



Welcome to Pre-Hab

Things to know about rehabilitation post
surgery

The Knee Joint

The knee joint is the largest joint in the body. It is a “hinge” joint where two bones are held together by thick bands of tissue called ligaments which keep the knee joint steady. It is formed where the thighbone (femur) meets the shinbone (tibia). A smooth cushion of cartilage covers the ends of the bones so they can slide against one another easily within the joint. This cartilage is kept slippery by joint fluid (synovial fluid) that is contained inside the joint capsule. The kneecap (patella) is a movable bone on the front of the knee. The back side of the kneecap is also covered by cartilage.

It glides over the end of the upper leg bone (femur) as the knee bends.

When the knee becomes arthritic, there is damage to the cartilage in the knee joint. The cartilage gets worn away and leaves the bone unprotected, causing the bones to rub together resulting in pain and stiffness.



Total Knee Replacement



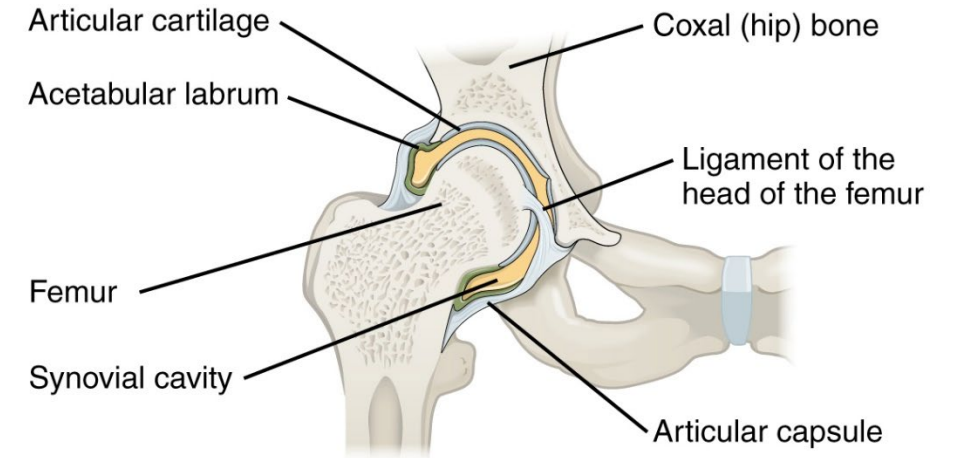
The main reason for replacing any arthritic joint with an artificial joint is to stop the bones from rubbing against each other. Replacing the painful, arthritic joint creates a new surface that moves smoothly without causing pain. The goal is to help people return to many of their activities with less pain and greater freedom of movement.

During knee replacement surgery, a thin layer of bone is removed from both the upper leg bone (femur) and lower leg bone (tibia) and is replaced with an artificial surface. The back of the kneecap (patella) may also be resurfaced, which can be discussed with your surgeon.

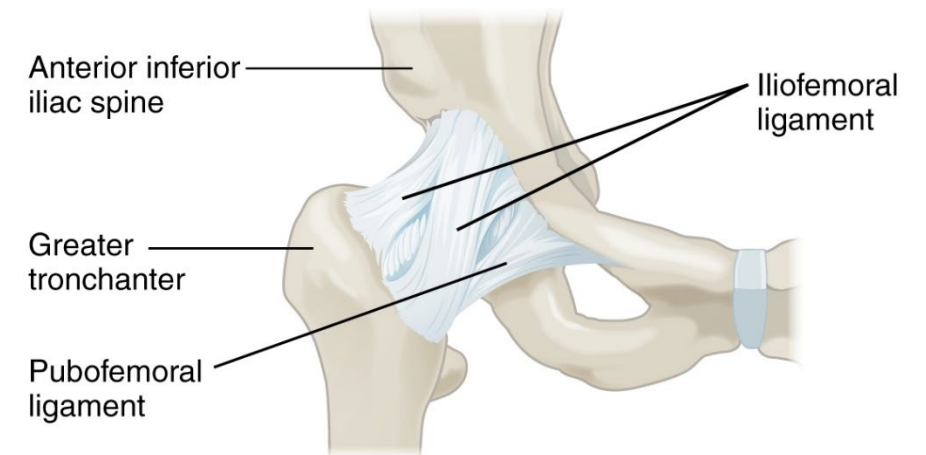


Hip Joint

The hip is a “ball-and-socket” joint that joins the pelvis and the leg. The hip socket (acetabulum) forms a deep cup that surrounds the ball of the upper thighbone (femoral head). The connection of the ball and socket is held in place by the hip joint capsule, a soft tissue sheath formed by ligaments that encloses the joint. The hip is then surrounded by the thick muscles of the buttock in the back and the thick muscles of the thigh in the front. The surface of the ball and the inside of the socket are covered with cartilage. This cartilage is a tough, slick material that allows the bones to move against one another without damage to either surface in smooth, painless movements.



(a) Frontal section through the right hip joint



(b) Anterior view of right hip joint, capsule in place

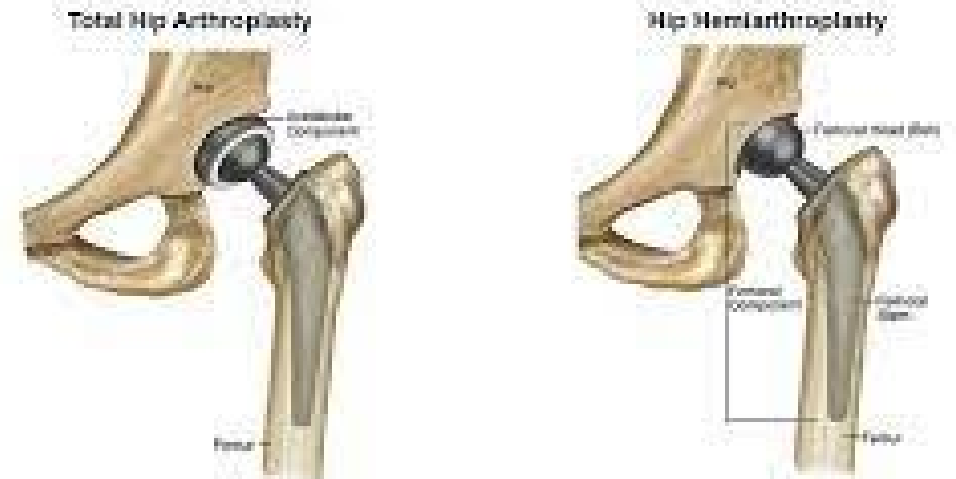
Total Hip Replacement



The main reason for replacing an arthritic joint with an artificial joint is to stop the bones from rubbing against each other. This creates a new surface that moves smoothly without causing pain in order to return to activities with less pain and more movement.

During hip replacement surgery, the ball of the femur will be removed and replaced with a metal ball. This prosthesis will continue down into the shaft of the upper leg bone (femur). The socket will be resurfaced with a new liner. The new ball and new socket are then joined together to form the new hip joint.

Hip Replacement (Arthroplasty)



© Mark Duvall, MA, CML, FASE

ChoosePT.com

ChoosePT
Physical Therapy

Anesthesia

- Spinal block – lose motor function last and gain motor back first
- Duration:
 - Knees: lasts 1.5- 2.5 hours
 - Hips: lasts 2- 4 hours
 - US guided peripheral nerve blocks(sensory) will last 12- 48 hours



Day of Surgery

- Physical Therapy Evaluation following surgery once spinal or nerve block resolves
 - Weight-bearing status (W BAT)
 - Bed Mobility, Ambulating, Stair Training (Bring walker to the hospital)
- HEP
 - Blood clot prevention – ankle pumps
 - Signs of blood clot: calf pain, warm/red/tender calf, difficulty breathing or chest pain



Equipment

Front- Wheeled
Walker



Sock Aid



Raised Toilet Seat



Reacher



Bedside Commode



HOME EXERCISE PROGRAM

Knee Exercises: <https://humankindness.medbridgego.com/>

Code: Q9PXPXYB

Hip Exercises: <https://humankindness.medbridgego.com/>

Code: NBBCTTRB

****To access these exercises, click on the link in blue and then type in the code below the link depending on whether you are having a hip or knee replacement.**

Do's and Don'ts

Total Knee

- Don't:
 - Place pillow under knee allowing knee to sit in prolonged bent position
- Do:
 - Ice/elevate surgical leg as needed
 - Be mindful of pain medication recommendations
 - Get up and move around every 1-2 hours. Try to gradually increase walking distance daily.

Total Hip

- Don't:
 - Bend past 90 degrees at the hip
 - Twist at the hip or cross legs when sitting or lying down
- Do:
 - Ice/elevate surgical leg as needed
 - Check with surgeon at follow-up appointment when to resume sexual activity

Video Tutorials

Using a Walker: <https://www.youtube.com/watch?app=desktop&v=cleZfOrgElk>

Using a Sock Aid: <https://www.youtube.com/watch?v=Us0bcyyoAaE>

Using a Walker Safely



THANK YOU FOR WATCHING! AND GOOD
LUCK WITH REHAB!