



Total hip replacement





Hip pain

Arthritis is the leading cause of disability in the United States, and the most frequent cause of discomfort and chronic hip pain. In fact, it's estimated that 1 in 5 people in the United States has some form of arthritis. Two-thirds of the people who have been diagnosed with arthritis are under the age of 65.1

Of the more than 100 types of arthritis, the following three are the most common causes of joint damage:

Osteoarthritis is a disease which involves the wearing away of the normal smooth joint surfaces. This results in bone-on-bone contact, producing pain and stiffness.

Rheumatoid arthritis is a systemic disease because it may attack any or all joints in the body. It affects women more often than men and can strike young and old alike. Unlike osteoarthritis, rheumatoid arthritis causes destruction of the joint through severe inflammation. The body's immune system attacks and destroys the synovial lining covering the joint capsule, the protective cartilage and the joint surface. This causes pain, swelling, joint damage and loss of mobility.

Trauma-related arthritis results from damage to the joint from a previous injury. It also results in joint damage, pain and loss of mobility.

The hip joint

The hip joint forms where the top of the thigh bone (femur) meets the socket of the pelvic bone

(the acetabulum). The top of the femur is shaped like a ball and fits snugly in the socket formed by the acetabulum. The hip bones are covered with a layer of slick cartilage, which cushions and protects the bones while allowing smooth movement.



Healthy hip

Ligaments connect the bones of the joint to hold them in place and add strength and elasticity for movement. Muscles and tendons play an important role in keeping the joint stable and mobile.

Hip replacement

When medication, physical therapy and other conservative methods of treatment no longer

relieve pain, total hip replacement may be recommended. Total hip replacement helps relieve pain and allows patients to perform some activities that may have been limited due to hip pain.



Arthritic hip

More than 260,000 people in the United States annually undergo hip replacement surgery to relieve pain and stiffness and restore mobility.²

Total hip replacement is the replacement of the ball and socket of the hip joint with implants.

There are two main components used in total hip replacement. The acetabular shell replaces the hip socket. The femoral stem replaces the worn-out top of the femur. These components may be made of any number of materials, including metal, ceramic and/or polyethylene (medical-grade plastic).



Hip replacement component

During surgery, the head of the femur (thigh bone) is removed and replaced with both a stem and socket, mimicking your existing anatomy.

Your hip evaluation

An orthopaedic surgeon will ask you many questions about your hip pain as well as your general health to determine if hip surgery is appropriate for you. The evaluation will include a careful review of your X-rays and other tests. This will help the surgeon understand your pain and limitations in activity and the progression of your condition.

During your physical evaluation, the range of motion of your hips and knees will be measured, and muscle strength will be evaluated. The surgeon will observe how you walk, sit, bend and move.

Surgery

To prepare yourself for surgery, you may be asked to do a number of things, including lose weight and/or stop smoking (if applicable). It is essential that you tell your surgeon about any medications or supplements you are taking. Bring a list of all medications and dosages, including over-the-counter medicines. Your doctor may want you to donate your own blood ahead of time for a possible transfusion during surgery.

It is normal to feel pain and discomfort after surgery. Be sure to let the nurse know if you are in pain.

The usual hospital stay for hip replacement is three to five days. To protect your hip, you will be asked not to sit up beyond a 90-degree angle. Whatever assistive devices you need will be provided. After 24 hours, you should begin to eat and drink regularly, according to your surgeon's direction.



Correct bed position—do not sit up past 90 degrees

Physical therapy

Your surgeon will recommend and supervise your hip rehabilitation program, which typically begins right after surgery. Isometric exercises (tightening muscles without moving the joint) will begin while you are still in bed. You will be instructed to do these exercises a number of times per day. You will be encouraged by the physical therapist to move your ankle and other joints to remain strong.

These exercises are designed to help you regain strength and mobility. The physical therapist will teach you the safest methods for getting in and out of bed or a chair, on and off the toilet and other ways to protect your joint while you recover.



Example of preparing to sit in a chair while using a walker

The physical therapist will monitor your daily progress and inform your surgeon.

Progress

The therapist will teach you how to dress, get out of bed without help and use a walker or crutches. You will continue to work to strengthen yourself in preparation for your return home.

It is important for you to follow your surgeon's directions and proper positioning techniques throughout your rehabilitation. By the time you leave the hospital, you should be progressing well in regaining your mobility and stability. When your sutures or clips have to be removed, you will be told who will remove them and where this will be done. It is not uncommon to still experience some pain. Remember that full recovery typically takes three to six months.

Home care

Just before being discharged, you will receive instructions for your at-home recovery.

Once you arrive home, one of the first things you should do is call the surgeon and make an appointment for a follow-up visit.

Look for any changes around your incision. Contact your surgeon if you develop any of the following:

- 1. Drainage and/or foul odor from the incision.
- 2. Fever (temperature about 101 degrees F or 38 degrees C) for two days.
- 3. Increased swelling, tenderness, redness and/or pain.

Medication/pain control

It is normal for you to have some discomfort. You will probably receive a prescription for pain medication before you go home. If a refill is needed, please call your surgeon's nurse at least five days before you run out of pills. Please contact your surgeon if you have increased discomfort or pain.

Resuming activities

Since recovery is different for each person, your surgeon will inform you when you can resume activities such as returning to work and driving.

You may resume sexual activity at any time as long as you keep all hip precautions in mind.

It is important to be active in order to control your weight and muscle tone. It generally takes two to three months before you can resume low-impact aerobic activities such as walking, bicycling and swimming. Jogging, high-impact aerobics and certain sports should be avoided.



Although your new hip is made of very durable materials, it is subject to wear and tear.

The performance of hip replacements depends on age, weight, activity level and other factors. There are potential risks, and recovery takes time. People with conditions limiting rehabilitation should not have this surgery. Only an orthopaedic surgeon can tell if hip replacement is right for you.

Special instructions

It's common for hip replacement patients to visit their surgeon at four to six weeks, three to six months and one year after surgery. Your surgeon may request to see you once a year after the first year, even if you are not having problems.

Any infection must be promptly treated with proper antibiotics because infection can spread from one area to another through the bloodstream. Every effort must be made to prevent infection in your implant. Before undergoing any treatment, you should always tell all your doctors (including dentists) that you have a hip replacement.

If you are to have dental work performed, please call your surgeon prior to having this work done. Your surgeon will most likely prescribe an antibiotic for you. Antibiotics must be used before and after any medical or dental procedure—a precaution that must be taken for the rest of your life.

References

- Arthritis Prevalence: A Nation in Pain. Arthritis Foundation web site. Available at: http://www.arthritis.org/media/newsroom/media-kits/Arthritis_Prevalence.pdf. Accessed December 18, 2008.
- ² Solucient, a Thompson Company, 2006.

For more information, visit www.hipreplacement.com



DePuy Orthopaedics, Inc.

700 Orthopaedic Drive Warsaw, IN 46581-0988 USA

Tel: +1 (800) 366-8143 Fax: +1 (574) 371-4865 DePuy International Ltd.

St. Anthony's Road Leeds LS11 8DT

England

Tel: +44 (113) 387-7800 Fax: +44 (113) 387-7890