

COMMON QUESTIONS AND ANSWERS

Q. How many periacetabular osteotomy (PAO) surgeries are performed each year at Barnes-Jewish Hospital?

A. 300 hip joint preservation surgeries, including more than 75 PAOs, are performed each year.

Q. How does the doctor determine I need a PAO?

A. Each patient's care needs are different. The doctor will recommend a PAO surgery after considering a combination of information obtained from your history, physical exam and imaging studies (x-rays, MRI, CT scans). We also consider the amount of pain and the limitation of activity associated with your hip problem.

Q. How long does the surgery last?

A. PAO surgeries typically take between 1½ – 4 hours, depending upon the condition and complexity of your hip at the time of surgery.

Q. Why do I have to take a blood thinner (aspirin) after surgery, and for how long?

A. You need to take a blood thinner after surgery to prevent blood clots. You will need to take it for approximately six weeks.

Q. When can I shower?

A. After approval from your surgeon — typically 3-4 days after your procedure — you may shower with assistance. It is important to protect your incision during showers. Your care team will discuss how to best do this.

You will not be able to sit in a tub without a tub bench for at least two months.

Q. How long am I on an assistive device (walker or crutches)?

A. You will use an assistive device for approximately four weeks. Your care team will evaluate your tolerance for weight bearing after these four weeks have passed. Most patients can anticipate unassisted walking at six to eight weeks.

Q. When can I ...?

1. **Return to my activities:** You can anticipate returning to strengthening exercises and nonimpact activities (cycling, swimming, elliptical) four weeks after your surgery, once your doctor has given you authorization.

Athletes generally may return to jogging three months after surgery, with a return to full sport generally allowed after four months.

2. **Drive and go to work:** You can drive when you: 1) are full weight-bearing, 2) feel safe and comfortable behind the wheel of the car and 3) are no longer taking narcotics.

If you have a light duty or desk job, you may return to work after surgery when you are comfortable. For most individuals, this occurs between four to eight weeks after surgery. Individuals with physically demanding jobs may require three months of recovery before returning to work.

3. **Have sex:** Sexual activity is not recommended immediately after surgery but may often be resumed safely four to six weeks after surgery. Your physical/occupational therapist will talk about safe ways to have sex without hurting your hip.

Q. How long should I keep doing my physical therapy exercises?

A. Keep exercising until your muscles are pain free and you can walk without a limp. The exercises will keep your muscles strong.

Q. Will I have numbness around my incision?

A. Numbness around the thigh and incision may occur but is usually not problematic.

Q. How often do I need to see the doctor after surgery and will I get x-rays?

A. You will come back to see the doctor four weeks after your surgery. You will return for another follow-up visit after two to three months, after which time the doctor will follow up with you an annual basis.

You will get an x-ray at each visit.

Periacetabular Osteotomy (PAO) Surgery

Barnes-Jewish Hospital and
Washington University Physicians

Why have hip surgery?

Even young adults can experience pain or discomfort in the groin or on the side of the hip, particularly when performing weight-bearing activities or after long periods of sitting or walking.

Pain often increases over time, and it is not uncommon to experience a sensation of catching or popping in the hip joint. You may even develop a slight limp, and strenuous activities may become more difficult for you.

These symptoms are often related to a deformity of a person's anatomy that was either present at birth (congenital) or acquired over time (developmental). If your condition remains untreated, you are likely to develop secondary arthritis.

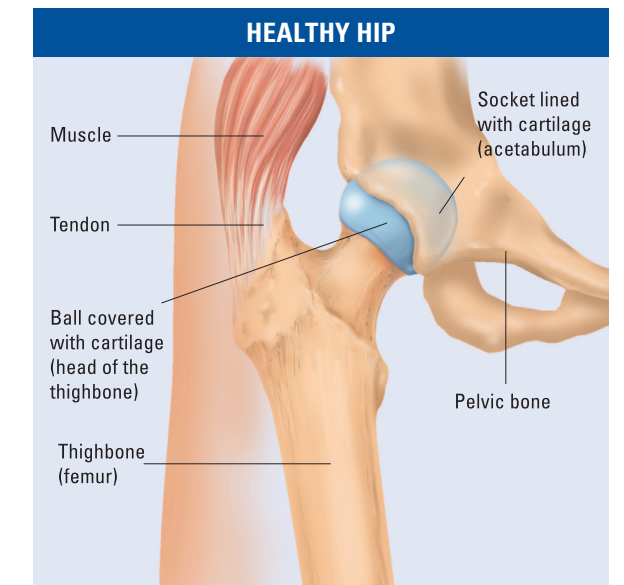
Periacetabular osteotomy (PAO) is a hip surgery that can correct a congenital or developmental deformity.

How the hip works

The hip is a joint — a place where two bones meet. Its ball and socket structure allows for your hip joint to move or rotate in various directions within a defined range of motion.

In a *healthy hip*, the hip socket is cup shaped. The head (or ball) of the thighbone (called the femur) is adequately covered by and well-positioned within the hip socket, or acetabulum.

Cartilage covers the head of the femur (ball) and the acetabulum (socket), and joint fluid helps the head glide smoothly in the socket. Muscles and ligaments help keep bones in place.



In a healthy hip, the ball (head of the thighbone) fits well within the hip socket (acetabulum).

The hip socket of an individual with hip dysplasia does not entirely cover the head of the thighbone (femur). This condition makes the hip unstable and may lead to discomfort, pain and osteoarthritis over time.

To speak with an orthopedic clinical specialist from Barnes-Jewish Hospital, call **(314) 362-4468**.

For more information, visit us at BarnesJewish.org or ortho.wustl.edu

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POSSIBLE PROBLEMS FROM PAO HIP SURGERY

Although PAO hip surgery is very successful for most patients, there is also a chance that surgery will cause problems. These problems are called complications.

What is hip dysplasia?

In the hip of an individual with dysplasia, the hip socket is shaped more like a dish and does not completely cover the femoral head. This condition causes parts of the hip joint to rub together, and weight is unevenly distributed within the joint.

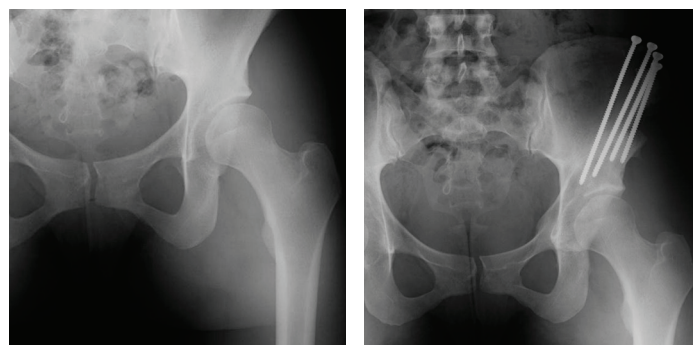
If you have hip dysplasia, the cartilage in your hip joint may wear away over time, and you may begin to experience increased pain or stiffness in your hip.

For many patients, the initial symptoms of hip dysplasia are discomfort in the groin or side of the hip. Others seek medical attention due to activity-related hip pain. You may also experience a sensation of catching or popping in your hip joint during certain activities. Prolonged sitting or walking can also increase these symptoms.

As these symptoms continue to increase, you may develop a slight limp and more strenuous activities may become difficult.

Some patients develop symptoms even after being treated for hip problems as an infant or child.

Some patients with hip dysplasia also may have other problems with their hip joints, including cartilage tears or a deformity of the ball of the thigh bone, or femoral head.



Dysplastic hip before surgery (left) and with correction with PAO (right).

How is hip dysplasia diagnosed?

Your doctor will determine if you have hip dysplasia after completing a physical examination of you and reviewing your medical history and x-rays. X-rays and other imaging help your doctor assess hip joint deformities and arthritis.

Your doctor may recommend a surgical treatment called *periacetabular osteotomy (PAO)* to help correct your hip deformity.

How surgery can help

A periacetabular osteotomy (PAO) is a hip preservation surgery to correct the anatomy of your hip joint and help you return to your activities.

During surgery, the surgeon will make an incision across the front and around your the socket (acetabulum) of your hip and will reposition it.

X-rays taken during your surgery help the surgeon determine the best way to reposition your hip socket. Four to five screws are used to secure your hip socket into its new position.

Hip deformity

Additional problems— such as cartilage tears and deformities of the ball, or femoral head, of the hip joint — are often corrected during a patient's PAO surgery.

Your surgeon may perform hip arthroscopy during your PAO procedure to treat problems within your hip joint and reshape the ball, or femoral head, of your hip joint.

How long is the recovery?

Most patients stay in the hospital for 2 to 3 days, and full recovery takes about 4 to 6 months.

The majority of patients experience major relief of pain and become quite active after recovery from surgery.

Although uncommon, possible complications from PAO surgery can include, but are not limited to:

- Nerve or artery injuries
- Bone fractures or a non-union of the bone
- Infection
- A blood clot in the leg
- Persistent hip pain, or osteoarthritis progression

There is only a small chance you will experience one of these problems. But, if you do, your care team will work with you to treat the problem you are experiencing. Our goal is to provide excellent care for you during your journey back to activity.

Nerve or artery injuries

A major nerve injury can cause numbness, weakness and/or tingling in the hip, lower leg, thigh and foot. Less than 2 patients out of 100 will have nerve damage. This type of complication is uncommon and patients who experience it usually recover without surgery.

Bone fractures or a non-union of the bone

Pelvic fractures or non-healing of the bone can occur. Again, these complications are uncommon but occasionally require additional surgery.

Infection

If an infection occurs, this may require oral antibiotics or surgery to treat the infection.

Blood clot in the leg

A complication of any hip surgery is a blood clot in the leg, or what is known as a deep vein thrombosis (DVT). This occurs in less than 1 percent of individuals undergoing hip surgery.

As a precaution, you will be given a blood-thinning medicine such as aspirin or Coumadin to prevent blood clots. You also may be asked to wear a compression device or stockings on your lower legs to help with blood flow and prevent blood clots.

If you do experience a blood clot after surgery, you will need to take a blood thinner for at least 3 months.

Persistent hip pain, or osteoarthritis progression

Most patients who choose to undergo hip procedures improve with surgery and are satisfied. Uncommonly persistent hip pain may limit activity and function after surgery.