



SuperPath[®]

Micro-Posterior[®] Total Hip Technique

*It's possible to walk within
hours of surgery.*



MicroPort
Orthopedics

Integrity In Motion[™]



Every patient is different, and individual results will vary. There are risks and recovery times associated with surgery.

Consult your doctor to determine if hip replacement surgery is right for you.

It's Possible to Walk within Hours of Surgery

In recent years, hip replacement surgery has quietly entered a new era. The concept of tissue-sparing or “minimally invasive” surgery has been applied to hip replacement. It is important to understand that true tissue-sparing surgery does not only mean a shorter skin incision, but also sparing critical muscles and tendons surrounding the hip. It is the sparing of this underlying soft tissue which allows patients to get back on their feet within days (possibly hours) instead of weeks or months. **A number of patients who have undergone this procedure are able to walk unassisted the day after surgery**, and leave the hospital without the typical restrictions (such as crossing their legs) associated with total hip replacement.¹

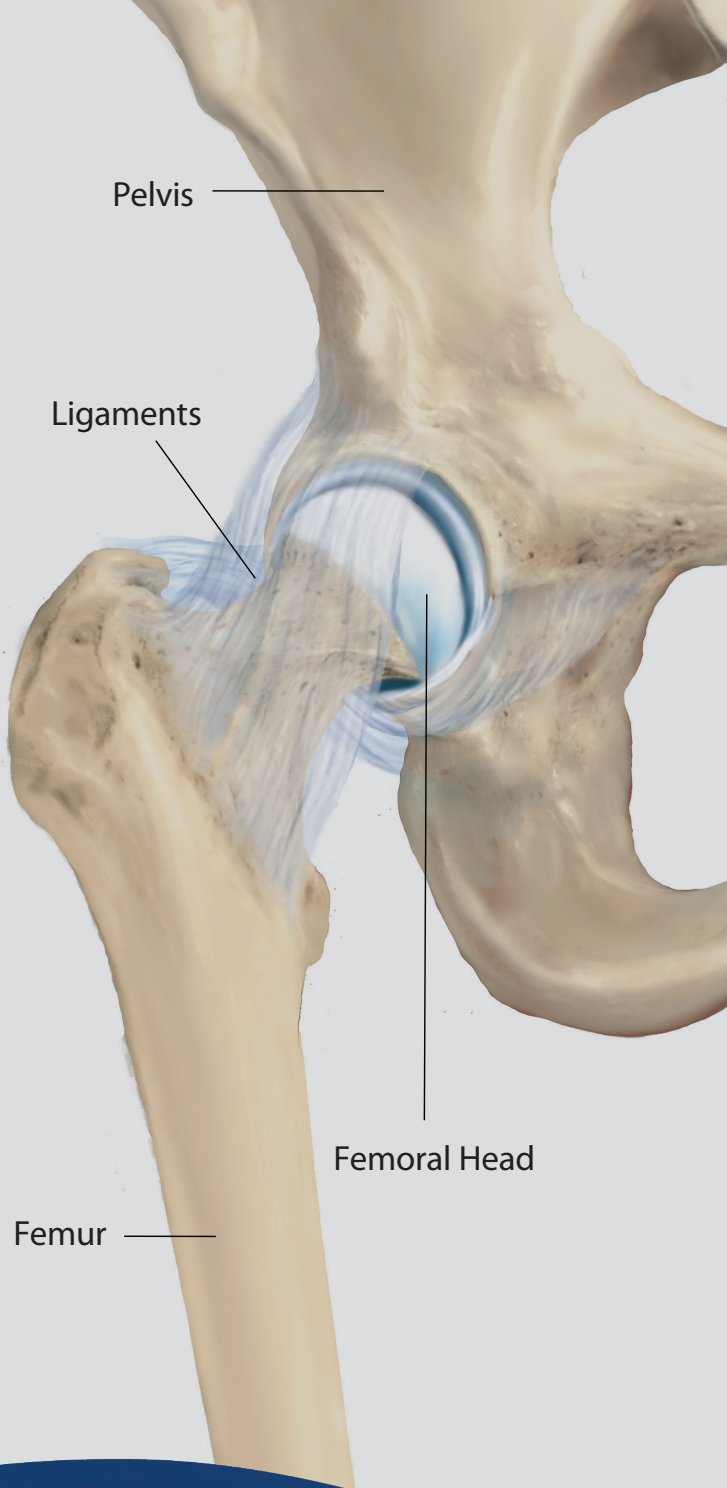
1. J Chow. “Modified Micro-Superior Percutaneously-Assisted Total Hip: Early Experiences & Case Reports.” *Current Reviews in Musculoskeletal Medicine* (2011) 4:146–155.

Pelvis

Ligaments

Femoral Head

Femur

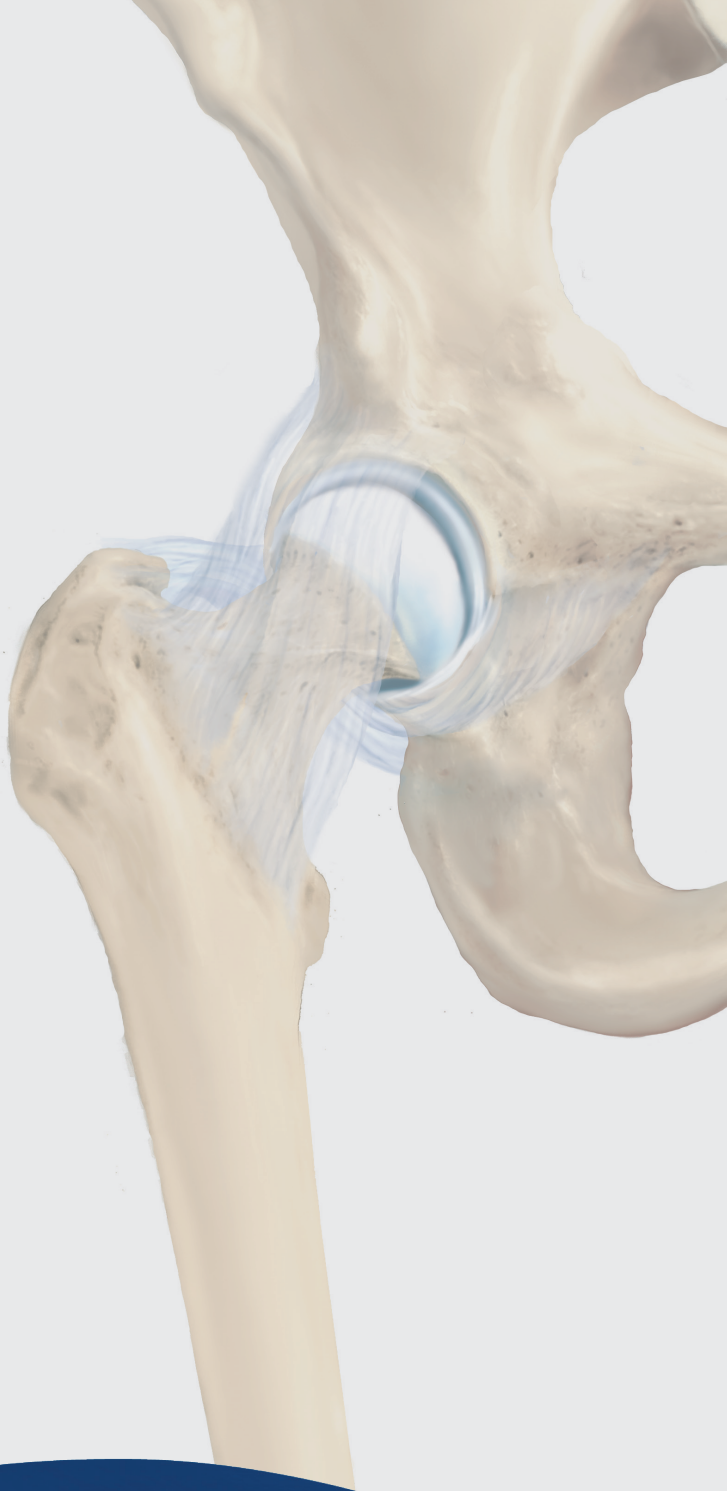


Why Does My Hip Hurt?

There are a variety of conditions that can lead to hip joint deterioration resulting in pain, reduced range of motion, and decreased quality of life. The human hip is a ball-and-socket, in which the ball of the femur (thigh bone) fits into the socket of the pelvic bone. Like other free-moving joints, the hip contains a small amount of synovial fluid, which lubricates the joint whenever you move. It is held together with ligaments – straps of tough tissue, which help prevent the joint from dislocating. Full function of the hip joint depends on the successful coordination of many interrelated parts including bones, muscles, tendons, ligaments and nerves.

When the cartilage in the hip joint is damaged or wears down, the bones begin to rub together – resulting in friction, pain, and even bone deterioration. Worn cartilage is typically associated with arthritis, or osteoarthritis, the most common type of arthritis leading to total hip replacement.

Osteoarthritis is just one of many forms of arthritis, which can result in individuals experiencing pain and limited activity level. Other forms of arthritis are avascular necrosis, inflammatory arthritis, and traumatic arthritis.



Important Information

What is the purpose of replacing my hip with a Wright hip system? (Indications for use)

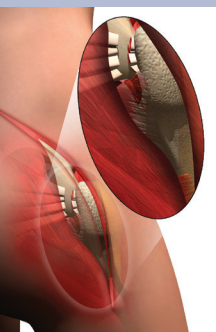
Hip systems manufactured by MicroPort Orthopedics are designed to relieve hip pain and improve hip function by replacing the parts of your hip that have been severely damaged by degenerative joint diseases. These diseases include osteoarthritis, rheumatoid arthritis, traumatic arthritis, dysplasia, and avascular necrosis (bone death caused by poor blood supply to the area).

A MicroPort hip system may also be used to correct a previous operation such as a fusion or hip replacement.

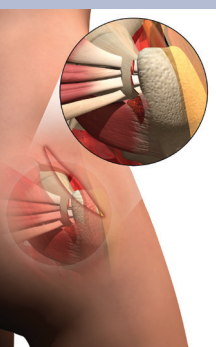
When should a hip replacement not be done? (Contraindications)

You should not receive a MicroPort hip system if:

- You have an infection of the body or blood.
- Your bones are not yet fully grown.
- Your bones are not strong enough or healthy enough because:
 - You have severe bone loss (osteoporosis) or have a family history of severe bone loss,
 - You have any blood vessel-related disease, muscle related disease, or nerve- and muscle-related disease that may prevent the artificial hip joint device from remaining stable or that may prevent you from following instructions during the recovery period.
- You have a suppressed immune system due to diseases, such as AIDS, or are receiving high doses of corticosteroids.
- You are severely overweight.



The posterior approach requires a large incision, and several muscle structures are traumatized.



The mini-posterior approach provides a significantly smaller incision, but still disturbs these same muscle groups.

The most common total hip approach is the **Posterior approach**. With this approach, surgeons historically have been trained to cut through several muscle structures as well as the short external rotator tendons.

In the past, the posterior approach also reported hip dislocation rates that led surgeons to investigate new and improved surgical techniques to lower the dislocation rate, while also shortening the recovery time.

The **Mini-Posterior approach** is quite possibly the most common total hip approach associated with the term “Minimally Invasive Surgery” or MIS Total Hip Replacement. In the Mini-Posterior approach, surgeons cut through several muscle structures as well as the short external rotator tendons.

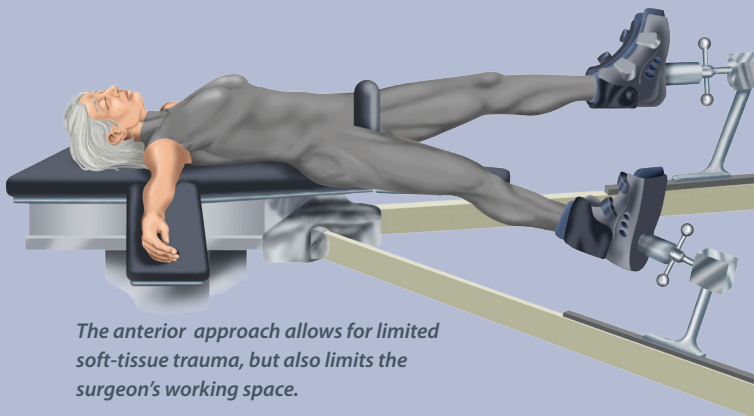
The Mini-Posterior approach reduces the length of the incision and the trauma to the surrounding soft tissues of the hip in an effort to improve on the results associated with the traditional Posterior approach.

Other Hip Replacement Techniques

The **Anterior approach** was designed to allow surgeons to gain access to the hip with limited cutting of muscles and tendons, while reducing the occurrence of post-operative hip dislocations.

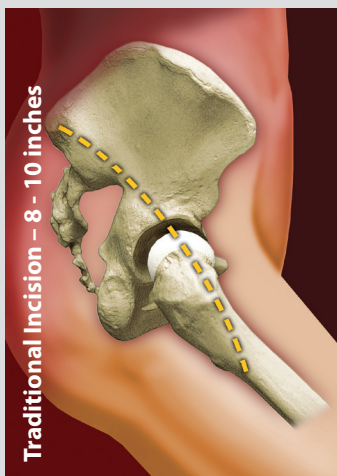
Although theoretically advantageous, this does present significant constraints because of the more limited working space. Special training and a fair amount of experience are required to minimize risk of nerve injury, muscle or tendon injury, wound problems, fracture, limb length discrepancy, and dislocation.

Additionally, while this technique can be accomplished without cutting a single tendon, there are published reports of the procedure indicating that it is often required to cut some of the soft-tissue structures at the “back” of the hip in order to gain the same access that Posterior approaches allow.

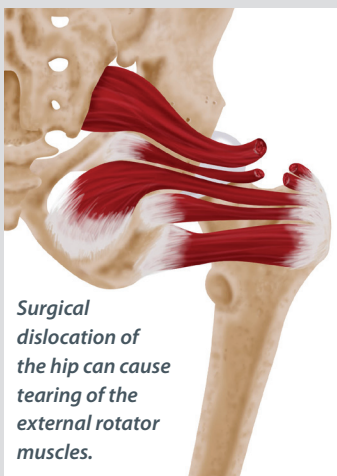
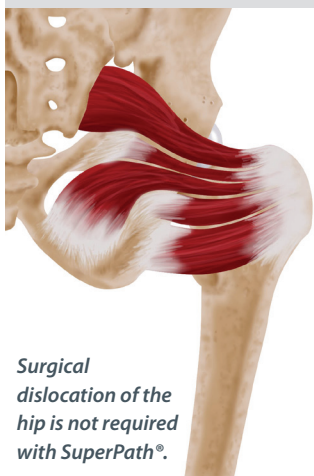


The anterior approach allows for limited soft-tissue trauma, but also limits the surgeon's working space.

SUPERPATH® vs. Traditional Posterior Approach



SUPERPATH® vs. Surgical Dislocation



Every patient is different, and individual results will vary. There are risks and recovery times associated with surgery. Consult your doctor to determine if hip replacement surgery is right for you.

SuperPath® Hip Replacement

SuperPath® Hip Replacement is a total hip technique being performed by a growing number of trained surgeons. **With SuperPath®, there is no surgical dislocation of the hip.** The key to any successful tissue-sparing approach is the avoidance of trauma experienced by the soft-tissue structures around the hip. By never surgically dislocating the hip, there is little trauma to the surrounding muscles and tendons. With this surgical technique, the implant is built inside the body, so the hip is never twisted into unnatural positions during surgery – a common element to many other hip procedures. With the SuperPath® Hip Replacement, no muscles are cut during the procedure.

The trauma, pain, and bleeding caused to these tissues is minimized by avoiding cutting the tendons around the hip. This leaves more intact tissue, specifically the short external rotator tendons and a less traumatized gluteus medius muscle. These muscles are normally responsible for preventing dislocation. Because of the elimination of damage to these important structures, **patients typically have a short hospital stay and a number of patients walk the same day as their surgery.**¹

1. J Chow. "Modified Micro-Superior Percutaneously-Assisted Total Hip: Early Experiences & Case Reports." *Current Reviews in Musculoskeletal Medicine* (2011) 4:146–155.



What Do Some Surgeons Say?

The SuperPath® technique was designed to minimize trauma to soft tissue in the hip. Trained doctors have shared some of the following comments:

“SuperPath® is the least traumatic of all surgical approaches to the hip that I have used.”

– **Michael Anderson, MD***
Milwaukee, WI

“The muscle-sparing plane of the approach minimizes blood loss and there is very little pain. Some of my patients don’t feel the need to stay longer than 23 hours in the hospital, and definitely need minimal rehab.”

– **Harbinder Chadha, MD***
Chula Vista, CA

“My patients are sometimes on their feet within 3 to 4 hours after surgery. The doctors who refer them are amazed, and so are the physical therapists.”

– **Jimmy Chow, MD***
Phoenix, AZ

Every patient is different, and individual results will vary. There are risks and recovery times associated with surgery. Your weight, age, and medical history determine your specific risks. Ask your doctor if hip replacement surgery is right for you.

** These surgeons are paid consultants for Wright. The opinions expressed are theirs alone and do not necessarily reflect the opinions of MicroPort Orthopedics Inc.*



Every patient is different, and individual results will vary. There are risks and recovery times associated with surgery. Consult your doctor to determine if hip replacement surgery is right for you.

What Are the Benefits?

Soft Tissue Preservation

Leaving muscles undisturbed allows patients to return to rehab activities soon, and promotes a minimized rehab experience in general.

The SuperPath® technique is designed to allow your surgeon to preserve as much soft tissue as possible.

After traditional hip surgery, surgeons usually impose restrictions on certain leg movements because the soft tissues in the joint are traumatized and loose, resulting in a risk of dislocation. The SuperPath® technique avoids trauma and stretching of these tissues, possibly avoiding the need for your doctor to impose restrictions on angular leg movement.¹

Fast Hospital Recovery


Because the tissues surrounding the hip are not traumatized, many patients are able to return to mobility within days, rather than weeks or months.

A number of patients who have undergone this procedure are able to walk unassisted the day after surgery.



What Are the Risks?

As with any major surgical procedure, there are risks and recovery times. Potential adverse effects which may result from hip replacement include, but are not limited to the following: pain, bone or component fracture, blood vessel damage or blockage, temporary or permanent nerve damage, a sudden drop in blood pressure during surgery due to the use of bone cement, leg deformity, blood clots that can travel to your heart or lungs, delayed wound healing, and deep wound infection or accelerated wear of the prosthesis which may necessitate additional surgery. Your weight, age, and medical history determine your specific risks. Ask your doctor if hip replacement surgery is right for you. For a complete listing of associated risks and precautions, please see the Frequently Asked Questions on the following pages.



Frequently Asked Questions

Before surgery, is there anything I should tell my doctor?

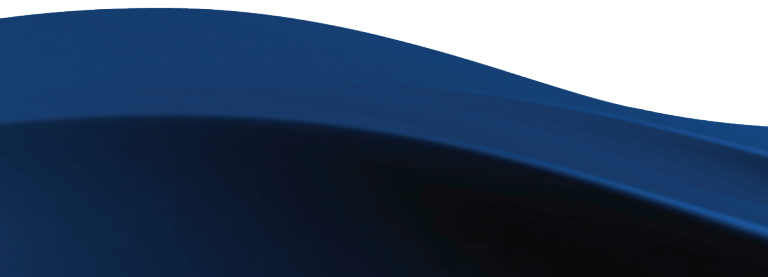
You should tell your doctor about your full medical history, even if you don't think that something in your history is important. Tell your doctor about any and all medications and herbal supplements you take.

You should be sure to tell your doctor about your occupation and lifestyle, particularly if your lifestyle involves any demanding physical requirements such as running or lifting heavy weights. Your surgeon will consider your lifestyle as well as your weight when determining whether a hip replacement is appropriate for you.

You should also tell your doctor if you think you might have a hard time following any instructions you are given regarding your new hip replacement. Before you decide that hip replacement is right for you, speak with your doctor about the instructions that you can expect.

Before surgery, is there anything I should ask my doctor?

You should ask your doctor to explain all of the risks of surgery to you. You should also ask your doctor what type of rehabilitation you can expect. Your doctor may request that you attend physical therapy, so you will need to make sure you understand this and can make arrangements for transportation if needed.



After surgery, when should I call my doctor?

After you have had hip replacement surgery, call your doctor if any of the following things occur:

- Redness, swelling, or drainage from around the incision
- An unexplained fever (temperature over 100° Fahrenheit or 38° Centigrade) or chills that last more than a day
- Severe hip pain that is not relieved by your pain medicine, or
- Any sudden swelling in the thigh or calf. It will always be important to protect this new part of your body from infection.

Your doctor may also give you additional signs and symptoms to watch out for.

After I have healed, when should I call my doctor?

After you have healed, you should keep any follow-up appointments that your doctor requests. In addition, if you notice any unusual sounds or sensations coming from your hip, please contact your doctor for further follow-up.

Will I need more than one surgery?

Hip replacement implants cannot be expected to perform as well as your natural joint, and they do carry the risks of breakage and wear, particularly if you lead a very active lifestyle, or place a lot of demand on the implant. If the implant does break or wear out, you may need additional surgery.

Are there certain people who should know about my hip implant?

If you travel by air, you will likely need to tell airport security about your hip implant because you may activate the metal detector. This is common and the security officer will have an alternative method for screening you.

Also, if you are sent for an MRI at any time after surgery, be sure to tell the MRI Technician about your hip implant.

Every patient is different, and individual results will vary. There are risks and recovery times associated with surgery. Consult your doctor to determine if hip replacement surgery is right for you.

For additional information on the SuperPath® Hip Replacement, please visit:

superpathhiptechnique.com.



MicroPort Orthopedics Inc.

5677 Airline Road
Arlington, TN USA 38002
866.872.0211

MicroPort Orthopedics BV

Hoogoorddreef 5
1101 BA Amsterdam
The Netherlands

ortho.microport.com

™Trademarks and ®Registered marks of MicroPort Orthopedics. ©2014 MicroPort Orthopedics.

All Rights Reserved.

009582