

Hip

- A ball and socket joint.
 - The "socket" is largely made up of the pelvis bone (acetabulum).
 - \circ The "ball" is made up of the head of the thigh bone (femur).
- Bands of tissue (ligaments) make up the joint capsule, connecting the ball to the socket and stabilizing the hip joint.
- Multiple large muscle groups work together to help stabilize the joint and allow proper function of the joint.
 - When one muscle group is not working properly, every other group will be affected!
 - Gluteal Group: Buttocks muscles.
 - Adductor Group: The inner thigh muscles.
 - Lateral Group: Outer hip/thigh muscles.
 - Iliopsoas Group: inner pelvic muscles.
 - Other muscles included are your **Hamstrings**: muscles on the back of your upper leg.
- These muscle groups work to allow you to lift your leg forward, extend your leg back, move your leg side to side, and rotate your leg inward/outward.



IT Band (iliotibial band)

- A "band" that is located on the outer side of your thigh, starting at the outer hip and spans just below your knee, attaching to your shin bone.
- Provides a connective point for multiple muscles of the hip.
- Works to stabilize the outside of your knee joint in conjunction with your quad (thigh) muscles.

IT band Syndrome

- Commonly caused by:
 - Repetitive exercise (running, cycling, soccer, basketball, etc.)
 - Excessive training
 - Faulty biomechanics
 - Muscle tightness, lack of flexibility
- May cause:
 - $\circ~$ Aching or sharp pain on the outside of the knee, spreading to the thigh and/or hip area.
 - Occasionally associated with low back pain

Treatment

- Once diagnosed by your doctor, through a physical exam and testing (x-rays), they will discuss possible treatment plans.
 - o Rest
 - Non-steroidal anti-inflammatory medication
 - Avoid activities that trigger the pain
 - Physical Therapy

Physical Therapy

The PT will perform an initial evaluation to test your range of motion, strength, and pain level. The physical therapist will develop a plan of care and establish goals to assist you in:

- Improving range of motion and flexibility
- Increasing strength
- Decreasing pain
- Learning proper body mechanics and training techniques to prevent re-injury



Labrum

- A special type of ligament that attaches almost completely around the edge of the socket (acetabulum) of the hip joint.
 - Provides a deeper "cup" for the socket.
 - Acts as a "seal" to cushion and hold the ball (thigh bone) into the socket (pelvic bone) of the joint.
 - Provides joint stability

Labral tear of the hip

• The labrum is made of a tough fibrocartilage with limited blood supply, making it difficult to reattach and heal, once torn from the bone.

Symptoms:

- May occur suddenly after an incident or gradually with progressive degeneration
- Pain in hip and groin
- Stiffness of the hip joint
- Loss of range of motion
- Locking or clicking of the hip joint

Treatment

- Once diagnosed by your doctor, through testing and imaging (x-rays, MRI), they will discuss possible treatment plans.
 - o Rest
 - o Non-steroidal anti-inflammatory medication
 - Steroid injection
 - Surgical intervention
 - Physical Therapy -before surgery, after surgery, or both.
- Surgical procedures may include:
 - **Labral tear repair**: The surgeon will reattach the labrum to the socket of the hip with small plastic anchors and a sterile thread.
 - **Debridement**: This technique involves the surgeon "shaving" (trimming and smoothing) the frayed pieces of the labrum to remove loose and damaged tissue that is causing pain.

Physical Therapy



The PT will perform an initial evaluation to test your range of motion, strength, and pain level. The physical therapist will develop a plan of care and establish goals to assist you in:

- Following and education of MD protocol and precautions
- Improving range of motion and flexibility
- Increasing strength and joint stability
- Decreasing pain
- Learning proper body mechanics and techniques to prevent re-injury



Total Hip Replacement (Arthroplasty)

- The damaged bone and cartilage are removed and replaced by prosthetic implants to create an "artificial joint," with the goal of less pain and increased function.
- Reasons for having a hip replacement:
 - Wearing or damage to the joint
 - Arthritis
 - Joint abnormalities
 - o Birth/developmental abnormalities
 - Hip pain that limits everyday activities, such as walking or bending
 - Hip pain that continues while resting, either day or night
 - Stiffness in a hip that limits the ability to move or lift the leg
 - Inadequate pain relief from anti-inflammatory drugs, physical therapy, or walking supports.

Following Surgery

- Once home it is IMPORTANT to:
 - Use the assistive walking device
 - Follow hip precautions given by your doctor.
 - Standard hip precautions include:
 - No crossing your legs
 - The surgical leg should not cross the center of your body
 - This includes laying on your side, without an adequate pillow /wedge to allow the surgical side to remain in neutral.
 - Do not bring your knee above your hip (past 90-degree angle)
 Examples:
 - Sitting on a low surface
 - Bending forward while sitting (this also changes the angle of your hip!)
 - No turning the surgical leg out to the side
 - Examples:
 - While laying down, keep your toes pointed at the ceiling



- While standing keep your toes pointed straight ahead of you, not to the person beside you!
- Control your pain with the medication your doctor prescribed
- Ice frequently
- Home Modification recommendations (not requirements, just ideas to help):
 - Securely fastened safety bars or handrails in your shower or bath
 - Secure handrails along all stairways
 - A stable chair for your early recovery with a firm seat cushion (that allows your knees to remain lower than your hips), a firm back, and two arms
 - A raised toilet seat
 - A stable shower bench or chair for bathing
 - A long-handled sponge and shower hose
 - A dressing stick, a sock aid, and a long-handled shoe horn for putting on and taking off shoes and socks without excessively bending your new hip
 - A reacher that will allow you to grab objects without excessive bending of your hips
 - Firm pillows for your chairs, sofas, and car that enable you to sit with your knees lower than your hips
 - Removal of all loose carpets and electrical cords from the areas where you walk in your home.

Home Modification recommendations sourced from https://orthoinfo.aaos.org/en/treatment/total-hip-replacement

Physical Therapy

The PT will perform an initial evaluation to test your range of motion, strength, pain level, and assess the surgical site. The physical therapist will develop a plan of care and establish goals to assist you in:

- Following and teaching of appropriate hip precautions and protocol
- Improving range of motion and flexibility
- Increasing strength
- Decreasing pain
- Assist in decreasing use of the assistive walking device as strength increases and the joint stabilizes.
- Learning proper body mechanics and techniques to restore function of the joint.
- Return to function and physical activities without limitations