground apart whilst holding on to an appropriate weight. Stand up in a controlled manner and slowly sit back down. As the exercise gets easier you can use a heavier weight or change to a squat based exercise.



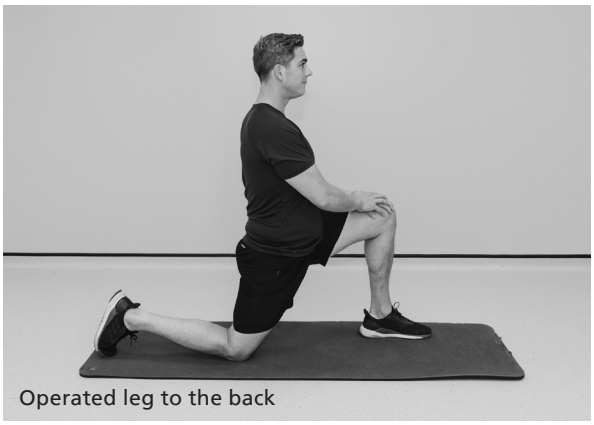
Single leg stand – around the world

Stand tall on your affected leg, tensing your stomach and buttock muscles. Maintain balance for upto 1 minute. As this gets easier, pass a weight around your body upto 1 minute in both anti and clockwise directions. Repeat 5 times.

Further range of movement

To further improve range of motion at the hip gentle stretches can also help. Remember to not push your hip into increased discomfort. Hold each position for 30 seconds, repeating 3 times.

Hip flexor stretch



Operated leg to the back

Standing adductor

Standing quads

Lying hamstring

Get fitter

At this point it is likely you will want to increase your activity further. This is highly recommended but the key to ensure success is gradual progression. Following major surgery and the significant deconditioning process through pain and the normal ageing process, it will take longer to recover, Allowing for this will be key to your recovery. Below will guide you through this process.

The current physical guidelines for activity in the UK are:

- 75 minutes of intense exercise per week
- 150 minutes of moderate exercise per week
- 2 resistance training sessions per week.

This link provides the NHS guidelines on exercise in adults:

www.nhs.uk/live-well/exercise

When beginning an exercise programme, it's best to start slowly. Some examples of low-impact, non-strenuous exercise include:

Stationary bike

Using a stationary bike on an easy setting allows you to slowly build your strength. Using the bike in your home allows you to avoid traffic and stop when you feel strained. A bike is a better choice than walking due to less load going through your hips. If you struggle to ride a bike, a set of home pedals is also a good option to get your hip moving.

Water exercises

Freestyle swimming provides a moderate workout. Walking in water up to your waist lightens the load on your joints while also providing enough resistance for your muscles to become stronger. This can greatly improve pain and daily function of the hips.

Yoga

Regular yoga can help improve flexibility of the joints, strengthen muscles, and lessen pain. Some yoga positions can add strain to your hips and should be avoided. So if you feel discomfort, ask your instructor for modifications. A class for beginners is a good place to start.

Tai chi

The slow, fluid movements of tai chi may relieve arthritic pain and improve balance. Tai chi is a natural and healthy stress reducer as well.

Walking

If you have balance problems, using a treadmill (with no incline) allows you to hold on. Walking at a comfortable pace — whether it's indoors or outdoors — is an excellent low-impact exercise.

Muscle strengthening exercises

Once you have improved mobility and movement the next stage is to develop strong muscles to help take pressure off your hip joints and help improve balance. This will also help improve the lifespan of the hip replacement and reduce the need for revision surgery.

At this point if you feel you have not recovered to where you would expect to be at 3 months, contact your consultant or physiotherapy team, so a more personalised programme can be created, which may help you.

References

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Notes

If you require a special edition of this leaflet

This leaflet is available in large print. Arrangements can also be made on request for it to be explained in your preferred language. Please contact the Patient Advice and Liaison Service (PALS) email: rjah.pals.office@nhs.net

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