

PERI-ACETABULAR OSTEOTOMY

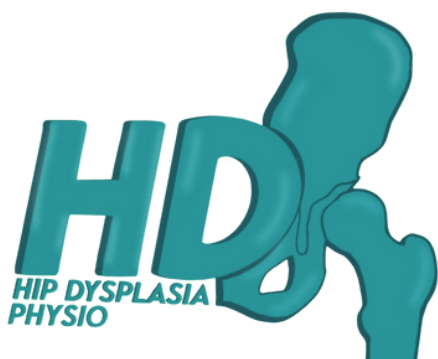


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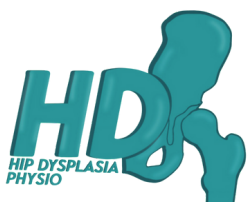
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What is Hip Dysplasia?

Developmental Dysplasia of the hip is an umbrella term used to describe various bony abnormalities which result in poor containment of the ball of the hip (femoral head) with the hip socket (acetabulum). It is a condition where the hip joint has not developed properly and this can affect; the shape of the bones, the orientation of the ball or socket, or all the above.

Ultimately there is a mismatch in the fit of the ball into the hip socket, meaning that the femoral head is not held tightly in place and therefore increased movement (shearing) occurs.



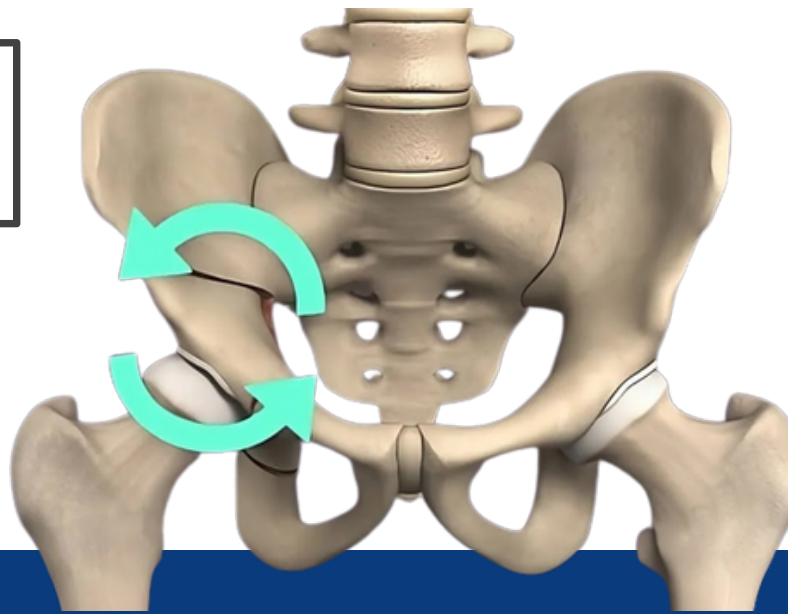
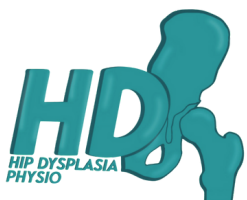
What is a Peri-acetabular Osteotomy (PAO)?

A pelvic osteotomy is considered in patients who demonstrate symptomatic acetabular dysplasia with minimal signs of joint degeneration (Tonnis grade 0-1) and who have failed conservative management.

A Peri-acetabular osteotomy (PAO) is designed to help improve the biomechanics of the hip joint, improve coverage of the hip joint and therefore reduce load on the painful structures such as the labrum and acetabular rim. It is extensive surgery which requires making an incision in the bikini line of approximately 8-12 cm, three cuts in three different areas of the pelvis in order to free the hip socket, this then allows reorientation of the socket in any plane (direction) required to optimise the coverage over the femoral head. Screws are then used to hold the bones in the correct place whilst they are healing.



Please review this video on PAO by Understand.com:
<https://www.youtube.com/watch?v=XixpV7f18Fo>



What is a PAO continued?

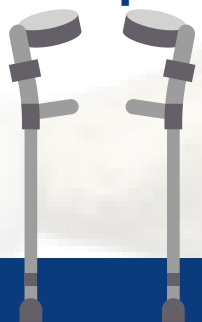
The bone cuts usually start to heal after about 6–8 weeks, then heal further over 12 weeks, and are fully healed after about 1 year.

For the first 6 weeks, you can only put a small amount of weight (up to 20 kg) on your operated leg — just enough to touch your foot flat on the ground. You will use two elbow crutches to help you walk and keep the touch weightbearing status on your operated leg for 6 weeks.

At 6 weeks, you will see your consultant team for a check-up and an X-ray to see how your bones are healing. If everything looks good, you can then start to put about half of your body weight through your operated leg.

At 12 weeks, you will have another check-up and X-ray. If your bone is healing well, you can start to put full weight on your leg. You might still use one crutch after this to make sure you walk properly. It's okay if you need crutches for 4 months or more — it's better to walk correctly and let your muscles work the right way, as coming off the crutches too early can lead to altered movement patterns and muscle compensations, so do not worry if you are on crutches for 4 months or more- it is better to optimise your movement patterns.

The screws used in your surgery can sometimes be felt under the skin or rub against clothes. If the bone has healed well after about 1 year, your doctor may remove the screws. This is a small, quick operation, and you can usually go home the same day. Your consultant team will advise you if you require the screws removed at your follow up appointments.



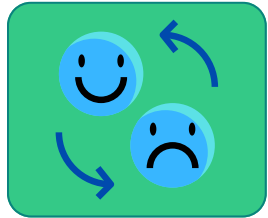
Pre-op X-ray



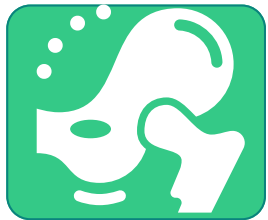
Post-op X-ray



Outcomes of PAO

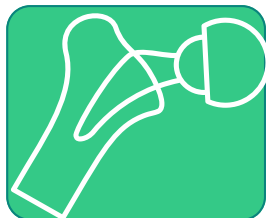


The operation aims to improve how the joint moves and to lessen pain from the condition. A 2020 (Holleyman et al) study found that 9 out of 10 patients showed clear improvement one year after surgery. They had better hip movement and less muscle pain (Jacobsen et al, 2019) & improved recreational ability & activities of daily living (Berwin et al 2023).

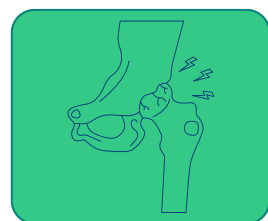


A 2022 systematic review by Hwee Inn Tan et al showed that:

- 75.9% of PAO patients still have their native hip at 10 years
- 36.5% of PAO patients still have their native hip at 20 years.



The operation can delay the need for a total hip replacement for up to 20 years in the vast majority of patients, and yield excellent results and pain relief (Matheney et al, 2010).



A study by Lerch et al 2017 showed that:

29% of patients, 1/3 of patients post PAO survive more than 30 years with good clinical results, no progression of Osteoarthritis (OA) or conversion to total hip replacement.

About 7 out of 10 people may have worsening joint problems over time. They might get more pain later on or may need a hip replacement within that 30 years.

Why have a PAO?



The surgery moves the hip socket into a better position so your hip works more evenly. This helps reduce pain in the hip and in the muscles around it. You can think of it like a car tyre. If the tyre is unbalanced, it wears out in one spot. If you fix the balance, the weight spreads out evenly and the tyre lasts longer. The surgery does the same for your hip — it helps your hip work better, hurt less, & may delay arthritis, so your own hip joint can last for many years.

When is a PAO not appropriate?



- Patients under 10 years old
- Advanced arthritis (Tonnis >2)- worse outcomes and less pain relief
- An incongruent (mismatched) joint
- Patients older than 40- If a PAO is to be performed then only appropriate if no osteoarthritis present, no cartilage degradation on MRI, good range of motion and congruent joint, with good general health
- Smoking- higher risk of non-union and wound issues (Lazar et al, 2023)
- Poor bone quality/vitamin D deficiency- higher risk of non-union (Lazar et al 2023)
- Obesity- >BMI above 30: Obese patients had an eleven fold higher risk of major complications compared to non-obese patients (Novais et al 2014)
- Psychological comorbidities- depression can significantly impair post-op outcomes (Fischer et al, 2023)



Risks associated with PAO Surgery



All operations carry risks & these will be discussed with you during your consultations & before being listed for surgery. You will have a general anaesthetic for the procedure. The risks associated with peri-acetabular osteotomy (PAO) can vary based on individual factors, surgical technique, & the surgeon's experience. However, some studies & clinical data provide approximate percentages for common complications. Keep in mind that these numbers can differ based on the patient population and healthcare facility. 82% of patients in a study of over 4000 PAO patients had good to excellent outcomes.

It's important to have a detailed discussion with your surgeon about the specific risks based on your condition, surgical approach, & any underlying health issues. Each individual's risk profile can vary.

1

Infection risk: 1% to 2%

Infections are a relatively rare complication but can occur at the wound site (5-10%) or within the joint (1-2%). Infection rates are slightly higher if you have a high BMI (body mass index) or smoke. Preventative measures such as antibiotics provided on the day of surgery, are typically used to minimise this risk. If you get a wound infection a course of antibiotics can be used to treat it, but sometimes further surgery is required.

2

Blood Vessel Injury and blood loss: Risk: 0.2%

Injury to major blood vessels around the hip joint is rare during PAO but can lead to significant complications like excessive bleeding or loss of blood supply to the femoral head, which could lead to avascular necrosis.

3

Nerve Injury: Risk: 1% to 6.14%

- Nerve damage is a potential concern, particularly with the femoral nerve or sciatic nerve. These nerves supply the leg and if they are damaged it can make the foot floppy or the leg weak. Most cases are temporary, but permanent nerve injury can occur in rare instances. Research in 2020 by Ali and Malviya, shows risk of sciatic nerve damage 1.18%, femoral nerve damage 0.32%.
- Lateral femoral cutaneous nerve (LFCN)-damage risk is slightly higher at 6.14%, this is temporary damage to the skin sensation in the lateral side of your thigh - the LFCN-(which only supplies the skin) as this can be compressed due to swelling post-operatively, or due to approach or due to traction during the operation. The LFCN does not affect hip function, just skin sensation.
- The common symptoms of LFCN issues are numbness, tingling, or burning in the lateral thigh. These symptoms often resolve over 3months-1 year post-op. Desensitisation work over the area can be beneficial & your physio or consultant team can help advise on this.

4 Intra-operative Fracture: **Risk: 0.66%**

Pelvic fractures or femoral fractures can occur during the surgery. This risk is generally low but may be higher in patients with underlying bone abnormalities.

5 Stress Fracture: **Risk: 4%-10%**

Due to the osteotomy sites increased load could lead to additional strain on the pelvis, which then could initiate a stress reaction & fracture in other areas of the pelvis. The majority heal without intervention. (Lazar et al, 2024 & Morris et al, 2022).

6 Hip Stiffness: **Risk: 10% to 20%**

Some patients experience decreased range of motion after PAO, though this can often be improved with Physiotherapy.

7 Delayed Recovery or Rehab Challenges: **Risk: Variable**

Recovery time is generally long (6 to 12 months), and some patients may experience delays in regaining full strength or range of motion. This depends on individual rehabilitation and adherence to postoperative protocols.

8 Progression to Osteoarthritis **Risk: Variable**

A PAO is done to help improve pain, protect your hip and delay arthritis, but there is still a chance that arthritis can develop later on. This depends on:

- How much damage your hip joint already had before surgery.
- How shallow your hip socket was.

The surgery helps make your hip joint look and work more normally, but it can't make it completely normal. Even though a PAO improves how the hip takes weight & moves, the joint might still wear down over time, & you might need a hip replacement in the future.

9 Nonunion or Malunion: **Risk: 2.21%**

The area where the cuts are made have a healthy blood supply but in rare cases there is the risk of the bones not healing properly. This might require further intervention to correct the healing.

10 Mal Correction: **Risk: <1%**

The correction is carefully planned and monitored with imaging during surgery, but there is a small chance that the correction may not be placed correctly.

11 Pain or Failure to Relieve Symptoms: **Risk: 2-11% of patients may require a further surgery with a hip arthroscopy.**

In some cases, PAO may not relieve hip pain or improve function as expected. If symptoms persist, additional treatments like hip arthroscopy or hip replacement may be needed.

12 Blood Clots (Deep Vein Thrombosis (DVT, PE): **Risk: <1%**

After any big surgery, especially on your legs or hips, there is a small chance of getting a blood clot.

To help stop this from happening, you'll need to:

- Take blood-thinning medicine (injections or tablets) for 6 weeks after surgery.
- Wear your TED stockings (tight socks for your calves) for 6 weeks.
- Start moving and walking as soon as your doctors say it's safe.

These things all help your blood flow properly and stop clots from forming.

A serious type of blood clot is called a Pulmonary Embolism (PE). This happens when a clot travels to your lungs and gets stuck. It can cause chest pain and sudden shortness of breath.

Doing your exercises, taking your medicine, and wearing your stockings all make this problem much less likely to happen.



Issues that may arise after the surgery:

- It's normal for your hip pain to go up and down during recovery. After the bone starts to heal, the pain usually gets better. Using crutches for a long time gives your hip a rest, but it also makes your leg & tummy (core) muscles weaker. These muscles were also moved a bit during the operation. When you start walking more & using your muscles again, you might feel different kinds of pain. This is normal and part of getting stronger.

Category	Issue	Evidence/references
Muscle–tendon pain	Iliopsoas, rectus femoris or gluteal pain; strongly linked to worse patient reported outcomes post PAO	Jacobsen et al 2019
Persistent groin or buttock pain especially with activity, even after a technically good PAO.	Often multifactorial, residual dysplasia, labral pathology, or muscle-tendon irritation	Clohisy et al, 2017
Nerve symptoms	Lateral femoral cutaneous nerve (LFCN) a nerve in anterior/lateral thigh, which causes numbness. Usually transient but occasionally permanent	Zaltz et al, 2023
Gait abnormalities / weakness	Hip abductor weakness or limp due to gluteal dysfunction or altered biomechanics post re-orientation	Novais et al, 2018
Hardware irritation	Localised pain from prominent screws, rubbing on clothing. Relieved by removal later	Ali and Malviya, 2020
Delayed or non-union	Pain from incomplete healing of osteotomy sites (Superior pubic ramus, ischium). Increased risk with high BMI and smoking	Matsunaga et al 2018
Overcorrection / undercorrection	Residual dysplasia (undercorrection), overcorrection may cause impingement	Novais, 2017, Tachibana, 2024
Progression to osteoarthritis / THA	Degenerative change despite PAO, especially with older age, Moderate OA or cartilage damage pre-op	Holleyman et al, 2020
Psychosocial and functional issues	Reduced activity tolerance, pain-related anxiety, delayed return to sport or work	Kaya et al, 2023, Murray & Downs, 2022

Alternatives to Surgery?

If you do not wish to have a peri-acetabular osteotomy then you can self-manage your hip pain with conservative measures.

There are no long term studies on the effect of physiotherapy on hip dysplasia, but improving your muscle strength with strength training exercises, general physical activity such as cycling or swimming, good core strength, activity modification, pain relief, weight loss & diet adjustments & use of aids such as sticks or crutches can all be beneficial.

A dysplastic hip with a labral tear can become minimally painful/non painful & be managed well with good conservative management. We do not have any studies on delay to arthritis progression with conservative management. The natural history of hip dysplasia is the development of arthritis earlier in life (up to 4 x more likely, Vinge et al 2023). Long-term management is key until there is a requirement for a hip replacement. A total hip replacement is usually advised when there is significant arthritis on x-ray, night pain, reduced range of movement- difficulty putting shoes and socks on & limitations with daily activity.

Ultimately, proceeding with a PAO is a huge decision and it may be beneficial to complete a pros and cons list specific to you, alongside goals:

Pros & Cons list:

Personal advantages to a PAO	Personal disadvantages to a PAO

Pre-op Assessment:

You will be reviewed by the consultant team and advised on the surgery and risks and given advice. This is a good opportunity to ask any questions you may have. You will also be assessed by the nurse where medical checks, height, weight, blood pressure, BMI, blood tests, & further x-rays, swab tests for MRSA etc will be completed. If you have any allergies please disclose these to the team at pre-op assessment so any modifications can be made (this includes medication & dressings). You will be asked to provide consent for surgery, during which the team will explain the operation, discuss associated risks, and confirm your decision to proceed. You may then either have a date for surgery or will be given one within the next 3 months.

- You will need to discontinue any birth control tablets 1 month pre surgery as they can increase risk of blood clots.
- Discontinue any anti-inflammatories such as ibuprofen, naproxen, aspirin, as this causes an increased risk of bleeding.
- Discontinue any opiate pain relief such as tramadol, as this can affect post-operative pain control response.
- It is good to supplement your diet with Iron, Vit D and Calcium for 3 months prior to surgery and for 2-3 months after. You can take over-the-counter ferrous sulfate (325 mg daily, providing 65mg iron), vitamin D (2000 IU daily), and calcium (1000 mg daily) to help support bone healing and maintain healthy iron levels. This will help with bone healing & iron levels post op.
- Quit smoking (whether tobacco, nicotine, marijuana, or vaping), as these all affect bone healing, increase your risk of infection and delay wound healing.

Day of the Operation:

You will be given a time to attend hospital, you will need to have starved from midnight the night before depending on the time of your operation, but this will be advised by the team. You will be seen by the consultant & anaesthetist on the day & consented for treatment. Then you will be called down to the anaesthetic room where you will be put under general anaesthesia.

What happens during the operation?

The procedure will take approximately 2-3 hours. The procedure is completed through a relatively small incision (8-12cm) in the bikini line (front of hip). The approach to the bones is done by reflecting some of the muscles surrounding the pelvis. 3 cuts are then performed in the pelvis around the hip socket- to free it from the pelvis and allow it to be moved into a more optimal position. There will be lots of scanning equipment in the surgery in order to ensure the optimal position is achieved, and pre-operative CT scans help with the surgical planning.

The muscles are reattached & the different layers are stitched. The deep fascia, muscle and subcutaneous tissues are closed with absorbable sutures (such as Vicryl or Monocryl). The surface skin wound will often be closed using absorbable stitches, & a dressing then applied over the top. Sometimes non-absorbable sutures are used but your team will advise on this.

The anaesthetist will monitor your vital signs during the surgery to ensure you are safe & all is well. There may be some blood loss during the surgery & your haemoglobin levels will be monitored post operatively, if low you may require a blood transfusion in some cases.

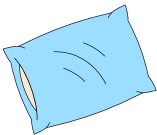
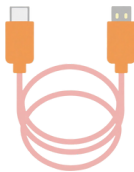
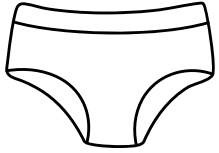
What can I expect once I wake from surgery?

- When you return from surgery you will have a catheter inserted in your bladder & also a small catheter in your wound with a local infusion pump which will continuously deliver anaesthetic to the wound for 48 hours. This will aid with your pain relief in the immediate post-op phase, alongside other pain medications.
- This wound infusion catheter will be removed on the wards by the nursing team after 48 hours, & the bladder catheter will be removed as soon as you are mobilising to the toilet or commode.
- The hip will feel very heavy & be difficult to move at first, & there will be some swelling which may track up and down the leg and around the pelvic area. There may also be some numbness at the front and side of the hip (this is normal & due to compression on the lateral cutaneous nerve, often from swelling, but sometimes from the surgery).
- Some people feel dizzy &/or sick after surgery. If this happens you will have anti-sickness medications prescribed. You usually do not need these to go home. Dizziness can be related to low blood pressure.
- You will need to have blood thinning medication prescribed to prevent an blood clots this may be subcutaneous injections into the stomach of Tinzaparin daily for 6 weeks or it may be a tablet like Aspirin or Rivaroxiban.
- Some patients may need laxatives post surgery due to becoming constipated. This may be due to side effects from opiate pain medication.

Pain relief post-op:

- It is very normal to have pain after a PAO.
- It's very important to keep your pain under control. This will help you move around more easily and get ready to go home. Work with your nurses to make sure your pain stays low and comfortable.
- Initially you may have a drip in your arm which is a PCA (patient controlled analgesia) which can provide morphine on demand- but does have a cut off if pressed too much. This is usually removed after a few days.
- Then different tablet medications can be used to control your pain: Opiates such as oxycontin, oxynorm usually in liquid form, Codeine or tramadol, Paracetamol.
- NSAIDs such as ibuprofen or Naproxen may be beneficial

What to pack to bring to hospital:



- Loose soft clothing
- You may want to buy some soft underwear that is a size or two larger than normal for the first few weeks post-surgery as swelling can be present. Some people like to wear more boxer style underwear.
- Body wipes or baby wipes
- Toiletries
- Extra-long charging cable
- Ear plugs/eye mask if on a ward
- Grip bottom socks so you don't slip
- Supportive slip-on shoes with a back that are not difficult to get on- backless slippers can slip off easily and may cause a trip.
- Try not to bring any valuables into hospital
- Dry shampoo
- Sanitary towels- sometimes surgery can cause changes in your cycle, it is best to wear a sanitary pad, rather than tampon as tampons can introduce bacteria into the vaginal canal, & after pelvic surgery your tissues are healing, & potentially more vulnerable to infection. The surgery may also cause swelling & tenderness in the pelvic region. There is no need to be concerned if your period starts the day of surgery, just let the surgical team know.
- Pyjamas or long nightie as easy to put on.
- You may want to bring your own pillow.

Predicted length of stay: 2-5 days, You will need to wear TED stockings in hospital which the nursing staff will help you to put on. You will be reviewed daily by inpatient Physiotherapy team, to assess bed/chair mobility, walker or crutches and flat foot touch weightbearing technique, & stairs. They will also teach phase 1 exercises to be done at home.

Discharge:

You can be discharged at any point during the day. You will require someone to drive you home from hospital, if you have a long journey it may be good to take regular breaks from sitting for long periods.

Criteria for discharge will be:

- Walking appropriately touch weight-bearing with crutches & safe.
- Navigate stairs correctly & safely
- Pain well controlled with oral medication.
- Tolerating food
- Able to get to the bathroom & opened bladder & bowels independently.



- On discharge you will leave hospital with pain relief for 6 weeks, you should have been referred to Physio & an appointment for wound care with GP. An Orthopaedic appointment will be made for 6 weeks time.
- You will be expected to wear TED stockings at home for 6 weeks.
- Dalteparin (injections will need to be taken daily for 6 wks- you will be sent home with the injections & a sharps box for disposal or sometimes aspirin or rivaroxiban tablets instead of injections (surgeon preference).
- Pain relief: Oral medications for 6 weeks.
- Try not to stand for long periods
- Try not to lift your operated leg straight up- it can be very painful on the osteotomy sites, the therapy team will teach you how best to move the leg to get into/out of chair & bed.
- You can use ice at home, wrapped in a damp towel, to reduce swelling.
- You may get circulation changes in your leg in the first 6 weeks, this can be a mottled appearance, red when standing etc, this is normal.

Home set up:

- Clear house of obstacles
- If bedroom and bathroom on same floor is ideal- as reduces requirement for repetitive stair use.
- If you can position your bed so you can get into bed non op side leading (first side to get into bed), so you can use your non-op leg to assist with getting into bed.
- Stock up on ready meals for the freezer as you may not feel able to cook at first.
- Due to using walking aids, cooking and carrying things will be difficult and you may need assistance.
- Having shopping delivered may be beneficial.
- You will be reliant on walking aids so heavy cleaning tasks will be difficult.

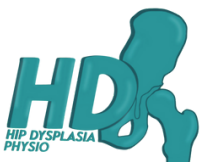


Caring for your wound:

- A nurse should change your dressing sometime within the first 10 days
- Observe for ooze on dressing or bleeding
- Keep an eye on the skin surrounding the wound
- Look out for: increasing redness, rash, increased swelling, opening of the incision site, night sweats or fevers. Speak with your GP or surgical team the same day if any of this is happening, as it may indicate an infection.

Looking after your mental health:

- Having a big operation can feel like a big change, and the first few weeks can be hard because you need help from other people. Make sure you rest a lot and sleep when you need to. Try to have friends or family visit if they can, and do small things for yourself when you feel able to.
- The medicine & anaesthetic (the drugs that help you sleep during surgery) can sometimes affect your sleep for a while, & you might not fall asleep until very late. That's okay — just be patient with yourself. Each day will get a little bit easier.
- Accept the recovery timeline, PAO recovery is slow and steady.
- Try not to compare yourself to others
- Set goals and make plans and celebrate small wins.
- Delay to diagnosis & managing long term pain in patients with hip dysplasia has been shown to affect mental health. hip dysplasia has been shown to be more than just a joint disease & living with pain can be very difficult when pain has a control on your life & functionally limits you from being active and independent.
- Stay connected with friends and family
- Maintain a gentle routine and try to keep some structure to your days when you feel ready.
- You may find meditating helpful or guided imagery.
- Seek GP advice if you are feeling in low mood.
- Nurture you- Eat well, sleep as much as is needed, engage in fulfilling activities that give you a sense of purpose beyond your hip.



Rehabilitation:

After discharge from hospital you will have an initial assessment with the outpatient Physio team- ideally at 2 weeks post op. You will also have a wound check with your local GP/Nurse at around 10 days post op, where any dressings are removed.

Hydrotherapy can be commenced after wound check and once you have been reviewed in outpatient physio. It is very useful in this protected weight-bearing stage, to enable range of movement of the hip and some muscle strengthening in a protected unloaded environment. It is worth investigating pre-operatively if there are local hydrotherapy centres or pool access that you can use, that are easy to get in, so you could go a few times a week once you have a program from your Physiotherapy team. You can walk freely in the water at chest height as the water is taking 75% of your body weight.

Rehabilitation:

Your rehabilitation starts on Day 1 post-surgery, in general rehab is split into 4 phases:

- **Phase 1:** 0-6 weeks- flat foot touch (up to 20kg) weight-bearing on crutches, The focus in this period is to protect the weight bearing, minimise pain & promote healing, increase mobility with crutches & minimise muscle wasting, & gradually increase hip range of motion as comfort allows. After 4 weeks further exercises can be added by your physio team.
- **Phase 2:** 6-12 weeks// post a check x-ray if all is healing well you will be progressed to 50% weight bearing & further exercises can be added by your physio team. Over the next 6 weeks you can gradually wean down to using 1 crutch. When you start to weight-bear you may get a little knee pain at times (this is normal).
- **Phase 3:** Post 12 weeks- 5 months// Check X-ray// The cuts should have healed by now & weight bearing can be progressed to fully weight-bearing. If a large correction has been undertaken, sometimes the pubic bone cut can take longer to heal & this can be up to a maximum of 18 months. It is important to continue to use 1 crutch until you can walk straight & correctly, without a limp or tilting over in your body as you walk. Coming off crutches too early can be detrimental & cause altered muscle patterning & lead to other soft tissue pain.

Phase 4: 5 months- 1 year: If you have achieved all your strength goals with your Physio team, then you can start some gentle impact exercises such as plyometrics & gentle jogging if ready from 5/6 months onwards as long as 12 wk scan showed good bone healing.

Frequently asked questions:

When can I drive?

It depends on which side has been operated on & if you have an automatic or manual car. If it is the left leg and an automatic car then it may be safe from 6 weeks as long as you can perform an emergency stop with your right leg. If you have a manual car with a clutch then from 10 weeks is possible. If it is your right leg then for safety of being able to perform an emergency stop we advise after 10 weeks. We also advise that you check with your insurance company prior to resuming driving.

When can I return to work?

The type of work you do will depend on when you can return to work. It is important to have time to recover & time for rehabilitation & we advise around 6 weeks, if you can work from home. If you have a very sedentary job you could work from home after 2 weeks, if you so desired. In general we advise 12 weeks off work to advise your employer. If you have a very physically active job with long commutes then 4-5 months is more reasonable to advise.

How long will I be on crutches?

You will be on crutches for up to 3-4 months on average, some people may be able to be walking without aids at 12 weeks, but continuing to use 1 crutch is vital until you no longer limp or tilt in your body. It is also related to muscle strength post-op. If using crutches causes discomfort in your hands, consider using tennis racquet grips, crutch pads, or Oarsome grips.

Frequently asked questions:

Will I need a Wheelchair?

It is not necessary to use a wheelchair, however if you are struggling with long distances on crutches & wish to go out to aid your mental health then it is possible to hire wheelchairs from various places- see what is available in your local area, or you may be able to pick ones up second hand on ebay. You can rent a wheelchair from the Redcross.

When can I sleep on my side?

Usually you will feel comfortable enough to sleep on your operated side- sometimes with a pillow between your knees from 6 weeks. It can be done after around 3 weeks if you sleep on the non-op side with a pillow between your knees.

It is normal for it to be painful when you cough, sneeze or laugh in the first 6 week?

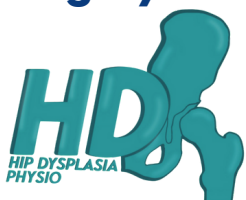
Yes- coughing, sneezing and laughing will all cause increased pain due to the cuts in the pelvis and increase in intra-abdominal pressure when you do these things.

When Can I return to the gym?

Usually after 6 weeks you can start body weight double leg exercise, or upper limb strengthening. Most people do not return to the gym until 10-12 weeks post op.

Why must I discontinue birth control prior to surgery?

Birth control tablets contain hormones which can increase the risk of having a blood clot, therefore it is vital that you discontinue any birth control tablets for at least 1 month prior to surgery & for 6 weeks post surgery.



Frequently asked questions:

When can I return to being intimate with my partner?

It is comfort based but usually within 6 weeks when some bony healing has occurred.

Does a PAO affect me having children or giving birth?

There is no contra-indication to having children or giving birth naturally after a PAO. There is no evidence that a PAO disturbs the birth canal in any way, therefore a c-section is not mandatory.

Will I set off metal detectors at the airport?

No- The screws used in a PAO do not normally set off metal detectors and therefore you would not be required to carry any card detailing your surgery or metalwork.

Will the Screws need to be removed?

In some cases the screw heads that are holding the socket in the corrected position can be prominent and rub on clothes like jeans and be very uncomfortable due to sitting just under the skin. If this is the case, the screws can be easily removed as a day case procedure under a general anaesthetic, and can be performed usually at a year post-op. There will be no restrictions with mobility post op and you can walk as normal. Screw removal does not cause harm to the bone. If you do not have issues with the screws then they can remain in with no issues.

Frequently asked questions:

When can I return to sports?

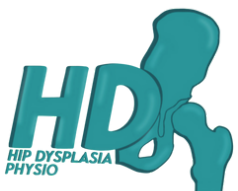
Patients can start to consider to return to sport under guidance of their Physio between 6-12 months post op. There are no long-term restrictions to sport or exercise and higher impact exercises can be returned to post-op. There is no short or long term data to say if you restrict high impact exercise then your joint will last longer than if you don't live your life and enjoy doing what you wish with your joint. However, there may be some efficacy in reducing high impact exercise in those who have some subtle arthritic change to the joint and severe hypermobility.

Will I need my other hip done?

Some patients with bilateral hip dysplasia may experience a flare up in their symptoms on the non-operated side post surgery, as you are relying on the other hip for mobility. This usually settles within 12 weeks and does not mean that you will definitely require surgery on the other side.

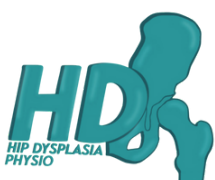
What happens to the labral tear?

Almost all patients with hip dysplasia have a labral tear present, this is due to the labrum providing increased stability for the hip in dysplasia. With a PAO, re-orientating the socket, reduces the load on the labrum & it no longer is painful. In the literature up to 8% of patients may need a labral repair post PAO if symptoms persist (Anderson et al, 2024 and Laboudie et al, 2022). There is currently no evidence that simultaneously addressing the labrum would further improve the outcome, (Lukas et al, 2024).



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