HIP PAIN AND ACETABULAR LABRAL TEARS

STUDY:
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Hip pain as a result of a labral tear has received more attention from the medical community in recent years. An article by Sahrmann and Lewis provides a great review of recent research and provides an overview of current physiotherapy treatment for this problem.

Patients are often referred to physiotherapy for pain occurring in the anterior aspect (front) of the hip. There are many causes of the pain such as muscular strains, postural imbalance and osteoarthritis to name a few. In the last few years, it has become apparent that more and more people are present with acetabular labral tears.

The labrum is a ring of thick cartilage and connective tissue that is located on the pelvic aspect of the hip (acetabulum). The acetabulum is a round depression on the pelvis that houses the femoral head. The function of the labrum is to deepen the socket to provide stability to the joint and provide a cushion barrier between the two bones. Damage to the labrum could be a cause of joint degeneration leading to osteoarthritis.

Research contributes direct trauma such as falls or motor vehicle accidents as a common cause of an acetabular labral tear. Sports related activities with excessive hip rotation have also been thought to cause tearing as well. This research paper states; however, that up to 74.1% of tears have not been associated with any specific trauma or sporting activity. This can be explained by natural aging and degeneration that occurs in the hip. It may also occur because of bony abnormalities of the hip as abnormal boney alignment increases stress to the joint. Over time, this increased stress can eventually cause a breakdown and may result in a tear. A study by McCarthy, et al, as reported in this research article, stated that out of 436 patients with mechanical hip pain symptoms, 73% showed both damage to the labrum as well as having evidence of osteoarthritis. He further stated that tears without arthritis appeared only in younger patients.

When a tear has occurred, patients will describe pain in the front or groin area of the hip. The hip may click or catch with certain motions. They may also report restricted hip range of motion. A physiotherapist can perform certain movement test to assess restrictions of range of motion as well as stress certain areas of the hip to determine the cause of the click and pain.

The research paper also reports that the anterior portion of the hip appears to be more susceptible to injury. One reason may be that the labrum on the anterior aspect does not have a good blood supply and is thinner than seen in the posterior aspect. It is also reported that the anterior region tends to be subjected to higher loads and stresses than other areas of the labrum. Other factors that may cause damage are altered movement patterns and muscular imbalance around the hip.

A tear can be difficult to diagnose even with proper imaging. An MRI appears to have the highest accuracy. It is also stated that a bone scan will show increase uptake in the anterior region of the hip if a labral tear is present.

If a tear is suspected, the goal of treatment is to unload stress from the front portion of the hip by controlling motion at the hip and reduce stress to the hip. This may occur by modifying general activities, postures and sports. Reducing muscular stress on the hip through proper and balanced strengthening has been shown to be affective. Surgery has been performed with some success but the long term results are still unclear.