

Physiotherapy following peri acetabular osteotomy (PAO) surgery

This leaflet explains more about returning to your everyday activities after your peri acetabular osteotomy (PAO). It explains the exercises you should do each day, things to look out for and some general advice about activities, such as driving and returning to sport.

If you have any further questions, please speak to your doctor or your physiotherapist caring for you.

What is the procedure?

The operation of **peri acetabular osteotomy** is designed to move the socket (acetabulum) of the hip joint so that it covers more of the femoral head (ball). The aim is to improve the biomechanics of the hip joint and reduce the high stresses that start to cause damage and arthritis because of the shallow acetabulum.

What do I need to avoid doing?

The operation involves a series of bone cuts around the acetabulum, freeing it from the pelvis and allowing it to be moved to a new position; it is then fixed in place with 3 screws. The bone usually takes 6-8 weeks to heal. To ensure this heals correctly, you will be **partial weight bearing** or advised to place no more than **twenty kilograms** of your weight through your operated leg. Your physiotherapist will help you with this.

Your physiotherapist will provide you with elbow crutches and teach you how to walk with them **partial weight bearing**.

How can I protect my hip?

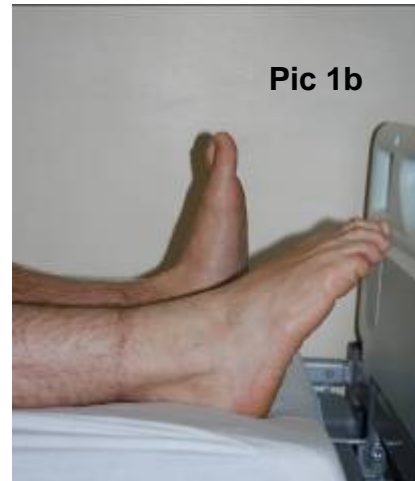
To help your hip heal correctly, follow these precautions/advice for the first 6 weeks:

- Try not to stand for long periods.
- If your leg becomes painful and/or swollen, elevate your leg on a stool. You can make an ice pack by wrapping a damp towel around a packet of frozen peas and place it on your operated hip for fifteen to twenty minutes. Repeat three to four times daily. Never place ice directly onto your skin as it can burn.
- Avoid lifting your leg up straight. The therapy team will advise you how best to get in and out of the bed and chair.

Will I need to do any specific exercises?

Your physiotherapist will teach you the exercises below. These exercises need to be completed at least three times a day starting the day after your operation. You should continue to do these exercises at home as it is important the hip does not stiffen up.

1. Lying on your back or sitting down. Pull your ankles up (**Pic 1a**) and down (**Pic 1b**) slowly then briskly. Repeat this **20** times. This exercise helps to prevent blood clots.



2. Lying on your back with your legs straight pull your toes up to the ceiling and push the back of your knee down firmly against the bed. Hold 5 seconds then relax. **Repeat 10 times (Pic 2).**



3. Lying on your back or sitting in a chair. Squeeze your buttocks firmly together and hold for 5 seconds then relax. **Repeat 10 times.**
4. Lying on your back. Bend your operated leg and place a pillow or rolled up towel under you knee (**Pic 3a**). Now push the back of your knee into the pillow or towel and pull your toes up at the same time (**Pic 3b**). Your knee should straighten and your heel should lift off the bed. Hold for 5 seconds then relax. **Repeat 10 times.**



5. Lying on your back. Bend and straighten your operated leg as far as comfortable. **Repeat 10 times (Pic 4).**



6. Lying on your back. Point your toes to the ceiling. Next slide your operated leg out to the side and then back to the starting position. You may need assistance initially for this exercise. **Repeat 10 times (Pic 5a & 5b).**



7. Stand holding onto a chair or kitchen work surface. Keep your operated leg straight, take it backwards and then bring back to the start position. Hold for 5 seconds. Do not lean forwards. **Repeat 10 times (Pic 6).**



8. Stand holding onto a chair or kitchen work surface. Bend your knee of your operated leg up forwards and lift your foot off the floor. Hold this position for approximately 5 seconds then relax. Aim to get your knee level with your hip. **Repeat 10 times (Pic 7).**



Will I be in pain?

You should expect a moderate amount of pain following your operation. You will be prescribed pain killers and it is important you take these regularly as prescribed by the doctor looking after you so you can complete your exercises. No matter how well your pain is controlled your hip may still hurt. The hip, thigh and groin will be swollen and bruised for up to six weeks.

When can I leave hospital?

You will be able to leave hospital when you can walk safely on your own with elbow crutches and can complete the exercise programme on this leaflet. This is normally three to four nights. If you have stairs at home please let your physiotherapist know so that they can teach you how to do them safely.

Will I receive ongoing physiotherapy?

When you are discharged home you will be referred for ongoing outpatient physiotherapy at Guys and St Thomas' Hospitals or at your local hospital. It is important to continue the exercises you have been taught in hospital when at home.

Physiotherapy is absolutely vital following your surgery. Crutches must be used to protect the screws holding the new hip position for the first six weeks. Hydrotherapy (exercise in a heated pool) is very useful during this period if available. After your six week outpatient appointment with your surgeon, you will be advised if able to fully weight bear without crutches and can start to increase your exercise repetitions and expand your choice of exercise. Once you have come off crutches at six weeks it is strongly encouraged you use an exercise bike, starting with low resistance. As the surgical discomfort subsides you will become more confident achieving goals set by your physiotherapist, with a move from static bike, to cross trainer and finally treadmill.

Muscles take many weeks to recover not only from the surgery but also, more importantly, the long term effect of the hip problem itself prior to surgery. After two or three months, physiotherapy can become more spaced out as the emphasis of rehabilitation moves from the physiotherapy practice to patient's own gym. Please be guided by your physiotherapist.

When can I return to normal activities?

Work:

It is advisable to take eight weeks off work, but this varies between individuals and on your type of job. The first two weeks after surgery should be dedicated to your recovery so you should not work at all during this time. It is realistic to start desk based work at home after the third or fourth week, with the potential to return to the office for the odd half-day after six weeks, provided your journey is manageable.

Returning to full time work is usually possible after eight weeks, again depending on how physically active your job requires you to be. Be aware it will initially be tiring being back at work and your rehabilitation will be ongoing, so setting time aside for exercise and your physiotherapy appointments is still required.

Sport:

By three or four months, the hip should function almost normally in day-to-day life. You should resume your normal gym activities, although at a lower intensity. Further improvements are expected over the next three to six months and a full recovery is really determined by your sporting goals. As a general guide, running and team sports are possible after six months. The hip will continue to improve for up to a year after surgery. Please be advised by your consultant and your physiotherapist at your follow up appointments.

Driving:

Once you are able to start fully weight bearing, are confident walking without crutches and can get in to and out of a car unaided and be able to do an emergency stop then returning to driving is reasonable after a minimum of at least eight weeks. Always check with your insurance company before driving after your surgery as they may refuse to meet a claim if they feel you have driven too soon.

Occupational Therapy:

An occupational therapist will be available on the ward to assist in learning how to perform your daily activities like bathing and dressing. You may require equipment and they can discuss any specific needs you may have after your surgery to make life easier and safe.

What should I do if I have a problem?

If you experience any of the following below see your GP as soon as possible.

- Sudden increase in swelling around the wound or the limb area
- The dressing has become loose or become wet and requires changing
- The wound starts to smell and the wound starts to ooze
- The wound is more tender and you are experiencing more pain
- The wound starts to bleed
- You have a temperature or start to feel unwell

Contact us

If you have any questions or concerns about your physiotherapy, please contact the orthopaedic physiotherapy team on 020 7188 5432 (Monday to Friday, 8.30am to 6.30pm).

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk

w: www.guysandstthomas.nhs.uk/membership