





ANATOMY OF THE HIP

The hip the body's largest joint. It is a ball-and-socket joint designed for repeated motion. The socket is formed by the acetabulum and the ball is the femoral head. The bone surfaces of the ball and socket are covered with articular cartilage, a smooth tissue that cushions the ends of the bones and enables them to move easily.

A thin tissue called synovial membrane surrounds the hip joint. In a healthy hip, this membrane makes a small amount of fluid that lubricates the cartilage and eliminates almost all friction during hip movement. Bands of tissue called ligaments connect the ball to the socket and provide stability to the joint.

MEMORIAL HERMANN SURGICAL HOSPITAL - FIRST COLONY

COMMON CONDITIONS

There are multiple conditions that can result in hip pain. If you have hip pain, some common causes include:

Hip Impingement

Hip impingement is a condition where the bones of the hip are abnormally shaped. Bone spurs develop around the femoral head and/or along the acetabulum. The bone overgrowth causes the hip bones to hit against each other, rather than moving smoothly causing damage to the joint.

Developmental Dysplasia

Developmental dysplasia (dislocation) of the hip is an abnormal formation of the hip joint in which the ball on top of the thighbone (femur) is not held firmly in the socket. In some instances, the ligaments of the hip joint may be loose and stretched.

Hip Fracture

A hip fracture is a break in the upper quarter of the femur bone. The patient with a hip fracture will have pain over the outer upper thigh or in the groin. There will be significant discomfort with any attempt to flex or rotate the hip.

Osteoarthritis

Like other joints that carry your weight, your hips may be at risk for "wear and tear" arthritis (osteoarthritis). The smooth and glistening covering (articular cartilage) on the ends of your bones that helps your hip joint glide may wear thin.

Bursitis

Bursitis is caused by inflammation of a bursa, a small jelly-like sac that acts as a cushion between bones and the overlying soft tissues. The bony point of the hip, called the greater trochanter, is an attachment point for muscles. It has a fairly large bursa overlying it that occasionally becomes irritated, resulting in hip bursitis.

TREATMENTS

An accurate diagnosis of your symptoms is necessary to determine an appropriate treatment for hip pain. Common treatments include:

Arthroscopy

During hip arthroscopy, your surgeon inserts a small camera, called an arthroscope, into your hip joint. The camera displays pictures on a television screen, and your surgeon uses these images to guide miniature surgical instruments. This helps them diagnose and treat joint problems. Hip arthroscopy may relieve painful symptoms of many problems that damage the labrum, articular cartilage, or other soft tissues surrounding the joint.

Hip Replacement

In a total hip replacement the damaged bone and cartilage is removed and replaced with prosthetic components. The damaged femoral head is replaced with a metal stem that is placed into the hollow center of the femur. A metal or ceramic ball is placed on the upper part of the stem replacing the damaged femoral head that was removed. The damaged cartilage surface of the socket (acetabulum) is replaced with a metal socket. Screws or cement are sometimes used to hold the socket in place. A plastic, ceramic, or metal spacer is inserted between the new ball and the socket to allow for a smooth gliding surface.

Hip Strengthening and Conditioning

After an injury or surgery, an exercise conditioning program will help you return to daily activities and enjoy a more active lifestyle. Performing the exercises two to three days a week will maintain strength and range of motion in your hips and thighs and help keep your hip joint stable. Keeping these muscles strong can relieve pain and prevent further injury. Stretching the muscles that you strengthen is also important for restoring range of motion and preventing injury.