

Chronic Hip Pain: An Undiagnosed Problem

There are many, many possible causes of hip pain. An accurate diagnosis is needed to direct treatment. But this can be elusive and take a long time to make. In this first part of a two-part series, hip pain is examined in detail. Differential diagnosis is the focus of part-one. Treatment approaches are discussed in part-two.

The main topic is a specific hip pathology called *greater trochanteric pain syndrome* (GTPS). GTPS refers to tenderness felt along the side of the hip. It is a noninflammatory condition that is easily confused for something else.

The physician's examination takes into account the possible *etiology* or cause of the problem. Was there some trauma? The mechanism of acute hip pain caused by injury is often a twisting motion. Overuse, repetitive motion, and diseases or degenerative conditions are other potential causes of hip pain.

Pain patterns associated with hip problems start with a deep aching and stiffness in the hip. True hip pain is experienced in the front of the body down into the groin area. *Hip pain* along the pelvic rim, down the side of the leg, or down the back of the leg is usually a sign that the cause of the pain is *extraarticular* (outside the hip joint). This could be coming from pinching of the soft tissues, nerve entrapment, or other extraarticular lesions. Loss of motion and/or function can help point to the specific soft tissue structures affected.

Pain patterns are made better or worse by movement, positioning, or rest. Unloading the joint by using a cane, walker, or other assistive device is another way to influence the symptoms. When making the diagnosis, the physician observes how the patient moves from one position to another.

The source of the pain and the location of the pain can be difficult to tell. The patient can't always isolate it and point to it with one finger. It helps to think of the hip as having four separate compartments. These include; 1) *central*, 2) *peripheral*, 3) *lateral*, and 4) *iliopsoas*. Each section has its own pain pattern and likely causes of pain for that compartment.

For example, referred pain to the central compartment could be coming from the *labrum* (fibrocartilage rim around the hip), ligament tears, osteoarthritis, hip dysplasia, or infection. The peripheral compartment is affected by fragments of cartilage (or other debris) in the joint, impingement, and synovitis or infection.

Muscular structures around the joint are involved with lesions of the lateral compartment. This can range from iliotibial band syndrome to bursitis, to problems with the large muscles of the buttocks around the hip. And finally, infection within the pelvic cavity causing a psoas abscess must be considered in the diagnosis of an iliopsoas compartment problem.

Despite all that we do know about hip pathology, there's still much left to be explored. Unnecessary X-rays and other imaging studies should be avoided. There are many clinical tests that can be used to sort out possible causes of hip pain. The authors review each test and what their results mean.

Palpation of the various bursa in and around the soft tissues of the hip is described. Tests for integrity of the *labrum* are provided. The labrum is a fibrous cartilage that helps hold the head of the *femur* (thigh bone) in the socket. It redistributes the weight and load placed through the joint during weight-bearing and movement. Tears of the labrum can cause hip pain and dysfunction.

Other tests include measuring joint range of motion. Specific motions designed to stress various individual soft tissue structures are described. There are tests for each compartment based on the soft tissue structures within each section. And there are other test maneuvers such as the *one-leg mini-squat test*, *Patrick test*, *Thomas test*, *psoas test*, and many more.

And finally, the authors encourage physicians to consider unusual causes of hip pain that may look like greater trochanteric pain syndrome. Evaluation of hip pain may require imaging studies such as X-rays or MRIs. Results are viewed cautiously as many changes in and around the hip may be observed but may not be the cause of the painful symptoms. The most obvious pathologies that must be treated include tumors, fractures, hematoma from bleeding after a fall, and infections.

Chris Dougherty, DO, and John J. Dougherty, DO. Evaluating Hip Pathology in Trochanteric Pain Syndrome. In *The Journal of Musculoskeletal Medicine*. September 2008. Vol. 25. No. 9. Pp. 428-436.