



Practice
Plus
Group

Hip replacement physiotherapy





Physiotherapy is an essential aspect both in the preparation for your surgery and post-operatively to ensure you get the desired end result of your hip surgery.

Members of the physiotherapy team will help you following your surgery, but the main person who can help you get the result you want is yourself.

Staff at our treatment centres work together as a team to ensure you, the patient, have the best experience possible following your surgery. However, you must remember that you are a big part of this team!

The physiotherapists will give you exercises and advice. It is then your responsibility to take this advice and put it into practice once you are at home.

Before you have your hip surgery you can prepare by starting your home exercise plan. This will not only help strengthen your muscles around your hip, but will also ensure you are aware of some of the exercises you will need to be doing during your hospital stay and when you go home.

Pre-operative

General guidelines

Pre-operative exercises can help you speed up your recovery. They can also help to:

- Maintain the movement in your hip
- Build up your muscle strength
- Improve your confidence for exercising after surgery.

Do activities that put less strain on your hip.

Rest your hip frequently during the day.

Pace yourself using walking aids.

Procedure

Hip replacement is a procedure in which the painful or arthritic hip joint is removed and replaced with an artificial joint, usually made from metal and plastic components.

Types of implant commonly used:

Metal, polyethylene plastic or ceramic

How long does it last?

Current evidence suggests that traditional total hip replacements last more than 10 years in more than 90% of patients. More than 90% of patients report having either no pain or pain that is manageable with use of occasional over-the-counter medications.

Hip precautions

Generally, after the hip replacement you can return to normal activities without needing to be overly cautious. Research has shown that few issues are prevented, and some are caused by being too careful, and therefore could mean that your full recovery is slower.

Of course, you should always follow the advice of your surgeon or physiotherapist, and they will let you know if you need to observe any specific precautions due to anatomic reasons or if you are exceptionally tall (generally over 180 centimeters). If you have been advised to follow hip precautions you may need additional aids like raised toilet seat, bed raise, chair raise etc.

Risks

Studies have shown that hip infection or dislocation, deep vein thrombosis (DVT or blood clots) or major complications following the hip replacement is typically less than 5% (with exception to other individual medical health risk factors).

Anaesthetic

Total hip replacement may be performed under epidural spinal or general anaesthesia. The choice is made in consultation with the surgeon and anaesthesia provider.

Pain management

You can expect some post operative pain following the procedure which will be manageable with effective pain medications. Studies have shown that the pain steadily declines with each passing day.

Recovery and rehabilitation in the hospital

Physiotherapy starts the day of (or the day after) surgery. You will be encouraged to walk, fully bearing weight on the operated leg (except in certain circumstances). Other exercises to help with balance and getting in and out of bed are initiated on the day of surgery or the next morning, depending on your recovery.

The physiotherapists are an integral member of the “team” approach, but the patient’s own high level of motivation and enthusiasm will be critical elements in determining the speed and ultimate outcome of recovery.

Hospital discharge and length of stay

The average hospital length of stay varies from individual to individual and is dependent on levels of pain and mobility. As soon as you meet your discharge goals and after successfully navigating stairs, you will be allowed to go home with crutches, a walking stick or zimmer frame.

Showering

You will be allowed to shower on the day after surgery or the following day if there is no discharge coming out from the incision site. Nurses will confirm with you when it is safe to shower and how to waterproof your dressing.

Driving

We do not recommend you driving while taking narcotic-based pain medications but; on average patients are able to drive between two and four weeks after the surgery. Insurance companies should also be contacted for further confirmation.

Sex

Please feel free to ask your surgeon, nurse, or physiotherapist, who will provide you with the information/handout regarding the sexual activity following hip replacement.

Pre-operative exercises

INHALE



EXHALE



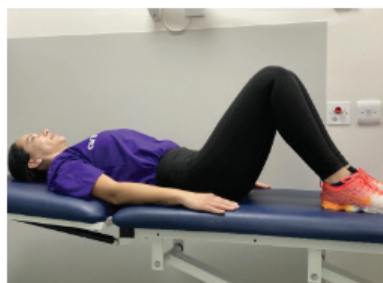
1. Breathing exercises

This exercise can be done either in sitting or lying on the bed.

Sit comfortably, with your knees bent and your shoulders, head and neck relaxed.

Breathe in slowly through your nose & breathe out through your mouth.

Repeat this 10 times before you start with exercises



2. Core muscles

Strengthening your core muscles will help with the alignment of your posture, supporting your spine and pelvis.

This helps with walking straight and helps to improve your balance and stability.

Note – prolonged hip pain has generally meant your muscles have become weaker. This can cause back pain and reduced mobility in your both spine and hips, which could affect your balance.



3. Armchair push ups

Strong arms will help with using crutches or walking frames after your surgery post-operatively. They will also help with getting in and out of the bed more easily.

Sit on a chair with armrests and push down through your hands to lift your body up, hold it for a few seconds and lower down slowly.

You can also do the first six exercises from Post-operative exercises – 0 to 3 weeks to tone up your muscles before the surgery.

Preparations you can make before you come into the hospital for surgery

Home environment:

- Consider the space you have around your home. You may need to move furniture to make enough space to get through doorways and passages with a mobility aid which may be issued to you after your operation.
- Remove any loose rugs and secure carpets in the home to prevent the risk of falls.

Kitchen:

- Stock up on easy to prepare meals. If you have a freezer, have a selection of ready prepared meals that you can heat in either a microwave or an oven.
- Arrange your kitchen so that the most commonly used items are all at worktop level or higher, so that you do not have to bend or twist to reach items.
- If you do not usually eat in the kitchen, consider having a stool or seat in the kitchen as you may be discharged home with walking aids which will have an influence on your ability to carry items when walking. An appropriately placed seat is also good for rests between tasks.

Lounge:

- If your chair at home is very low you may have a higher one you can borrow from family or friends, which will make getting out of your chair easier.

Household tasks:

- Arrange for family or friends to help you with heavier household tasks, like Hoovering, changing bed clothes etc.

Personal care:

- Cut your toe nails, as you will not be able to reach them for approximately 6 weeks after surgery. Be careful not to cut the skin. If this happens then the surgery would need to be deferred till the wound has healed. This is to prevent any infection hindering your recovery process after the surgery.
- Place clothes and toiletries in drawers and on shelves around waist height to avoid bending or twisting for these items.

Transport home:

- Think about who can collect you following your stay in hospital. It should be safe for you to travel home as a passenger in a car.

Improving blood circulation

Simple bed exercises, such as ankle pumps, quad sets and gluteal sets will help prevent circulation problems. Other exercises appropriate for you are reviewed later in this booklet. We advise you repeat these exercises every hour that you are lying in the bed.

Ankle pumps

With your leg relaxed, gently bend and straighten your ankle. Move through full range of movement. **Repeat this 10 times every half hour**

Static quadriceps

With your knees straight tense the muscle at the front of your thigh. Straighten your knee as if you are pushing the back of your knee down into the bed. Make sure your buttock muscles are not tense. In order to make sure that you are doing the exercise correctly, try the exercise on your good leg to understand how it should feel. **Hold for 5 seconds and relax. Repeat 10 times**

Static gluts

Lie flat on your back with your legs straight. Squeeze your buttocks together.

Hold for 5 seconds and relax.

Repeat 10 times

Additional pain management techniques

Cold therapy

Cold therapy in the form of ice packs can be provided for you while you are an in-patient, as an intervention to reduce pain and swelling.

Cold therapy produces an anaesthetic effect when placed on the surgical area. Do not hesitate to ask a member of staff for ice packs between various activities. Cold therapy can be very helpful at home.

If your leg feels heavy, stiff, swollen, or hot, we recommend that you rest on your bed with an ice pack applied to the tender or swollen area. Making an ice pack can be as simple as wrapping ice cubes in a towel or using a bag of peas wrapped in a towel. There are commercial ice packs available which you can keep cold, ready to use, in your freezer.

Breathing and relaxation exercises

Relaxation exercises, such as slow rhythmic breathing, can help you handle any pain you may be feeling, as well as providing overall comfort.

1. Breathe in slowly and deeply.
2. As you breathe out slowly, feel yourself beginning to relax and feel the tension leaving your body.
3. Now breathe in and out slowly and regularly, at whatever rate is comfortable for you. You may wish to try abdominal breathing (using your diaphragm).
If you do not know how to do abdominal breathing, ask your nurse for assistance.
4. To help you focus on your breathing, breathe slowly and rhythmically. Breathe in and say silently to yourself “In, two, three,” then breathe out and say silently to yourself “Out, two three”.
5. It may help to imagine that you are doing this in a place that is very calming and relaxing for you, such as lying in the sun at the beach or in your own special place.

As you breathe out and say to yourself

“I feel alert and relaxed”.

Then concentrate on staying that way.

Rehabilitation

Members from the healthcare team will assist and guide you with your exercises and also help you out of bed for the first time.

Continue exercising regularly while you are in the bed (exercises shown earlier in this booklet). Members of the healthcare team will add to these exercises throughout your stay. It is fine to use and bear weight through your new joint as instructed by the healthcare team. Pain you experience when you walk is not harming your new joint. Remember to observe your hip precautions.

Bed transfers

Transferring out of bed

Following your surgery you will be helped out of bed by a member of the health care team. The physiotherapist is there to help you, but it is important to remember that you will be able to do most of the work yourself.

It is most likely that you will get out of bed the same side as your operated leg. Use your hands on the bed to move your bottom closer to the edge of the bed. You can bend your non-operated leg to help you lift your bottom off the bed and move it across. Once you are near the edge of the bed you can lower your operated leg over the edge of the bed. Use your hands on the bed to guide your bottom round so you can place your feet down to the floor.

Once you are sitting on the edge of the bed you can rest there until you are ready to stand.

Transferring back into bed

When you are ready to get back into the bed, position yourself closer to the pillows near the head of the bed and try to ensure you guide your bottom back onto the bed as much as possible before you lift your legs up into bed. Keep your knee facing up to the ceiling to avoid twisting of the leg. Use your hands and the non-operated leg to manoeuvre yourself in the bed to make yourself comfortable. Please ensure you ask for assistance if needed.

Walking with a frame

Once standing, hold the frame with two hands. When you feel ready to walk pick the frame up and move it forward so that the feet are level with the back of the frame. Move the operated leg forward into the middle of the frame. Transfer your weight onto your operated leg and through the frame. Then step your good leg level with your operated leg keeping a gap between your feet. Make sure there is a gap between you and the front of the frame.



Remember FOG

Frame, Operated leg, Good leg

While turning use the same leg pattern as walking forward. Frame, operated leg, good leg. Do small steps on the spot picking your feet up to avoid twisting your operated leg.

When walking backwards keep the walking frame in front of you. Step backwards with your good leg first, then your operated leg and then bring the frame back towards you.

Sit to stand

Always use the arms of a chair or the surface that you are sitting on to push yourself into a standing position. Do not pull on the walking aid as this could tip or you could put unnecessary stress on shoulders and elbows that could cause damage. Move your operated leg slightly out in front of you. Push up from the arm rest of the chair. Once standing safely position your hands on the walking frame.

Stand to sit

Step backwards to the chair until you feel the chair with the back of your good leg. Keep your operated leg out in front of you. Reach back for the arms of the chair so you can lower yourself down gently into it.

You should now be performing your exercises well and doing them regularly without the need for prompting by staff. These exercises are progressive and a member of the team will guide and progress the exercises appropriately to improve your knee function, posture and walking pattern throughout your stay.

You should also notice your mobility improves and you can walk to and from the bathroom using your walking frame or crutches without assistance once a member of the staff has advised you.

Most patients continue to use the crutches and will take them home with them to use.



Walking with crutches

Once standing, put your crutches on so the handles are pointing forwards. Move your two crutches forward first, ensuring they are far enough apart for you to step between them. Move your operated leg forward to the level of your crutches. Push down on the crutches with your arms and apply weight through your operated leg. Step forwards with your good leg slightly ahead of the operated leg and the crutches.

Remember COG

Crutches, Operated leg, Good leg

As you progress you will be able to return to a normal walking pattern with one foot in front of the other. Continue to use your crutches. Make sure your heel strikes the floor first, followed by the sole of your foot and then the toes push off.

When you turn ensure your crutches are in a position that you can lean through them. Take small steps to turn moving your crutches first, then your operated leg, followed by your good leg. Make sure you pick your feet up. Do not twist and do not drag the operated leg.

Sit to stand when using crutches

As when standing up using a frame, always use the arms of a chair or the surface that you are sitting on to push yourself into a standing position. **Do not use the arms of the crutches** as this is less steady and can put unnecessary stress on shoulders and elbows that could cause damage.

Stand up first using the arms of the chair with crutches in a 'H' position. Once you have gained your standing balance put your crutches on.

Before standing, put both crutches on while you are in the sitting position, with the handgrips facing backwards. Push up on the arm rest of the chair to stand up. Turn the hand grip of the crutches to point forward and position your hands comfortably.

Stand to sitting when using crutches

Step backwards to the chair until you feel the chair with the back of your good leg. Keep your operated leg out in front of you. Once positioned put the crutches out in front of you and turn the hand grips of the crutches to face backwards. Reach back for the arms of the chair and gently lower yourself down into it.

Alternatively, once you are ready to sit down, take your crutches off and place them carefully resting nearby. Then reach back for the arms of the chair to lower yourself down gently.



Negotiating stairs

Walking upstairs



- 1 Move one step up with your good leg
- 2 Move your operated leg to the same step
- 3 Move your crutches on to the same step

Walking downstairs



- 1 Move your crutches down one step
- 2 Move your operated leg on to the same step
- 3 Move your good leg on to the same step

If you have two banisters you can use both. If you have one banister, it is safer to use the banister and hold a walking aid in the other hand.

Remember to keep your back straight maintaining the normal curvature of the spine.

Going home

By now you should be mobilising independently using the walking aid issued to you by the therapies team. You should also be able to get in and out of bed yourself and getting up to wash in the bathroom and dress.

Discharge advice

Patients progress goals

- **Progress mobility**
- **Follow exercise programme**
- **Observe hip precautions**



Walking programme

It is important that you begin a walking programme once you get back home to build and maintain your muscle strength and your blood circulation system. You should aim to do this walking programme as well as your normal daily activities and your home exercise programme.

Aim to walk for a certain period of time rather than to walk a certain distance.

Gradually increase the time you walk, as you feel comfortable.

Ice packs

Ice does help reduce swelling. If you have ice packs already at home then make sure they are ready in the freezer for when you get home. If you do not have ice packs then bags of peas are fine to use (just don't eat them afterwards!).

Never put ice packs directly onto your skin. Always use a clean tea towel or pillow case to wrap the ice pack in. Do not use the ice pack on your skin for more than 15 minutes. Always check the skin condition after using ice. Redness of the skin following the use of ice is expected.

Walking Guideline:

Days 1 to 4 5 minute walk - 2 times a day

Days 4 to 8 10 minute walk - 2 times a day

Days 8 to 12 15 minute walk - 2 times a day or
30 minute walk - once a day

After day 12 30 minute walk - once a day
You can increase the distance if your new joint feels comfortable

Leg length discrepancy

Following a total hip replacement there may be a slight change in your leg length. In the majority of cases this is an apparent leg length discrepancy where by the leg just feels a different length due to the adaptations that your body has made as a result of your hip problem. This difference will therefore reduce as you learn to walk properly and exercise following your hip operation.

In few cases this leg length discrepancy may be more permanent, however this is unusual and can usually be corrected with orthotic appliances.

A majority of people have a measurable difference in leg length, although most people adapt to the difference with no apparent ill effects.

Car transfers

Ensure that the passenger seat is as far back as possible and is slightly reclined. Twisting to reach the seat belt is not advisable. Ask the driver to hand it to you.

To get into the car:

- Turn and back up to the car until the backs of your legs touch the car seat
- Give any walking aids to other person present
- Keep your operated leg extended, with your heel resting on the ground
- Hold onto the car frame or dashboard
- Bending on your un-operated leg, gently lower yourself onto the seat of the car
- Slide your bottom back towards the driver's seat, without twisting from side to side (a cushion over the handbrake can be useful)
- Turn your body so that the sides of your legs rest against the side of the car footwell
- Lift your legs into the footwell, together if possible, leaning back slightly (recline seat if possible)
- Alternatively lift legs separately into the car, avoiding crossing the midline
- Reposition self on centre of car seat and adjust back rest without twisting
- Keep your operated leg straight for the duration of the journey
- Alternatively keep the back rest reclined slightly





To get out of the car:

- Assistance is required to open the car door
- Recline the back rest
- Slide your bottom towards the driver's seat without twisting
- Turn body so that your outside leg rests against the inside of the car footwell
- Lean back slightly and lift legs over side of footwell
- Alternatively lift your legs separately out of the car, avoiding crossing the midline
- Slide forward to the edge of the seat, without twisting from side to side
- Keep operated leg extended with your heel resting on the ground
- Place un-operated foot on the ground and straighten the knee
- Push up from the seat/dashboard or pull up from door frame to a standing position
- Check your balance before taking any walking aids from the other person present

Cars that are low to the ground are not advisable. 4x4/people carriers may need a temporary step to assist the transfer to prevent twisting or awkward movements.

Dressing

Because you should not bend at your hips to reach your feet, putting on anything over your feet will be a real challenge at first.

Please consider the movements needed to dress very carefully, as they must be followed to reduce the risk of dislocating your new hip joint. Upper body dressing can be as your usual routine. Skirts can be placed over the head if possible and secured accordingly. Refer to the following for putting on lower garments.



Underwear and lower garments:

- Prepare your clothes by putting them on the bed or armrest of a chair beside you within easy reach
- Sit on the side of the bed or in a suitable armchair
- Use the long handled reacher to grip one side of the garment and lower it down to the ground
- Put your operated leg into the leg hole first
- Next place your un-operated leg into the garment
- Pull the clothing up with the aid of the long handled reacher to above your thighs
- Stand from the bed, check your balance before pulling up your clothing



To put shoes on:

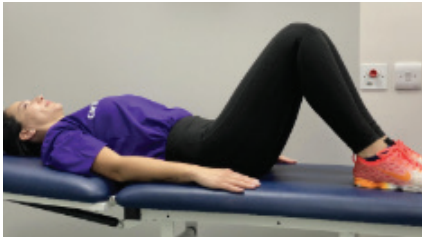
- Use the long handled shoe horn
- Slip on shoes are easier than shoes that require laces/velcro/buckles providing they give adequate support
- Backless shoes are not recommended
- Stiletto heels are strongly not advised
- Use the long handled reacher or shoe horn to position the shoe in front of your foot
- Lean back slightly
- Lift your foot and place toes into shoe with your heel raised
- Position the shoe horn behind the raised heel
- Slide the rest of your foot into the shoe and lower heel
- Remove shoe horn

To take shoes off:

- Slide shoe horn inside your shoe, avoid crossing the midline
- Lean back slightly
- Push down on the shoe horn
- Lift your foot out of the shoe slowly

Post-operative exercises: Initial phase, 0 to 3 weeks

As well as starting these exercises before your operation, it is important you carry on doing these exercises from the day after your surgery onwards.



1. Breathing Exercises (lying or sitting)

Lie on your back or sit with your neck and shoulders relaxed. Breathe in slowly through your nose for 2 second. Breathe out through your mouth for 4 seconds.



2. Ankle pumps

With your legs straight bend your feet up towards your face and then point your feet away from your face.



3. Quad sets

Lie on your back with your knees straight. Tighten up the top of your thighs by pressing the back of your knees into the bed. Hold the contraction for 5 seconds.



4. Gluteal sets

Lie on your back with your legs straight. Squeeze your buttocks together. Hold for 5 seconds.



5. Short arc quads

Lie on your back with a rolled up towel or pillow under your knee. Slowly straighten your knee and lift your heel off the bed while maintaining contact with the rolled towel. Hold for 5 seconds, then gently lower.



6. Heel slides

Lie on your back with your legs straight. Bend your knee by sliding your heel towards your buttocks as far as possible. Straighten and relax.



7. Hip abduction

Lie on your back with your legs straight. Slowly slide your leg out to the side and then back in.
Remember – do not slide your leg too far inward.



8. Knee extension/flexion in sitting

Sitting on a firm chair, straighten your knee. Hold for 5 seconds. Slowly bend your knee as far as possible.



9. Hip flexion exercises

Sit on a firm, highchair with both feet on the floor, holding the sides or the arm rest for support.

Gently lift the operated leg just off the floor (making sure not to bend the hip more than 90 degrees).

Gently lower the leg and repeat.

Post-operative exercises: Mid phase, 3 to 6 weeks

It is important you do these exercises in addition to the hip exercises you are already doing.



1. Standing hip extension

Standing with your hands supporting for balance, keep your operated leg straight and bring the entire leg backwards.

- Keep your back straight
- Don't lean forward



2. Standing knee flexion

Standing with your hands supporting for balance, bend the knee of the operated leg and without lifting your hip, push the knee backwards.

- Keep your back straight
- Don't lean forward



3. Standing hip abduction

Standing with your hands supported for balance, take your operated leg out to the side, without letting it come forward. Hold for 5 seconds then slowly relax.

- Don't lean forward



4. Standing hip flexion

Standing with your hands supported for balance, keep your knee straight and move whole leg forwards.

- Keep your back straight



5. Standing heel rise

Standing with your hands supported for balance, rise onto your toes keeping your knees locked and back straight.



6. Standing hip flexion with knees bent

Standing with your hands supported for balance, slowly raise your knee.

- Keep your back straight



7. Double leg bridging

Lie flat on a bed with both hands resting by your sides, with your feet firmly flat on the bed, shoulder width apart. Slowly lift your midsection to make a straight line through your knees, hips and shoulders. Focus on a slow upward and downward movement, ideally one repetition every five to 10 seconds, holding in the upward phase for a few seconds.

Use your hands to aid balance, avoid pressing downwards to help with the lift. Downward force should be applied only through the shoulders and feet.

From 6 to 8 weeks

You have completed the most critical part of your treatment. From now on you can increase your activities progressively, providing they do not hurt you.

- As you will soon have to return your equipment, start to progressively reduce the height of your armchair, bed and toilet seat to their usual levels. In future, if you have the option to sit in a higher chair with arms, it may be safer and more comfortable
- You do not need the pillow between your legs at night and you can turn in bed to either side
- If you are still using the elastic stockings you can remove them in the late afternoon. If your legs do not swell, next day take off the stockings a few hours earlier, and so on each day. After a few days you will not need them any longer
- As soon as you feel confident and can walk without a limp or pain, you can give up the walking stick or crutch.

After 8 weeks

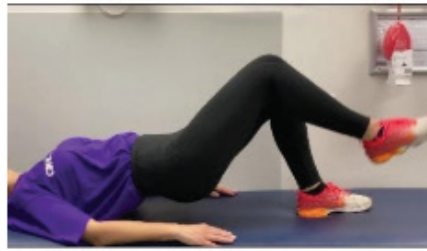
The recovery of your hip is now well advanced. From now on, you can reduce the daily exercises to once or twice a week. Basically you can lead a normal life.

However, remember that your hip is an artificial device, even if it feels “normal”.

As with any artificial device, there is a risk of mechanical failure if you over-stress it. You are recommended to follow these precautions.

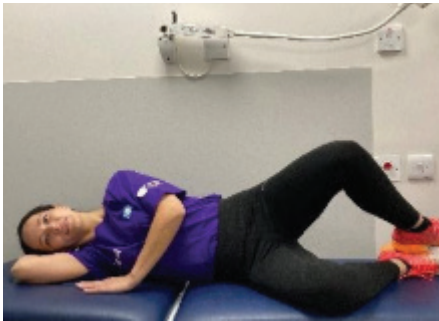
- Avoid being overweight. Make every effort to lose weight if you are over-weight
- Avoid lifting or carrying loads heavier than 30lbs (14kg)
- Avoid jumping or causing any significant repetitive impact on your hip
- Use the banister when climbing stairs
- Avoid strenuous or contact sports, but you may enjoy slower gentler exercises such as swimming or using an exercise bicycle
- It is usually okay to drive after 6 weeks. Please discuss this with your consultant at your follow-up appointment
- Activities such as swimming are fine to return to as long as your wound is fully healed and you are confident to walk in the pool environment
- Stairs can be done with a normal pattern rather than one leg at a time

Post-operative exercises: Late phase, 6 to 12 weeks



1. Advanced bridging or single leg bridging

Lie on your back with knees bent. Tighten your abdominal muscles. Lift your hips up. Now support your hips with your non-operated leg and gently straighten your operated leg. Return to the bent knee position and repeat the same from the beginning.



2. Clam shell

Lie on your good side with your head resting on your arm. Bend both knees slightly, approximately 45 degrees. As you exhale, lift your top knee up, keeping your ankles together.

Hold that position for two seconds. Slowly lower the leg back down. Repeat the same exercise on your right side.



3. Hip abduction (side lying)

Lie on your side with or without pillows in between your knees.

Lift your operated leg straight up.

Keep your pelvis still, do not let your hip roll backwards.

Gently lower the leg and repeat.



4. Sit to stand (arms folded)

Sit with the hands crossed facing into your chest.

Lean forward, keeping your back straight and feet flat on the ground. Gently push through your feet to get up from the chair.

Repeat from the beginning.

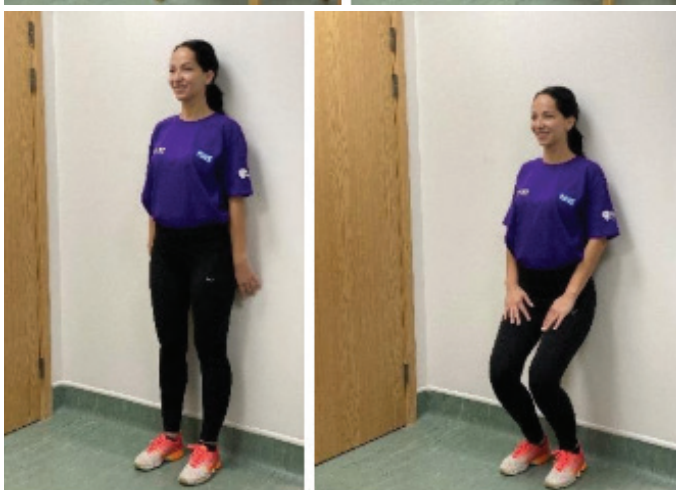


5. Squat behind chair

Tighten your abdominal or tummy muscles

Bend forward at the hips and gently rise up from the bed.

Stand behind the chair holding on to the backrest of the chair. Keep your back straight and gently squat to bring your knees above your toes. Return to the standing position and repeat the same.



6. Squat against a wall

Feet slightly out in front of you and shoulder width apart.

Slide your back down the wall keeping your knees over your toes and weight in your heels and stop once the knee is above your toes. Hold for a few seconds and return to the standing position

Repeat the same.



7. Squat with exercise band

Leaning your back on to the wall. Tie an exercise band around your knees to keep it in a stretched position. Keep your back straight and gently squat to bring your knees above your toes.

Return to the standing position and repeat.



8. Bent knee pull out

Lie on your back with knees bent. Tie an exercise band around your knees. Move the knees apart against the resistance of the exercise band. Hold it for a few seconds & relax.

Repeat the same.



9. Hip flexion with exercise band

Place the exercise band around your ankles.

Keep your knees straight and move your operated leg forward against the resistance of the exercise band.

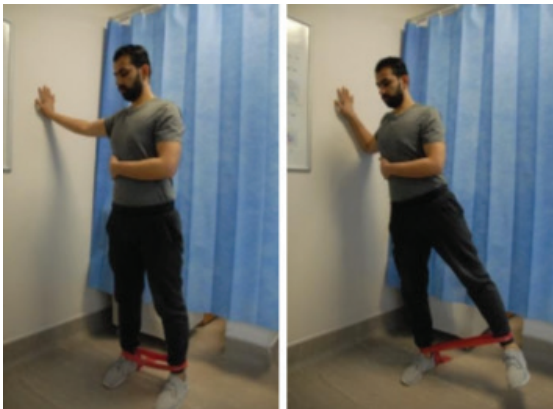
Hold and slowly return with control.



10. Hip extension with exercise band

Place the exercise band around both your ankles. Hold on to the backrest of a chair or use a wall to steady yourself. Keep your knees straight and move your operated leg back. Keep your back straight and avoid leaning or bending over. Hold and slowly return to the starting position.

Repeat the same on the other leg.



11. Hip abduction with exercise band

Place the exercise band around your ankles.

Keep your knees straight and move your operated leg sideways against the resistance of the exercise band.

Hold and slowly return with control. And repeat.



12. Hip flexion with exercise band

Lie with a pillow under belly button. Rest ankle on a pillow. Tighten your tummy and lower buttocks. Lift thigh off the bed to straighten leg. Keep core turned on the lower thigh.

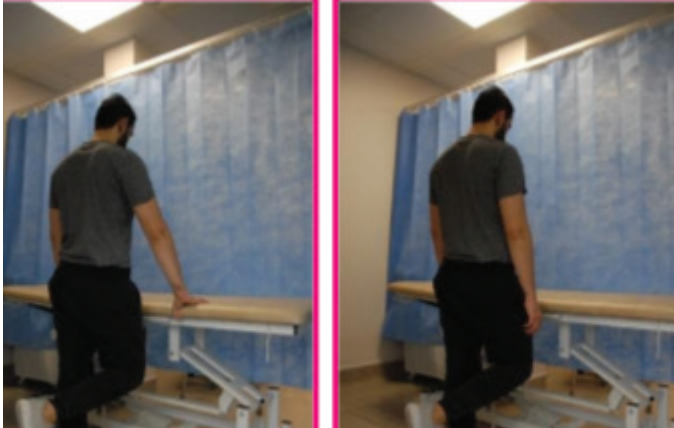


13. Left lift with bent knee in side lying

Lie on your non-operated side with a pillow inbetween your legs. Keep your hips straight and knees bent behind you.

Lift the top leg towards the ceiling and tighten the hip muscles. Keep your pelvis still and do not let your top hip roll backward.

Gently lower the leg to the starting position and repeat the same.



14. Single leg stand

Stand upright with feet together by holding on to the back of a chair or a kitchen counter. Gently lift your operated leg for 5 seconds and weight bear on your good leg/non-operated. Return to the standing position and repeat the same, this time weight bearing on your operated leg and lifting your good/non-operated leg.



15. Split Squat - Lunge

Using a kitchen counter for support, step forward with one leg. Tighten your tummy and buttock muscles. Lower and lift body straight up and down through the hip, bending at the knee. Do not lean forward. Keep your body weight behind your front knee and foot.

Exercise guidelines: 3 months to 1 year aerobic activity

Regular physical activity will increase the life of your joint replacement.

Regular exercise will help you to:

- Increase fitness and endurance
- Reduce risk of falling
- Increase muscle strength
- Improve bone quality and strength
- Maintain a healthy weight (because extra weight puts stress on your joint)

Following joint replacement, try to do activities that have low risk of injury and do not require you to learn new skills. Pick activities that are fun and have indoor and outdoor options.

Gardening and kneeling activity

Typical hip joint loads during exercise

Different activities put different loads on your hip joints. This table shows typical joint loads at the hip joint with common activities.

Strength training

| Activity | Hip joint Load (Times of bodyweight) |
|--|--------------------------------------|
| Cycling (high resistance) 1.4 4.5 4.7 | 1.4 |
| Downhill skiing - long turns and flat slopes | 4.5 |
| Walking at 5 km/h (3 mph) | 4.7 |
| Jogging at 12 km/h (6 mph) | 6 |

Long term exercises to strengthen will help you with day-to-day activities such as climbing stairs and balance. It will also protect your replaced joint and other joints that have arthritis. Strong muscles help keep bones strong. Your operated leg will take up to a year or more to regain normal strength and control.

In order to strengthen muscles, exercises need to be challenging and done often enough to produce a “training response” in your muscles. Your physiotherapist will advise you on what level to start at and how to progress the exercises to ensure ongoing benefit.

Balance training

Some of the exercises, such as those to turn on your core muscles

or improve your balance and coordination, are done differently. These ‘neuromotor control’ exercises are done more often with little or no added resistance. These exercises train the connection and coordination between your muscles and nervous system. They also contribute to better balance during daily activities and decrease the risk of falling.

Flexibility training

If you had tight or shortened muscles before surgery it may take longer to regain the movement in your joint. Stretches can be done in different ways. Ask your physiotherapist how to change a stretch if it doesn’t work for you.

Leisure and sporting activity after total hip replacement

| Allowed | Allowed with experience | No consensus | Not recommended |
|---|---|---|----------------------|
| Speed walking, swimming, road cycling, golf | Ice skating | | Jogging |
| | Cross-country skiing | | Basketball |
| | Downhill skiing | | Football / Soccer |
| Hiking, canoeing/kayaking, square dancing, ballroom dancing, bowling, sailing | Stationary skiing (Cross-country ski machine) | Singles tennis, handball, rock climbing, volleyball | Baseball |
| | Doubles tennis | Tai chi | High impact aerobics |
| Low impact aerobics, Water aerobics, weight training | Horseback riding | | Martial arts |
| | Rowing pilates | | Squash |
| | Inline skating | | Hockey |

Community exercise programs after total hip replacement:

You can join community exercise group runs locally, (check with GP for the local services) slips and trips, community active exercise groups, fitness for elderly and so on.

Helpful resources

- Hip and knee tv on youtube nhs website.
- National Institute for Health and Care Excellence (NICE).
- The British Orthopaedic Association: the main professional society for british orthopaedic surgeons.
- British Hip Society: the society of orthopaedic surgeons with a specialist interest in hip surgery.
- British Association for Surgery of the Knee (BASK): research, education and advice on all aspects of knee surgery.
- National Joint Registry (NJR).
- KNEEGuru: UK site for people contemplating knee surgery.
- 'Wheeless' Textbook of Orthopaedics: a free resource provided by Duke University, North Carolina. This provides comprehensive information on all orthopaedic topics.

Exercises log

| Week | S No | Exercises | Repetitions |
|----------------|------|--|----------------------------|
| Before surgery | 1 | Breathing exercises | 10 reps 2-3 times a day |
| | 2 | Core muscles strengthening exercises | |
| | 3 | Armchair push ups Add exercises 5 to 9 | |
| 0-3 weeks | 4 | Breathing exercises | 5 reps 4-6 times a day |
| | 5 | Ankle pumps | |
| | 6 | Quad sets | |
| | 7 | Gluteal sets | |
| | 8 | Short arcs or terminal knee extensions | |
| | 9 | Heel slides | |
| | 10 | Hip abductions | |
| | 11 | Knee flexion and extension | |
| | 12 | Hip flexion exercises | |
| 3-6 weeks | 13 | Hip extension in standing | 5 reps 4-6 times a day |
| | 14 | Knee flexion in standing | |
| | 15 | Hip abduction in standing | |
| | 16 | Hip flexion in standing | |
| | 17 | Heel rise in standing | |
| | 18 | Hip flexion with knees bent in standing | |
| 6-12 weeks | 19 | Double leg bridging | 10 reps 2-3 times a day |
| | 20 | Advanced bridging | |
| | 21 | Clam shell exercises | |
| | 22 | Hip abduction inside lying | |
| | 23 | Sit to stand (arms folded) | |
| | 24 | Squat behind a chair | |
| | 25 | Squat against a wall | |
| | 26 | Squat against the wall with exercises band | |
| | 27 | Bent knee pull out with exercises band | |
| | 28 | Hip flexion with exercises band | |
| | 29 | Hip extension with exercises band | |
| | 30 | Hip abduction with exercises band | |
| | 31 | Leg lift lying on your stomach | |
| | 32 | Leg lift with bent knee in-side lying | |
| | 33 | Single leg stand | |
| | 34 | Squat split lunge | |

Hip precautions

As your surgeon will have most probably mentioned to you, following your hip surgery there is a small risk of dislocating the new joint. The main risk is in the first 6 weeks when the muscles are at their weakest. This is why it is important to exercise regularly to strengthen the muscles and to support the hip.

Within the first 6 weeks it is important to follow some hip precautions to minimise the risk of damaging the new joint. Please ensure you follow these recommendations.



- Do not cross your legs either in sitting, standing or lying
- Gently lower yourself onto your chair/toilet with your operated leg out in front
- Do not lean forwards once you are sitting, you must not flex your hip over 90 degrees. Your knees should remain lower than your hips in sitting
- Do not try to reach your feet or stretch up to reach high levels. Try to use your long handled equipment that will be provided for you
- Sit in a high arm chair. Use your hands to assist you in sitting and rising from the chair
- No twisting or pivoting on the operated leg
- Do not lift heavy objects



- At night, sleep with two pillows between your legs. You may turn in bed as long as the pillows are between your legs

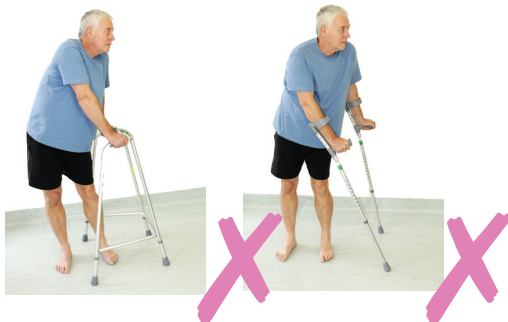


- When using your walking aid:

DO NOT pull on the walking aid when rising from a sitting position. **DO** use the arms of the chair



DO NOT take a step unless the walking frame is flat to the ground



DO NOT turn by pivoting/twisting on your operated leg. Ensure you pick your feet up as you turn

Notes
