Adapted for patients of OrthoBalance PT from Move Forward; American Physical Therapy Association

Physical Therapist's Guide to Total Hip Replacement (Arthroplasty)

Total hip replacement/arthroplasty is a common surgical intervention that is performed for severe arthritis or hip fracture when all other conservative treatments fail. The goal of total hip replacement surgery is to relieve pain, improve joint mobility, and restore or improve the ability to safely perform functional activities like walking, standing, stair climbing, or running.

What is Total Hip Replacement (Arthroplasty)?

Total hip replacement surgery removes damaged bone and cartilage from a painful hip and replaces it with a prosthetic or artificial hip.

The hip joint is a ball-and-socket joint. The ball is part of the femur (thigh bone) and the socket is part of the hip bone/pelvic bone. The type of hip replacement surgery performed varies with each individual's physical condition.

The 2 types of hip replacement surgeries are:

Total hip arthroplasty

With total hip arthroplasty, the ball and the socket are both replaced with artificial parts. Total hip arthroplasty is performed to treat conditions, including osteoarthritis, rheumatoid arthritis,

- traumatic arthritis,
- ankylosing spondylitis,
- avascular necrosis,certain hip fractures, and
- benign and malignant tumors.

Hemiarthroplasty

With hemiarthroplasty, or partial hip replacement, only the ball is replaced. Hemiarthroplasty is performed when there is damage only to the femoral portion of the hip joint. This is mostly performed in patients who are elderly and frail, and for fractures involving the ball or the neck of the femur (thigh bone).

How Does it Feel?

Before surgery, patients may experience severe pain in the hip and groin, and occasionally down the thigh. They may also have significant difficulty walking, navigating stairs, and sleeping on the affected side.

Postsurgery

After total hip replacement surgery, you will experience stiffness in the hip and leg, and muscle weakness. Postsurgical pain is expected for an average of 4 to 6 weeks. However, some patients may experience pain for up to 12 weeks, or even longer.

Pain is managed primarily with medication. Your physical therapist may also recommend ice packs to help reduce discomfort.

It may be difficult to put weight on your leg when walking after surgery. Depending on your particular case/surgical procedure, you will be asked to limit the amount of weight you put on the surgical leg. It may be as little as a toe touch, or as much weight bearing as you can tolerate. Your physical therapist will teach you how to correctly put weight on the affected leg, and will recommend an assistive device, such as crutches or a walker to minimize discomfort as you work to restore your physical function.

How Is It Diagnosed?

When you seek help for hip pain, you will be evaluated by a medical professional. Your doctor will order hip x-rays to assess whether there is damage to the hip. A physical therapist will evaluate your functional mobility, such as how you get in and out of bed, stand up from sitting in a chair, and walk. The results of these evaluations will help determine whether you need total hip replacement surgery.

Hip replacements are most often performed in adults aged 60–80. Your doctor will determine if you are a good candidate for surgery based on your x-rays and your physical assessment. The doctor will also consider risk factors that may interfere with your recovery, such as advanced age, obesity, or a history of smoking or excessive alcohol intake.

How Can a Physical Therapist Help?

Before Surgery

Your physical therapist can help educate you about what to expect from your surgery, and give you exercises to condition your body presurgery.

In preparation for surgery, your physical therapist may teach you:

- Flexibility and strengthening exercises for the lower extremities
- How to use a walker or crutches for walking and for navigating steps
- Any precautions to take after surgery

After surgery, your physical therapist may tell you not to:

- Bend your new hip more than 90 degrees.
- Bend forward more than 90 degrees. (For example, you will not be able to bend over to put on your socks and shoes for a while.)
- Cross your leg with your new hip over the other leg.
- Turn the leg with the new hip inward.

Your therapist may recommend changes in your home to improve safety and help your recovery, including the use of a raised toilet seat, hand rails on stairs, a bed rail, and a tub seat or grab bars in the shower.

It is recommended that you make these changes before you have surgery, so your home is prepared for your return.

After Surgery

On the first or second day after your surgery, your physical therapist will come to your bedside to begin your postoperative treatment. Your therapist will review any postsurgical precautions to take to prevent reinjury and to help restore your full function.

During your acute-care recovery (the first 3–5 days after surgery), your physical therapist will work with you to help you safely:

- Turn in bed and get up to a sitting position
- Get out of bed to stand and move to a chair
- Walk with an assistive device (walker or crutches) for short distances
- Perform gentle range-of-motion and strengthening exercises in bed

Physical Therapy will continue during your subacute recovery (4–6 weeks). You may need to recover in a short-term rehabilitation facility. Some patients are discharged to their home without nursing-home care, depending on the help available at home and their ability to stay safe. Your physical therapist will help make this determination for you.

As you progress in your recovery, you will continue to work on:

- Walking and stair climbing.
- Balance—after surgery your balance may be impaired, which could put you at risk for falls.
- Transferring to the bed, a chair, and a car.
- Full movement of your leg and new hip (such as putting on socks and shoes).
- Specific muscle strengthening exercises to improve your ability to stand and walk safely and independently.

When you are independent in these activities you will be ready to fully function at home. However, you may still need to continue physical therapy in an outpatient clinic.

Outpatient physical therapy sessions will continue your work on range of motion and stretching exercises, and weight-bearing activities to restore your function to optimal levels. This level of physical therapy focuses on activity-specific rehabilitation for your specific goals, such as a return to work or sport. Your physical therapist will incorporate exercises that simulate those activities. These may include lifting techniques, pushing, pulling carts, climbing ladders, agility exercises, or light jogging depending on your recovery and activity level.

Can this Injury or Condition be Prevented?

More than 95% of hip fractures are caused by falls. The best way to prevent the need for total hip replacement surgery is to prevent a fall. Your physical therapist can help you reduce your chances of falling by evaluating your risk and prescribing regular weight-bearing exercises. Your therapist can also recommend changes in your home environment, such as removing trip hazards like unstable rugs, or adding grab bars in the bathroom.

It may be possible to prevent or slow the onset of osteoarthritis, a condition that can require total hip replacement surgery, by choosing a healthy lifestyle, such as participating in regular exercise and eating a healthy diet. Your physical therapist can teach you conditioning, strengthening, and flexibility exercises to help you maintain peak fitness throughout your life span.

Real Life Experiences

Susan, 65, lives by herself in a 2-story house. Over the past few months, she has been experiencing pain in her back and hip with movement, and has had difficulty navigating the stairs to the basement to do her laundry. Lately, Susan has found that simply standing over the stove to cook for any length of time has become too painful. She decides to call her doctor. After a thorough examination, her doctor diagnoses severe arthritis in her left hip and recommends total hip replacement surgery.

Susan goes to see her physical therapist prior to her scheduled surgery. He evaluates her range of motion and observes how she walks and navigates steps. Susan and her physical therapist discuss potential safety problems at her home; he makes suggestions for changes to her living environment, such as adding hand rails on the steps, grab bars in the shower, and a raised toilet seat. He teaches Susan exercises for stretching and strengthening her lower extremity muscles prior to surgery, and shows her how to safely use a walker following surgery.

On the first day after her total hip replacement surgery, a hospital physical therapist comes to Susan’s room to help her perform gentle exercises in bed. She then helps Susan sit at the edge of the bed and stand up and transfer to a bedside chair. Moving around is painful at first, but Susan's physical therapist timed this visit with her pain medication schedule to help her be as comfortable as possible.

On the second day, Susan repeats the first day’s exercises, and also walks with a wheeled walker with assistance. On the third day, she climbs a few stairs using hand rails, and increases her walking distance.

As her recovery progresses, Susan is transferred to a short-term rehabilitation facility, where she attends physical therapy sessions twice a day. Following 2 weeks of extensive rehabilitation, Susan is discharged home.

Susan begins attending outpatient physical therapy sessions twice a week after her return home. Over the next 4to 5 weeks, she progresses to more advanced exercises for balance and walking. Starting last week, she was even able to work on weight machines! Susan agrees with her physical therapist that she has progressed well, and has achieved all of her goals. She is discharged from physical therapy, and continues to perform her daily exercises at home.

What Kind of Physical Therapist Do I Need?

All physical therapists are prepared through education and experience to treat a variety of conditions or injuries.You may consider the following when you are looking for a physical therapist:

- A physical therapist who is experienced in treating patients with orthopedic or musculoskeletal conditions.
- A physical therapist who has experience in treating patients after a total joint replacement.
- A physical therapist who is a board-certified specialist in orthopedics.

You may use the online search tool Find a PT located on American Physical Therapy Association's website [www.APTA.org] to locate a physical therapist in your area.'

General tips when you're looking for a physical therapist (or any other health care provider):

- Get recommendations from family and friends or from other health care providers.
- When you contact a physical therapy clinic for an appointment, ask about the physical therapists' experience with total hip replacement surgery.
- During your first visit with the physical therapist, be prepared to describe your symptoms in as much detail as possible.
- You may also ask friends or family for advice if they have attended physical therapy in the past.

Further Reading

The American Physical Therapy Association (APTA) believes that consumers should have access to information that could help them make health care decisions and also prepare them for their visit with their health care provider.

APTA has determined that the following articles provide some of the best scientific evidence on Developmental Coordination Disorder. The articles report recent research and give an overview of the standards of practice for treatment both in the United States and internationally. The article titles are linked either to a PubMed* abstract of the article or to free access of the full article, so that you can read it or print out a copy to bring with you to your health care provider.

Nanaku M, Tsuboyama T, Akiyama H, et al. Preoperative prediction of ambulatory status at 6 months after total hip arthroplasty. Phys Ther. 2013;93:88-93. Article Summary on PubMed.

Slaven EJ. Prediction of functional outcome at six months following total hip arthroplasty. Phys Ther. 2012;92:1386-1394. Free Article.

Vissers MM, Bussmann JB, Verhaar JA. Recovery of physical functioning after total hip arthroplasty: systematic review and meta-analysis of the literature. Phys Ther. 2011;91:615-629. Free Article.

Cibulka MT, White DM, Woehrle J, et al. Hip pain and mobility deficits—hip osteoarthritis: clinical practice guidelines linked to the international classification of functioning, disability, and health from the orthopedic section of the American Physical Therapy Association. J Orthop Sports Phys Ther. 2009;39(4):A1-A25. Free Article.

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