

Hope for Hips



Understanding hip arthritis
and today's options for
overcoming pain





Table

Painful hips are no laughing matter. After all, hips are the largest ball-and-socket joint, designed to stabilize and support the weight of the entire body. So when hips are hampered by arthritis or other problems, it can be hard to have a good day or a restful night. Fortunately, with today's range of treatment options, there is hope for hips; and that's what this brochure is all about.

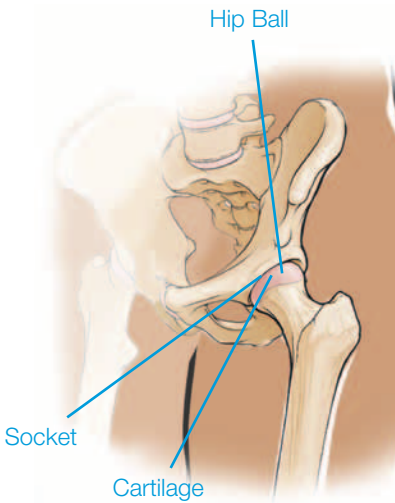
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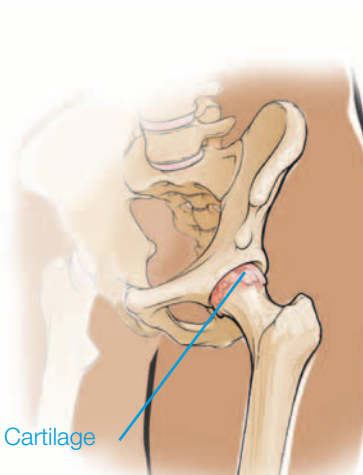
Hip Arthritis

Hips are a prime target for arthritis. The first sign may be an occasional ache, but, over time, the pain may become too much to ignore. Millions of Americans have more than 100 different types of arthritis, and osteoarthritis, the most common type, is a leading cause of hip pain. Joints like the hips are simply places where bones meet and join together. Those meeting places are cushioned by cartilage, so the bones don't rub right up against each other. But when the cartilage is worn away—which is actually the definition of osteoarthritis—the result is a bone-on-bone grind. That grinding hurts. You can feel it walking, sitting, or even lying down trying to sleep.

Other causes of hip pain include rheumatoid arthritis, osteonecrosis (death of bone caused by insufficient blood supply), injury, and bone tumors.



In a healthy hip, cartilage provides a cushion between the hip ball and socket.



In an arthritic hip, the cartilage has thinned and deteriorated, allowing bone to rub against bone, causing pain.

Diagnosis

Early diagnosis of arthritis and tailored treatment are crucial in slowing or preventing damage to your joints. Only a physician can determine if you have arthritis, based on:

- the overall pattern of symptoms
- medical history
- physical exam
- X-rays and other imaging techniques
- lab tests





Treatment Options

Arthritis is a disease that typically worsens over the years, so it is common for treatment to involve more than one approach and change over time. For some people, the lifestyle changes, medications, and walking aids described on these pages help alleviate the pain. For others, hip replacement surgery, which is discussed later in this booklet, may be the only long-term solution. Together, you and your doctor can determine the best treatment options for you.

Nonsurgical Treatments

Pacing Your Activities helps protect your joints. This involves alternating periods of activity with periods of rest, so your joints don't tire from the stress of repeated tasks.

Assistive Devices may help you maintain mobility, while easing joint stress and pain. For example, shoe inserts called orthotics are designed to support, align, and improve the function of your foot. In turn, they may lessen the pressure on your hips. Canes are traditional, “low-tech” devices that can work quite well.

DID YOU KNOW?

A properly sized and used cane has been shown to reduce the pressure on the hip joint by as much as 30 percent. The top of the cane's handle should reach the crease of your wrist, when you are standing with your arms at the side. The cane is typically held on the side *opposite* the painful joint.

Low-Impact Exercise is important to keep the body moving and flexible. And contrary to popular opinion, when done properly, it will not “wear out” joints or increase osteoarthritis.



DID YOU KNOW?

Many range-of-motion exercises and aerobic exercise programs, including fitness walking and swimming, are often beneficial for people with osteoarthritis.

Heat or Cold treatments may provide short-term relief from arthritic pain and stiffness. Using cold packs will help reduce inflammation and swelling and may be useful in flare-up situations. Heat will assist in relaxing muscles and increasing circulation.

Physical & Occupational Therapy can help you manage the pain of osteoarthritis.

DID YOU KNOW?

Physical therapists can work with you to create a personalized exercise program and show you how to use therapeutic heat and massage. Occupational therapists can introduce you to all kinds of beneficial devices, such as those used to elevate chair or toilet seat height.

Medications are used by millions of people to treat osteoarthritis. They range from over-the-counter to prescription drugs, including aspirin-free pain relievers, anti-inflammatory drugs, corticosteroids, disease modifiers, and sleep medications. Nonnarcotic and narcotic pain relievers can also be used. However, some of these can be addictive over time.

Primary care physicians often begin treating osteoarthritis with a simple oral analgesic (pain reliever) such as acetaminophen (Tylenol). If the pain persists, your doctor may then recommend an oral NSAID (nonsteroidal anti-inflammatory drug).

It is important to talk with your doctor about all medications and dietary supplements you are taking or considering taking, even those available without prescription. All drugs have side effects, and some of the medications used to treat osteoarthritis increase the risk of liver and kidney damage. Even nonprescription NSAIDs, such as ibuprofen and naproxen, have potential cardiovascular and gastrointestinal risks.

DID YOU KNOW?

A study reported in the *Journal of the American Medical Association* in 2006 found that the use of antacid drugs called proton pump inhibitors (PPIs) is associated with an increased risk of hip fracture. PPI therapy may decrease calcium absorption or bone density in certain patients. More than one year of PPI therapy was associated with a *44% increased risk of hip fracture*.¹

Injections of hyaluronic acid, a substance that is similar to the lubricating material produced in natural, healthy joints, are sometimes used to provide temporary relief from hip pain. This treatment is approved by the FDA for use in the knee and may provide temporary hip pain relief for some patients, according to some small studies. More research is needed to fully assess this treatment for hip pain sufferers.

Nontraditional—or Alternative Treatments are used by many people who suffer from hip osteoarthritis, although the effectiveness of these treatments is usually not supported by widely accepted scientific research. In addition, herbal and dietary supplements are not regulated by the FDA. Again, because drug interactions and side effects can occur, let your doctor know about every supplement and medicine you are taking or even considering.

Some people with osteoarthritis take vitamins C and D because of their role in the formation of joint material, including collagen and cartilage. Some take vitamin E, a major dietary antioxidant. Glucosamine and chondroitin sulfate, typically used in combination, are the most commonly used dietary supplements.



Is it time for hip
replacement?

That's a question you and your orthopedic surgeon will have to answer together. But when non-surgical treatments aren't providing enough relief for you to enjoy life the way you'd like, the time may be right.

Here are some signs to consider:

- hip joint damage is visible on X-ray
- you have frequent pain, swelling, and stiffness in your hip
- the pain and stiffness in your hip interferes with your daily life and limits your mobility

Your doctor may decide that surgery is not appropriate if you have an infection or if you lack the bone mass or bone strength to support an artificial hip

What is a hip replacement?

It's the same idea as having most things fixed—worn parts are taken out, and new parts are installed in their place. Hip replacement involves replacing the painful, damaged parts of the hip with artificial parts called prostheses or implants. To replicate the action of your original joint, a hip replacement has 3 parts: socket, ball, and stem.





The outer shell of the new socket is usually made of metal. The inner shell, or liner, can be made of ceramic, metal, or a plastic called polyethylene. When a metal or ceramic ball is joined with the socket, the new hip can produce smooth, nearly frictionless movement. The stem, which fits into the thigh bone, is commonly made of titanium.

How long does hip replacement last?

Many factors contribute to an artificial hip's longevity, including the patient's physical condition, activity level and weight, as well as the accuracy of placement during surgery. But, while there are no guarantees, the numbers are encouraging. Studies show that more than 80% of all hip replacements across the industry last at least 15 years, and more than 70% last at least 20 years.²

Individual results may vary. Your results will depend on your personal circumstances. And just like a natural hip, how well the materials in an artificial hip withstand the wear and tear that come with everyday use and rotation of the hip joint contributes to how long the artificial hip will last.



DID YOU KNOW?

Trabecular Metal™ Material, used exclusively in Zimmer replacement joints, acts remarkably like natural bone. And like natural bone, it allows existing bone and tissue to grow right into it.^{3,4} With its excellent flexibility, it's simply *The Best Thing Next to Bone®*.

The final decision about whether or not to have hip replacement surgery will be yours, so you will want to understand the risks and benefits involved. Talk with your doctor if you have specific questions about these risks.



Polyethylene Liner (Inner Shell)

Hip replacements are not “one size fits all.” A properly sized and shaped joint, and the positioning of the joint during surgery, are vital in meeting patient needs. And just like a natural hip, how well the materials in an artificial hip withstand the wear and tear that come with everyday use and rotation of the hip joint contributes to how long the replacement will last.

DID YOU KNOW?

Zimmer Longevity[®] Highly Crosslinked Polyethylene hip liners are made of a very strong material that is highly wear resistant. The *Longevity* Liner also offers many size and shape options, to allow surgeons to optimally fit hip replacements to many different patients.

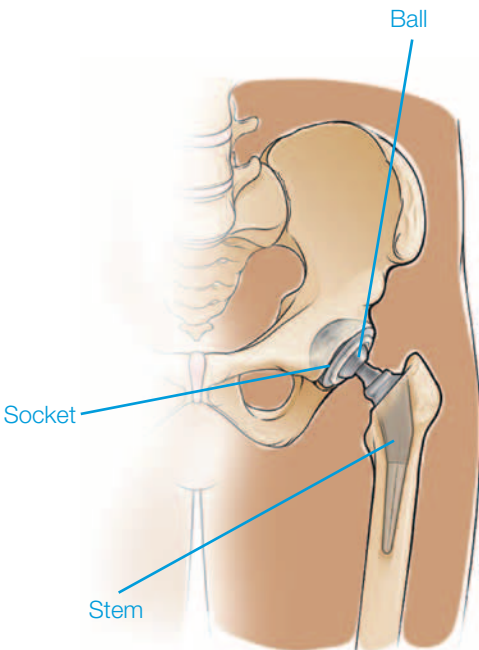
Additional information on artificial joint materials is available at **zimmer.com**.

Minimally Invasive Options

Traditional hip replacement surgery involves a long incision (10 to 12 inches) and a lengthy rehabilitation. Over the past decade, however, minimally invasive techniques have been developed.

DID YOU KNOW?

With Zimmer® Minimally Invasive Solutions™ (MIS) hip procedures, surgeons can avoid or separate key muscles and tissues which are cut during traditional surgery. Zimmer's advanced MIS techniques may result in smaller incisions, shorter hospital stays, and quicker recovery.⁵



Total Hip Replacement

Zimmer MIS Hip Replacement

Compared to traditional surgery, Zimmer's Minimally Invasive Hip Replacement procedures involve less cutting or manipulation of skin, muscle, ligaments, and tendons. In fact, some procedures require no cutting of muscles or tendons. The result is that hospital stays after *Zimmer* MIS Hip Replacement can be *less than half as long* as hospital stays following traditional surgery. Your results will depend on your personal circumstances. Not everyone is a candidate for minimally invasive hip replacement. Talk with your surgeon to determine if this procedure is the best option for you.



DID YOU KNOW?

Thousands of *Zimmer* MIS Procedures have been performed around the world.



What Is It Like To Have Total Hip Replacement Surgery?

Before Surgery

If you and your surgeon decide that total hip replacement is right for you, a date will be scheduled for your surgery. Several things may be necessary to prepare for surgery. For example, your surgeon might ask you to have a physical examination by your primary care physician.

You should also finish any dental work that may be under way to prevent germs in your mouth from entering the bloodstream and infecting the new joint. If you prefer, or if your surgeon feels it is needed, you may want to donate your own blood ahead of time to reduce the risk of your body reacting to the blood transfusion.

During Surgery

On the day of surgery, an intravenous tube will be inserted into your arm to administer necessary medications and fluids during surgery. You will then be taken to the operating room and given anesthesia.

The surgery usually takes 2 to 4 hours, although this is dependent upon the severity of the arthritis in your hip. In the operating room, a urinary catheter will be inserted and left in place for 1 or 2 days. Compression stockings and pneumatic sleeves will be put on both legs.

The procedure is performed through an incision in the area of the hip. The ball-end of the thighbone (femur) is cut and replaced with the new ball and stem components. The stem may be stabilized with or without cement. The damaged surface of the socket is smoothed in preparation for the insertion of the new socket. The ball and socket are then joined. When the surgeon is satisfied with the fit and function, the incision will be closed and covered with dressings. You will also find small drainage tubes coming out of the hip to drain fluid from the wound.

Recovery

You will be sent to the recovery room, and as the anesthesia wears off you will slowly regain consciousness. A nurse will be with you, and may encourage you to cough or breathe deeply to help clear your lungs. You will also be given pain medication and will find a foam wedge or pillows placed between your legs to help hold your joint in place. When you are fully conscious, you will be taken back to your hospital room.

What Can I Expect After Surgery?

When you are back in your hospital room, you will begin a gentle rehabilitation program to help strengthen the muscles around your new hip and regain your range of motion. On the day of surgery you may be asked to sit on the edge of the bed and dangle your feet. You will also learn how to protect your new hip while doing daily activities.

As soon as possible, usually within the next 24 hours, your physical therapist will help you start walking a few steps at a time. As you heal you will progress from walker or crutches to a cane. Before you are dismissed from the hospital, an occupational therapist will also show you how to perform daily tasks at home with your new hip. For example, he or she will instruct you on how to go to the bathroom, how to dress yourself, how to sit or stand, how to pick up objects, and many other tasks.

After about 2 to 4 days, or when your surgeon determines that you have recovered sufficiently, you will be discharged. You may be transferred to a nursing facility for a few more days, as determined by your surgeon. Upon returning to your home, you will need to continue taking your regular medications and continue exercising as

directed by your surgeon or physical therapist. Walking, remaining active, and practicing the required exercises are the quickest ways to full recovery. Within 6 weeks, you will revisit your surgeon at the hospital to check up on the progress of your recovery.

In most cases, successful total hip replacement will relieve your pain and stiffness, and allow you to resume many of your normal daily activities. But even after you have fully recovered from your surgery, you will still have some restrictions. Normal daily activities do not include contact sports or activities that put excessive strain on your hips. Although your artificial hip can be replaced, a second replacement may not be as effective, and your activities would likely be even more restricted. Talk with your surgeon about your specific situation.

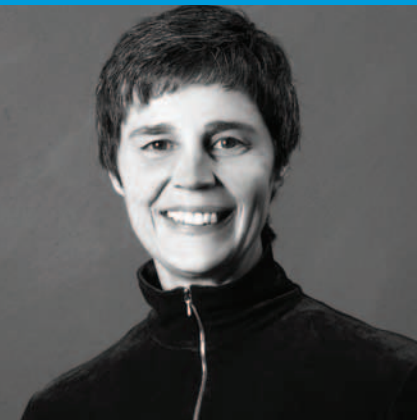
Yoga Without Pain

Kathleen Flanagan never envisioned herself slowing down as she got older. A yoga instructor and massage therapist, she also did aerobics, ran, biked, and rode horses. Then she started noticing pain, deep in her groin. When she was told she had severe arthritis in her left hip and needed hip replacement surgery, Kathleen was in shock.

“I didn’t want a major operation with a big cut,” said Kathleen, who divides her time between California and Indiana.

“Climbing stairs and walking were the most difficult activities. I was pretty good at coping with the pain, but then it affected my back. My knees started hurting, and I found I’d lost three-quarters of an inch of height. I knew I needed hip replacement.”

At age 49, Kathleen underwent a *Zimmer MIS Hip Replacement Procedure* and left the hospital on crutches less than 24 hours later. “It was a gift to get out of the hospital so quickly. The smaller scars are great—I can hardly see them anymore,” she said. Now pain-free, Kathleen is back to teaching yoga, performing massage therapy, biking, and walking. “Every surgery in the world should be rethought this way,” she said.



Kathleen Flanagan
Zimmer MIS Hip Replacement Patient

Patient testimonial included in this material reflects actual patient experience. Results are not necessarily typical, indicative, or representative of all hip replacement patients. Your results will depend on many factors such as pre- and postoperative health conditions, weight, activity level, and adherence to instructions regarding the use of your new hip. In return for allowing Zimmer, Inc. to share her personal story with others, the patient identified received nominal compensation.



Hope for hips is here

To learn more about Zimmer joint replacements, obtain helpful information for patients and caregivers, or for assistance in finding a surgeon familiar with our products and surgical techniques,

call toll free: 800-447-5633
or visit zimmer.com



Important Note: This brochure is intended to provide an overview of hip replacement surgery and should be reviewed with your doctor. It does not include all of the information needed to determine eligibility for hip replacement or for the proper use and care of hip replacements. Please consult your surgeon for more information. Information may also be obtained by calling the toll free number or visiting the Web site. The toll free number also can be used to obtain complete product contraindications, warnings, precautions, and possible adverse effects. Individual results may vary. Your results will depend on your personal circumstances. How long a hip replacement will last varies from patient to patient. It depends on many factors, such as the patient's physical condition, activity level, and body weight and the surgical technique. Replacement joints are not as strong or durable as a natural, healthy joint, and there is no guarantee that a prosthetic joint will last the rest of a patient's life. All hip replacements may need to be replaced at some point.

This device is available only on the order of a physician.



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