

Hip arthroscopy

Introduction

This leaflet will explain what will happen when you come to the hospital for your operation. It is important that you understand what to expect and feel able to take an active role in your treatment. There will be many different health professionals involved in your care during your stay and there will be a clear plan for any after care when you are discharged from hospital. This leaflet will answer some of your questions but if there is anything you or your family are not sure about then please ask your nurse, doctor or therapist.

What is an arthroscopy?

Hip arthroscopy is performed under a general anaesthetic (you are asleep) using small cuts through which a camera (to see the joint) and instruments are passed. Using traction (a pulling force) to bring the hip slightly out of joint, your surgeon can get a good view of the hip and any areas that are causing your symptoms. Then, using the appropriate instruments, your surgeon can carry out the necessary procedure(s).

What happens during the operation?

You will be positioned on a fracture table (special traction table) with a well padded post pressing against the inside of the thigh (very close to the groin) – this is used to keep the thigh bones in a good position. Traction is applied to each leg to allow space for the camera to pass into the hip joint. A special X-ray (image intensifier) is used to confirm that the joint is stretched opened enough to allow the camera to pass before starting the operation. X-ray is also used during the operation to help carry out certain procedures.

What are the benefits of an arthroscopy?

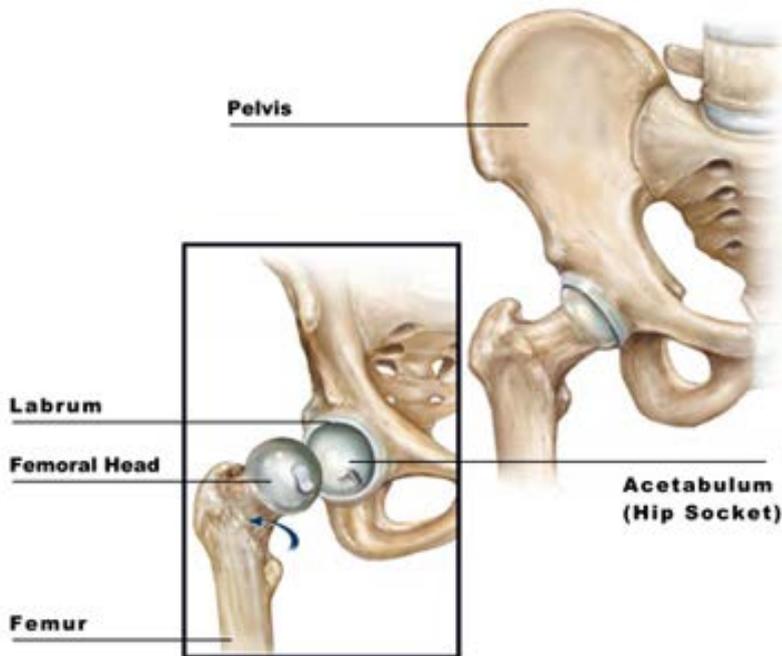
An arthroscopy is much less invasive than previous forms of hip surgery. This means that you have a shorter hospital stay and quicker healing than more traditional surgery. You will also be able to start your rehabilitation earlier. The hip arthroscopy also aims to remove or reduce your symptoms, including pain, instability and stiffness.

Hospital stay

Your operation can take from 1.5 to 3 hours, depending on how much work needs to be performed. You may need to stay in hospital overnight following your procedure however,

in some cases you may be able to go home on the same day (dependent on the extent of your surgery, and the time the procedure is completed). This may vary depending on your medical history and also on how you are managing to mobilise with help from the physiotherapists.

Hip anatomy



What conditions can be treated with hip arthroscopy?

The four most common conditions are:

- **Femoroacetabular impingement (FAI)**: This condition involves the head of the thigh bone (femur) and the rim of the socket (acetabulum). It is caused by bumps on the femoral head causing abnormal contact with the socket, which can lead to damage of the cartilage (labrum). This in turn can cause pain. An arthroscopy can be used to reshape the femoral head and socket to prevent this abnormal contact.
- **Labral tear**: The hip socket has a rim of fibrous cartilage called the labrum. This can be damaged either through abnormal contact or other causes. Common symptoms of a labral tear include a locking or catching sensation in the hip as well as groin pain.
- **Loose bodies**: These are pieces of cartilage that form within the joint. They look like small marbles floating around in the joint space. They can be caused as a result of trauma, sports injury or wear and tear.
- **Articular cartilage injury**: Articular cartilage covers the joint surfaces of the head of the femur and inside the socket, allowing for smooth movement. Tears in this cartilage can happen from activities such as running or jumping or as a result of wear and tear.

After the operation

You will need to rest until the effects of the anaesthetic have passed. This may take several hours.

Pain – You may feel some pain in your hip as well as other areas such as your lower back, buttock or knee. It is important you take your prescribed pain relief in order to help with this pain. You may also notice some swelling around the hip and groin. This is normal and should go down over the first few days.

You may find that after the operation you have some pain at the front of your hip, near where the scars are. This area and the area around your hip bone may also feel tender to the touch. This can be due to inflammation of one of the tendons around the hip. Unless there are any contra-indications (reasons why two drugs or procedures should not be used together) we would recommend regular anti-inflammatory tablet usage for the first two weeks after surgery to help with this. Using an ice pack over the area may also help. Your physiotherapist should also be able to recommend some stretches for this area.

Walking – You may need to stay overnight following your hip arthroscopy. You will be seen by a physiotherapist following your surgery and they will teach you some initial exercises as well as help you to learn to walk with the use of crutches. How much weight you are allowed to put through your operated leg depends on the surgeon's instruction. If your weight bearing is restricted, this can be for up to for 6 weeks but depends on the procedure the surgeon has performed. If you have stairs at home your physiotherapist will show you how to manage these safely.

Wound care – It is normal for the wound sites to sometimes leak a little bit of blood or fluid in the first few days after your surgery. The nursing staff will discuss taking care of your wound with you. You will need to see a nurse at your doctor's surgery to have the stitches taken out at about 10-12 days after your surgery.

Driving – You can drive once you are fully weight bearing and it is comfortable to do so. You must be able to perform an emergency stop without hesitation. It is also a good idea to check the terms of your motor insurance policy with your insurance company to ensure it is valid, as some policies state you must not drive for a certain period of time following an operation.

Work – You may return to work when the pain has settled and you are confident that you can manage. If your job is not physically demanding, this can be after 1-2 weeks. However, if you have a physically demanding job this can be longer, taking up to 8-12 weeks. An initial sick certificate can be provided by the ward – please ask the nurse before you leave the ward. Subsequent certificates will need to be obtained from your GP.

Sports – Return to sports will depend on what you have had done during your hip arthroscopy. You will need to stop doing sports until you are fully weight bearing. Even at this point you should avoid any impact sports or swimming breast stroke. It can take up to 3-6 months before you are able to return to competitive sports. It is important you follow the advice from your surgeon and physiotherapist.

Rehabilitation – This usually begins within 1-2 weeks of your hip arthroscopy. A physiotherapist will assess you and provide you with some exercises. Depending on the assessment findings your physiotherapist may refer you for hydrotherapy (pool) treatment. However, not every patient requires this. It is very important that you do the prescribed exercises as they will help to build the strength in and around your hip. Your physiotherapist will then continue to review you and progress your exercises as necessary.

Follow up appointment – You will have an appointment to see the consultant or a member of their team at 6 weeks after your operation. Questionnaires will be sent out electronically for you to complete about how your hip is feeling after the operation. You will also be sent these to complete at 3, 6, and 12 months post operatively.

Complications

All surgery carries the risk of complications and these will be explained to you before your operation. However, in general, the risk of complications from an arthroscopy is very small. Complications can include:

- General complications following an anaesthetic such as: inability to pass urine, constipation, blood clot in the leg(s) and/or lungs.
- Swelling Some swelling is normal following the operation, but if you notice that either your calf or thigh has become very swollen, tender, red and / or hot then it is important that you see your GP or attend the Emergency Department (A&E).

Specific complications relating to hip arthroscopy include:

- Non-improvement / recurrence of symptoms

There is a chance that following the arthroscopy your symptoms do not improve. This is more common if the surgeon finds you have arthritis in your hip joint. Cartilage tears can also occur again following your surgery depending on your activity levels.

- Infection

This is very rare following hip arthroscopy. It is important to keep your wounds clean and dry following your operation. If infection occurs it is often superficial and can usually be treated with antibiotics. In very rare circumstances, if the infection involves the joint it may need further surgical treatment.

- Numbness

The traction applied to the legs to separate the hip joint can result in injury to nerves in the leg. This can manifest itself as numbness in the leg that usually will recover within hours of the surgery; however, occasionally slight loss of feeling over the upper and outer aspect of the thigh can persist for much longer. Occasionally, some patients may experience numbness in the groin; but this is rare and almost always resolves within 24 hours.

- Failure of the labrum to heal

When the labrum is repaired surgically it still then needs to go through a healing process to ensure success. If this is Impaired for whatever reason, there can be a recurrence of symptoms, which may warrant further investigation and treatment.

- Development of fibrous bands (adhesions) within the joint

Over time, this can cause pain and stiffness of the joint. Rehabilitation is the main treatment to prevent/ treat this but sometimes further surgery may be required.

- Heterotopic ossification

New bone formation can occur in the soft tissues around the hip after surgery. This can lead to restricted movement and / or pain. In extreme cases further surgery may be needed. Taking anti-inflammatory medication after surgery (unless contra-indicated) will help to reduce this risk.

- Vascular complications

These are very rare but there is potential for damage to blood vessels causing bleeding.

- Scars

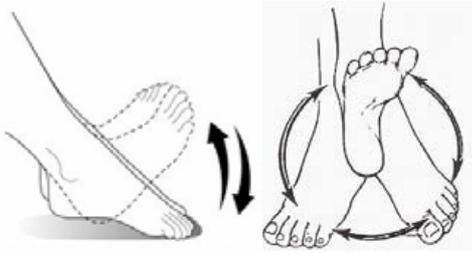
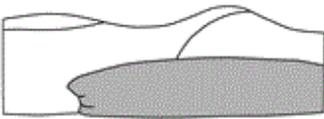
You may always notice the scars from the incision sites. The colour and tenderness of any scars can be minimised by using creams such as E45 or vitamin E oil or Bio-oil. The scars do tend to fade over a period of many months.

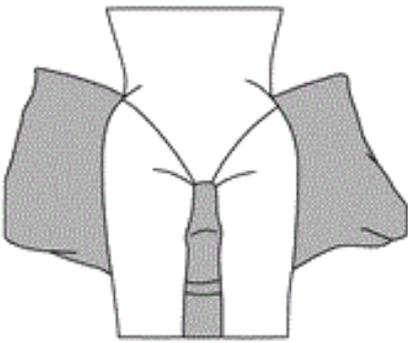
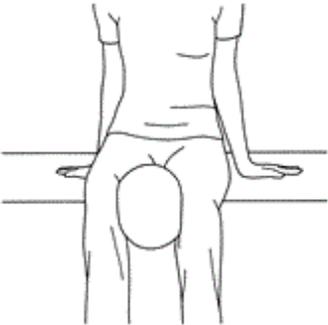
- Progression of degenerative changes (wear and tear) within the joint

Hip arthroscopy is part of a spectrum of treatment options for hip problems. Sometimes degenerative changes may progress and other treatments may be necessary including injections or even a hip replacement.

Initial exercises

You will be taught these exercises by your physiotherapist following your operation. You should begin these straight away and do them at least 2 times a day. Only do the ones recommended to you by your physiotherapist.

<p><u>Circulatory exercises</u></p> 	<p>Point and bend your ankles. Rotate them in circles. Complete at least 10 of each exercise.</p>
<p><u>Core stability exercise</u></p>  <p>©Elsevier</p>	<p>Lying on your back with hips and knees bent and neck and back muscles relaxed. Breathing in - tighten the pelvic floor muscles. Breathing out - lift the pelvic floor and activate deep abdominal muscles. Repeat at least 10 times.</p>
<p><u>Multifidus and core stability exercise</u></p>  <p>©PhysioTools Ltd</p>	<p>Lying face down with your hips over a pillow and back relaxed. Pull the stomach up and in to hollow the lower lateral abdominals. Maintain this abdominal hollow and gently squeeze both buttocks to flatten the low back. Sustain this contraction. Hold for the count of 10. Repeat 10 times. (adpt Sahrman PhD, PT)</p>
<p><u>Static gluteal contraction</u></p>  <p>©Elsevier</p>	<p>Lying face down with your hips over a pillow and back relaxed. Breathing in - tighten the pelvic floor muscles. Breathing out - gently lift the pelvic floor muscles, hollow the lower abdominal area just above the pubic bone and squeeze the lower portion of the buttocks towards the midline. Continue this action until the lower</p>

 <p>©Elsevier</p>	<p>buttocks are firmly contracted.</p> <p>Breathing in - slowly and at the same time release the buttocks and abdominal muscle contractions.</p> <p>Breathe out.</p> <p>Repeat 10 times.</p> <p><u>Progression</u></p> <ul style="list-style-type: none"> - The buttocks contraction can be sustained for two or three breaths. - One side of the buttocks can be exercised whilst the other side remains relaxed.
<p><u>Static quadriceps contraction</u></p>  <p>©PhysioTools Ltd</p>	<p>Sit or lie with your legs out in front of you.</p> <p>Bring your toes up towards you and push the back of your knee into the bed by tightening your thigh muscles.</p> <p>Hold for the count of 10.</p> <p>Repeat 10 times.</p>
<p><u>Static hamstrings contraction</u></p>  <p>©PhysioTools Ltd</p>	<p>Sit or lie with your legs out in front of you.</p> <p>Pull your toes up towards you.</p> <p>Dig your heel down into the floor / bed. You should feel the muscles at the back of your thigh working hard.</p> <p>Hold for the count of 10.</p> <p>Repeat 10 times.</p>
<p><u>Static adductor contraction</u></p>  <p>©PhysioTools Ltd</p>	<p>In sitting with feet supported on the floor.</p> <p>Place a ball or rolled up towel between your knees.</p> <p>Squeeze your lower stomach and bottom muscles.</p> <p>Gently squeeze the ball / towel with your knees. You should feel your inner thigh tense.</p> <p>Hold for the count of 10.</p> <p>Repeat 10 times.</p>

Static abductor contraction



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Sitting on a chair with feet supported on the floor. Put a rubber exercise band around your knees.

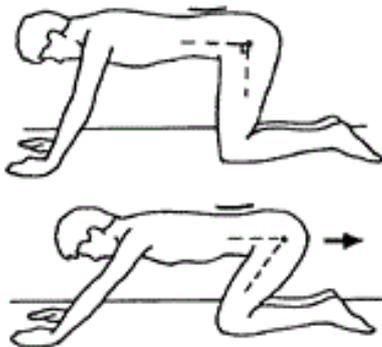
Squeeze your lower stomach and bottom muscles.

Push your knees apart into the band (there should not be very much movement).

Hold for the count of 10 and slowly bring knees back together.

Repeat 10 times.

4 point kneeling rocking



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Kneel on hands and knees with the knees under the hips and the back relaxed in a neutral position. (Feet relaxed).

Keeping the back flat, slowly rock backwards moving at the hips.

Do not let the back bend or arch.

Stop after a short distance or before the onset of any pain.

Only move backwards as far as the controlled flat back allows. Move slowly and do not stretch.

Repeat 10 times (adpt Sahrman PhD, PT).

Hip internal rotation



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Kneel on hands and knees with the knees under the hips and hands under the shoulders.

Keep the back relaxed in a neutral position. (Feet relaxed).

Keeping knees still, take feet apart. Slowly return feet to start position.

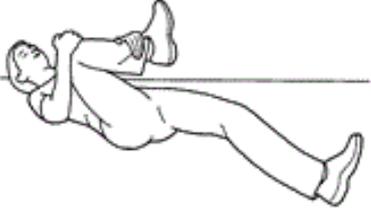
Repeat 10 times.

Alternative position:

Sit with knees and feet together.

Bring your feet apart with heels leading and toes turned in. Return to starting position.

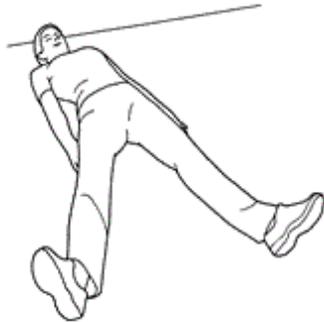
Repeat 10 times.

<p><u>Hip external rotation</u></p>  <p>©PhysioTools Ltd</p>  <p>©PhysioTools Ltd</p>	<p>Lying with your knees bent and feet on the floor hip width apart.</p> <p>Turn the soles of your feet to face each other and allow your knees to fall outwards. Feel the stretch in your groin. Keep your back flat on the floor during the exercise.</p> <p>Slowly return knees to start position.</p> <p>Repeat 10 times.</p> <p><u>Alternative position:</u></p> <p>Lying on your back with one leg bent. Put one hand on your knee and the other one on your ankle.</p> <p>Rotate your leg outwards, bringing your ankle towards the opposite shoulder.</p> <p>Slowly return leg to start position.</p> <p>Repeat 10 times.</p>
<p><u>Heel slides</u></p>  <p>©Elsevier</p>	<p>Keeping the hip neutral in rotation, slowly slide the heel along the floor until the leg is straight.</p> <p>Breathing in - maintain abdominal muscle engagement and at the same time bend the hip and knee to slide the leg to the starting position. Help guide the movement with your hands or a towel / belt if it is painful. Breathe out.</p> <p>Repeat 10 times.</p> <p>NB: The lower back should remain neutral and stable throughout. Breathing in as the hip bends enhances lower back stability.</p>
<p><u>Hip extension in lying</u></p>  <p>©PhysioTools Ltd</p>	<p>Lying face down. Squeeze your lower stomach and bottom muscles (see static gluteal contraction exercise already stated).</p> <p>Lift your leg up behind you towards the ceiling keeping your knee straight.</p> <p>Hold for 10 seconds. Lower your leg slowly.</p> <p>Repeat 10 times.</p>

Hip abduction in lying



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Lying on your back. Squeeze your lower stomach and bottom muscles.

Slowly take your leg out to the side as far as is comfortable. Slowly bring your leg back into the mid position again.

Repeat 10 times.

N.B. This exercise can be made easier by placing something shiny / slippery under your heel e.g. a plastic bag or tray.

Hip flexion in standing



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Stand with your hands supported on a firm surface or on your hips if you are able to maintain your balance well.

Squeeze your lower stomach and bottom muscles.

Raise your operated leg up towards your chest. Do not push into discomfort.

Keep stomach and bottom muscles tensed as lower leg.

Repeat 10 times.

Hip abduction in standing



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Stand with your hands supported on a firm surface.

Keep your body upright and with your hip, knee and foot facing forwards move your operated leg out to the side.

Slowly return to the starting position.

Repeat 10 times.

Hip extension in standing



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Stand with your hands supported on a firm surface.

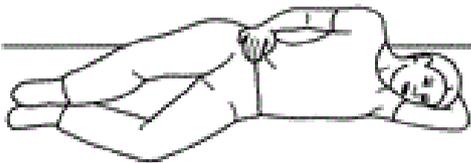
Keep your body upright and with your hip, knee and foot facing forwards move your operated behind you.

Do not arch your back or lean forwards.

Repeat 10 times.

The following exercises may be added in once your hip is feeling more comfortable. Your physiotherapist will be able to guide you.

Clams



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Lie on your un-operated side with your knees bent.

Tighten your buttocks and stomach muscles.

Lift your top knee as far as you can, without letting your pelvis rotate forward or back. Keep your feet together and back straight during the exercise.

Hold for 10 seconds. Lower your leg slowly.

Repeat 10 times.

Bent knee fall outs



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Lie on your back with one leg bent and the heel beside the straight knee. Your back should be flat and your pelvis should be level without any twist.

Squeeze your stomach muscles to keep the back flat and slowly let the bent knee lower out to the side.

Do not let the pelvis twist or rotate at all.

Only move the leg as far as the flat back and level pelvis allow.

Slowly return to the start position maintaining control of the pelvis during the return.

Repeat 10 times. (adpt Sahrman PhD, PT).

Bridging



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Lying on your back with knees bent.
Squeeze your lower stomach and bottom muscles.
Lift your bottom off the floor (do not arch your back).
Hold for count of 10.
Return to starting position.
Repeat 10 times.

Hip abduction in side lying



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Lying on your side supporting yourself on your elbow. Roll top hip slightly forward, use top arm to support yourself in front.
Keeping top leg straight lift it up towards the ceiling to hip height. Make sure the leg stays in line with your body and toes point forwards.
Repeat 10 times.

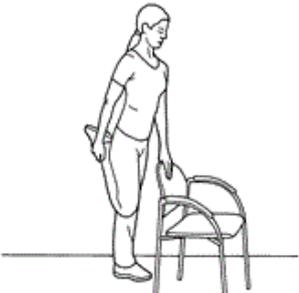
Please note: During the above exercises you should not push into pain but mild discomfort is acceptable.

As is usual with any new exercise, your muscles may ache and you may experience new aches and pains for a few days but these should settle. If they do not, try to establish the aggravating exercise and leave this out of your exercise programme for a few days and then try again.

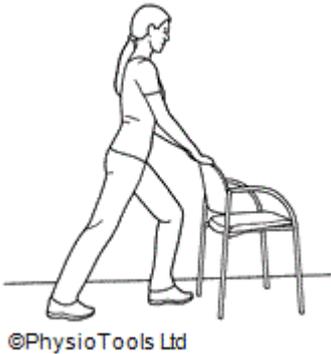
Exercise pictures © Physio Tools Ltd.

Stretches

Maintaining range of movement at your hip is very important post operatively. To help with maintaining or improving the range of movement at your hip, it is important to perform the following stretches along with your exercises.

<p><u>Anterior hip stretch</u></p>  <p>©PhysioTools Ltd</p>  <p>©PhysioTools Ltd</p>	<p>Stand straight with one knee bent and the foot supported on a stool as shown.</p> <p>Bend your straight leg until a stretch is felt at the front of the thigh on the other leg.</p> <p>Hold for count of 30.</p> <p>Repeat 6 times.</p> <p><u>Alternative position:</u> Half kneeling.</p> <p>Tighten your stomach muscles to keep your back straight. Rotate the heel behind you outwards while pushing your hip forwards.</p> <p>Hold for count of 30.</p> <p>Repeat 6 times.</p>
<p><u>Quadriceps stretch</u></p>  <p>©PhysioTools Ltd</p>	<p>Stand holding on to a support with one hand and to your ankle with the other hand.</p> <p>Keeping your knees together, gently pull your ankle towards your bottom.</p> <p>You should feel a stretch down the front of your thigh.</p> <p>Hold for count of 30.</p> <p>Repeat 6 times.</p>
<p><u>External rotation stretch</u></p>  <p>©PhysioTools Ltd</p>	<p>Sitting on a chair with your foot on the opposite knee.</p> <p>Gently push your knee towards the floor.</p> <p>Hold for count of 30.</p> <p>Repeat 6 times.</p>

<p><u>Adductor stretch</u></p>  <p>©PhysioTools Ltd</p>	<p>Lying with your knees bent and feet on the floor hip width apart.</p> <p>Turn the soles of your feet to face each other and allow your knees to fall outwards. Feel the stretch in your groin. Keep your back flat on the floor during the exercise.</p> <p>Hold for count of 30.</p> <p>Repeat 6 times.</p>
<p><u>Piriformis stretch</u></p>  <p>©PhysioTools Ltd</p>	<p>Sit on the floor with one leg straight and the other leg crossed over it.</p> <p>Bring your knee towards your opposite shoulder. Feel the stretch in your buttock.</p> <p>Hold for count of 30.</p> <p>Repeat 6 times.</p>
<p><u>Hamstring stretch</u></p>  <p>©PhysioTools Ltd</p>  <p>©PhysioTools Ltd</p>	<p>Stand with the leg to be stretched on a footstool.</p> <p>Flex your ankle and push the heel towards the footstool keeping your knee straight.</p> <p>Bend your upper body forwards from your hips keeping your back straight. You should feel the stretching behind your knee and thigh.</p> <p>Hold for count of 30.</p> <p>Repeat 6 times.</p> <p><u>Alternative position:</u></p> <p>Lie on the back with both legs straight. Bend one hip to 90 degrees and hold the thigh in this position. The knee should be relaxed.</p> <p>Holding the thigh in position, slowly straighten the knee until a stretch is felt at the back of the thigh. Sustain this stretch.</p> <p>Hold for count of 30.</p> <p>Repeat 6 times.</p>

<p><u>Calf stretch</u></p>  <p>©PhysioTools Ltd</p>	<p>Stand in a walking position with the leg to be stretched straight behind you and the other leg bent in front of you. Take support from a wall or chair.</p> <p>Lean your body forwards and down until you feel the stretching in the calf of the straight leg.</p> <p>Hold for count of 30.</p> <p>Repeat 6 times.</p>
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Exercise pictures © Physio Tools Ltd.

Stages of rehabilitation

Stage 1 – Initial phase (Week 1-3) (Improving range of movement)

Aims:

- Reduce pain and swelling.
- Normalise your walking pattern depending on weight bearing status.
- Improve hip muscle strength and core strength.
- Improve movement at your hip, including rotation.
- Improve your balance.

Stage 2 – Intermediate phase (Week 3-5) (Strengthening)

Aims:

- Improve muscle strength by functional exercise – Step ups/down, static bike etc.
- Improve core strength (the muscles in your abdomen, back, pelvic floor and hips).
- Improve balance – double leg to single leg.
- Maintain cardiovascular fitness – Swimming – no breast stroke, static bike, walking on treadmill (if walking pattern normalised).
- Improve movement.
- Complete hydrotherapy; if appropriate.
- Week 6 – Consultant review and completion of HOOS/ functional questionnaires (electronically).

Stage 3 – Advanced phase (Week 5 -12) (Stamina)

Aims:

- Improve muscle endurance.
- Full hip range of movement with stable pelvis.
- Good core control and stability (have strong and flexible muscles in your core).
- Improve cardiovascular fitness.
- Begin plyometric work – fast, change of direction exercises useful for sport.
- Week 12 – Consultant review and completion of HOOS/ functional questionnaires (electronically).

Stage 4 – Sports specific rehab (Week 12+)

Aims:

Designed for people who want to return to competitive sport.

- Gradually return to maximal effort
- Challenge balance.
- Complete full impact activities.
- Begin sport training before returning to full competition.
- Eliminate asymmetries in activities such as running.

Goals:

- Return to full sporting activity. Depending on what procedures were performed on the hip it may not be advisable to return to high impact exercise such as running, rugby etc.
- Consultant review at 6 months and 1 year – Completion of HOOS and functional scores (electronically). Discussion around return to sports/activities.

Post-operative progress:

As listed above you will be reviewed at regular intervals at the Royal Berkshire Hospital by a specialist physiotherapist, who will assess your progress. The most important component of your recovery is your regular attendance at physiotherapy classes where you will be given strict instructions regarding appropriate exercises and the 'dos and don'ts'.

At certain points before and after your surgery we will be going through one or two questionnaires with you to provide us with information about your functional improvement not only to make sure you are getting better but also to ensure that our surgery has been successful for our own records. Your co-operation in this will be much appreciated.

Useful numbers and contacts

Redlands Ward: 0118 322 7484 / 7485
RBH Outpatient Physiotherapy: 0118 322 7811

Wokingham Physiotherapy: 0118 949 5109
West Berkshire Physiotherapy: 0163 5273362
Clinical Admin Team (CAT 5) 0118 322 7415 rbbh.CAT5@nhs.net

For more information about the Trust visit our website: www.royalberkshire.nhs.uk

This document can be made available in other languages and formats upon request.

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