

Periacetabular osteotomy

Why this operation has been suggested

Dr Kieran Hirpara, an orthopaedic surgeon at Mater Private Hospital Rockhampton, offers hip preservation surgery such as periacetabular osteotomy when it suits your condition. Patients are generally referred to our clinic by their GP; if a physiotherapist has suggested you see us, you will still need a referral from your GP in order to be eligible for the Medicare rebate. At your first visit we take a history, examine your hip and arrange imaging if needed.

Periacetabular osteotomy means cutting the bone around your hip socket and turning it so the socket covers the ball of the hip joint better. It is usually offered to younger adults with a hip socket that did not form deeply enough, a problem called hip dysplasia. This can cause groin pain, pain on the side of the hip, a limp, and daily pain that settles with rest. Left alone, it can lead to early wear-and-tear arthritis.

For long-standing problems we usually try non-operative care first, such as changing your activities or physiotherapy. We consider this operation when those steps have not given enough improvement. The aim is pain relief, better hip function and a more stable hip.

Before the operation

Your surgeon will plan the operation using X-rays and scans such as MRI or ultrasound. These show the shape of your hip socket and the condition of the joint surface, so they are usually done before surgery is booked.

In the weeks before the operation, you will be given clear instructions. You will need to stop eating and drinking seven hours before surgery. This longer gap means your operation can be brought forward if the theatre list runs early. Some medications may need to be paused, so bring a list of everything you take and your surgeon will advise which ones to stop. Arrange for someone to drive you home afterwards, and wear loose, comfortable clothing on the day. If you have other medical conditions, you may need blood tests or a review with the anaesthetist.

On the day

You arrive at the hospital's surgical admissions unit, where you are checked in and prepared for theatre. You will meet the anaesthetist, a doctor who looks after your anaesthetic and pain relief during and after the operation. This operation is done under general anaesthetic. A regional nerve block is sometimes added for post-operative pain relief; the anaesthetist will discuss this with you on the day.

You are then taken into the operating theatre, where the operation is performed. When it is finished, you wake up in the recovery area. Nurses there watch over you while the anaesthetic wears off. Once you are stable, you either move to a ward or go home, depending on the procedure and how your recovery is going.

What the operation involves

Periacetabular osteotomy is an operation on the pelvis. The surgeon makes a cut at the front of your hip, along the line where the skin creases naturally. Through this cut, the surgeon reaches the bone around your hip socket.

The surgeon then cuts the bone around the socket in several places, leaving one strong column of bone intact. This lets the whole socket move as one piece. The surgeon turns the socket so it sits over more of the ball of your hip joint, giving it better cover. Once the socket is in the new position, it is held there with screws while the bone heals.

If you also have damage inside the joint, such as a torn rim of cartilage or some extra bone at the top of the thigh bone, the surgeon can deal with this at the same time. The hip joint can be looked at with a camera through a small cut, and any rough areas on the thigh bone can be smoothed. Doing this in the same operation means one anaesthetic and one recovery.

The cut is closed with stitches and covered with a dressing. The whole operation usually takes a few hours.

Some people need more than one operation on their hip over time. If you have had hip surgery before, the socket may not be able to be turned as far, and the risk of problems is higher. Your surgeon will talk this through with you before you decide.

After the operation

You will wake up in the recovery area, then move to the ward or go home once you are stable. Your team will tell you whether you go home the same day or stay one night in hospital. Nurses will keep an eye on you and give you pain relief as needed. Someone should stay with you for the first 24 hours after you get home. Your hip will be covered with a dressing over the stitches. We leave the dressing on for about 10 days; please do not take it off before then unless we tell you to. We change or remove it when we see you. A physiotherapist may help you stand and take a few steps, sometimes with a walking aid. You will not need a brace after this operation.

Recovery

The first days are the hardest. Your hip will ache and the area around the cut will be swollen and bruised. Pain relief keeps this comfortable, and the discomfort eases a little more each day as the swelling settles. Rest, ice and keeping your leg in a comfortable position all help.

You will start moving early. A physiotherapist will guide you through simple exercises to keep your hip from getting stiff, and you will walk with a walking aid at first. You will not need a brace. You can move around the house and do light tasks, but you should not twist, bend deeply or put full weight through the hip until your team says it is safe. Sleeping on your back may feel easiest while the cut heals.

As the weeks pass, the swelling goes down and walking gets easier. Once your surgeon is happy the bone is healing, you will move from the walking aid to walking on your own, then build up your distances. When your surgeon clears you to drive, you can get back behind the wheel. Sport comes back in stages: low-impact activity first, then higher-impact sport as your strength and movement return. Most people who were active before surgery get back to their previous activity level or higher.

Recovery varies from person to person. Your timeline may differ, and your surgeon and physiotherapist will guide you at each step.

What can go wrong

Most patients do well, but problems can occasionally happen. Your surgeon and the team monitor you closely to spot any issue early.

The bone that has been cut needs to knit together, and this takes time. If a cut site is slow to heal or does not heal, you may feel a deep ache or a sharp pain in the groin or buttock that does not settle. Sometimes a small crack appears in the pelvis from extra load on the healing bone. Tell your team at review if pain lingers or worsens; you may need more scans, and a small number of people need another operation to help the bone heal.

The nerves near the hip can be irritated during surgery. You might notice numbness or tingling down the outer thigh, or weakness lifting your foot. These effects are usually temporary and settle on their own. Mention any new numbness, pins and needles or weakness at your next review, or sooner if it is severe.

The cut can become infected. Watch for redness that spreads out from the wound, warmth, increasing pain, weeping fluid or a fever. Most wound infections settle with antibiotics. If the wound looks worse or you feel unwell, call the clinic promptly; some infections need a return to theatre for the wound to be washed out.

A fall in the early weeks can shift the bone before it has healed. If you fall and your pain suddenly changes, contact the clinic straight away.

The screws holding the socket can occasionally irritate nearby tissue. If a screw causes a nagging ache or a sharp poke near the front of your hip, bring it up at review; sometimes a screw is removed later.

Rarely, a weakness in the abdominal wall near the scar can allow a bulge to appear, especially with coughing or straining. If you notice a new bulge, see your GP.

If you become pregnant later, a caesarean birth may be more likely. Discuss this with your obstetrician when the time comes.

The complications table on this page lists typical rates if you want the specifics.

When to call us

Most problems show up early, and we would rather hear about them sooner than later. Call us if you have a fever, if the redness around your wound is spreading, or if the wound starts weeping fluid. Call us if your pain suddenly gets worse or does not settle with pain relief. Go to emergency if you have swelling or pain in your calf, or shortness of breath, as these can be signs of a blood clot. Go to emergency if you lose feeling in your leg or cannot move it. If you fall and your pain changes, call us straight away.