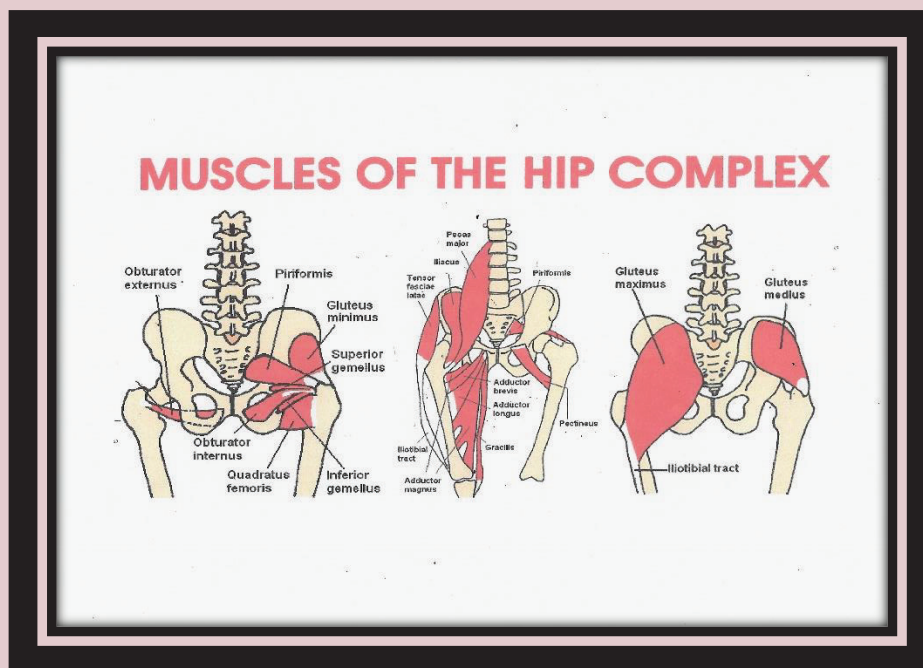


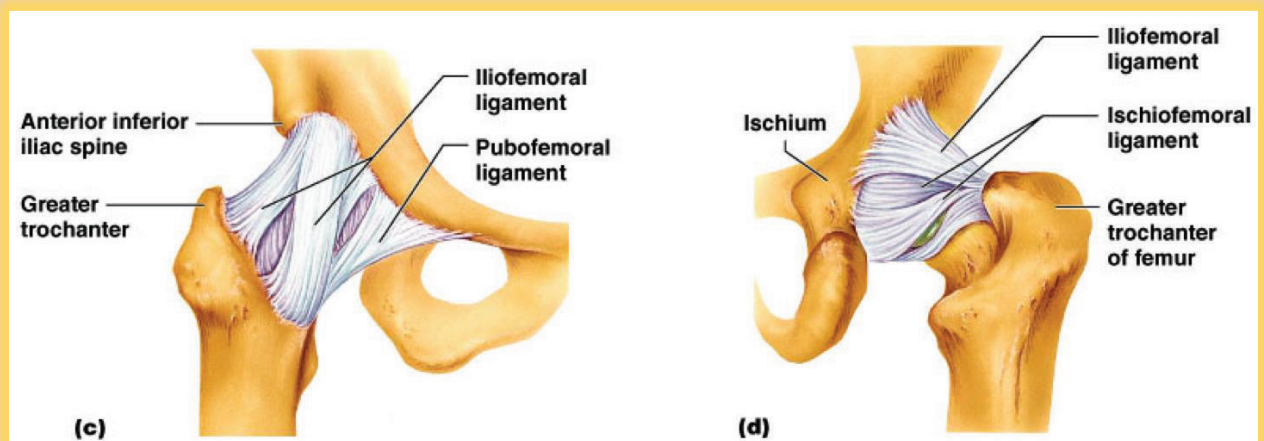
HIP PAIN REPORT

Hip pain can originate from any of the various tissues around the hip joint or be referred from the nerves originating from the low back and/or pelvis. This makes it difficult for the average person to know where the source of the pain is coming from.



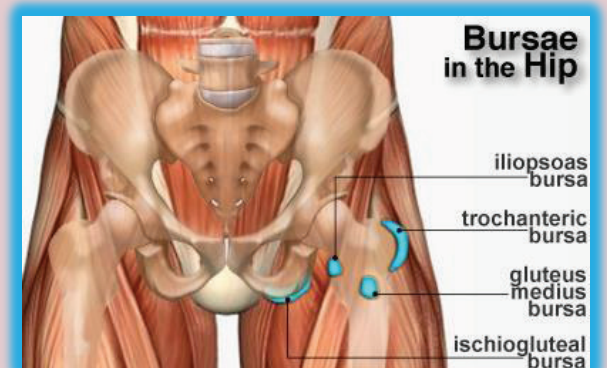
MUSCLES-the function of muscles is to contract and move our bones through space. They have pain fibers imbedded in them. These pain fibers will get very excited and let our conscious brain know when there is a problem. This usually happens when there is an increase in inflammation (inflammation is acidic and irritates the pain fibers).

Any of the muscles around the hip joint can cause pain. However, the more common muscles involved are the: (1) **Piriformis** which causes the back of the hip to hurt and can even radiate pain down the back of the leg, (2) **Tensor Fascia Latte** and **gluteal muscles** which can cause lateral hip pain and can lead to **Iliotibial band contracture/pain** (IT band syndrome), (3) the groin musculature (**adductors**) can cause medial hip pain, and (4) the hip flexors (**iliopsoas**) can cause the front of the hip to hurt. *Causes of muscle pain are tearing of the muscle or tendon from injury and muscle imbalance due to excessive weakness and/or tightness of the muscle.*



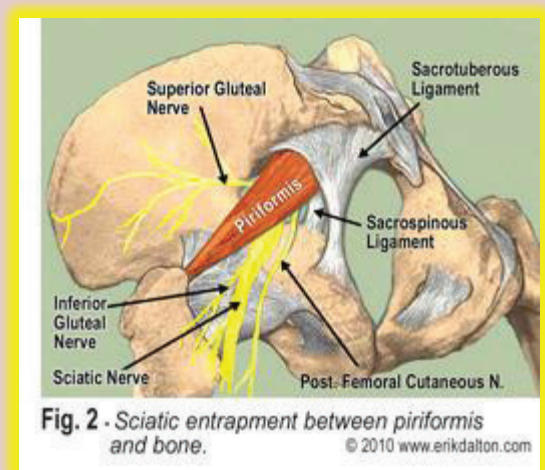
LIGAMENTS- Their function is to stop excess motion and provide stability to the joint. They also have an abundant supply of pain fibers associated with them. These fibers will get stimulated when inflammation occurs, resulting in pain. The inflammation can occur due to trauma (blunt or accumulative), lack of motion (joint locking), or too much motion.

BURSA SACS- Their function is to allow for smooth gliding between bone and soft tissues. Inflammation can fill in these sacs due to injury or joint/muscle dysfunction resulting in pain.



NERVES- Their function is to transmit messages usually from the brain to other parts of the body.

A nerve can become inflamed, resulting in pain locally or cause symptoms down the length of the nerve (e.g. leg pain/numbness/tingling). One example of hip pain caused by an inflamed nerve is when either the lumbar joints or sacroiliac joints become dysfunctional, resulting in an inflamed sciatic nerve.



Causes of Tissue Damage, Resulting in Inflammation to the Pain Sensitive Tissues.

1.) BLUNT TRAUMA-Auto accidents, falls, sports injuries, lifting improperly, and other body collisions can all cause joint locking, tearing and over-stretching of the muscles or ligaments (sprain and strain injuries). Inflammation occurs causing irritation to the tissues, muscle spasms occur, and more joint locking results.

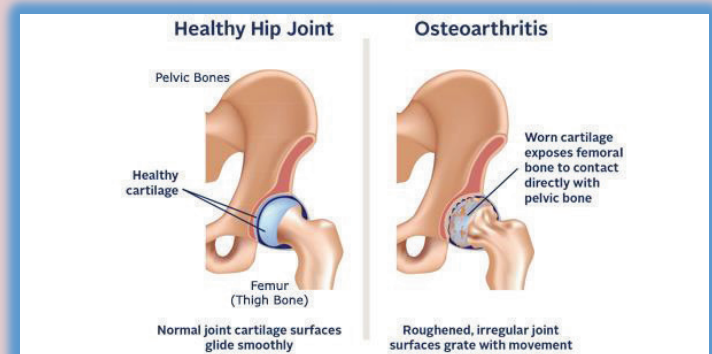


2.) ACCUMULATIVE TRAUMA-Performing an activity repeatedly can cause an accumulative trauma. Examples of this are running, martial arts, prolonged sitting, laying carpet, warehouse workers, playing golf, tennis, other sports. Accumulative trauma can be compounded by poor gait, a poorly designed work station, poor posture, muscle weakness, poor stretching habits, previous injuries that did not heal completely, and/or sitting/ standing in one position for too long. Inflammation occurs causing both irritation to the tissues and muscle spasm, which results in the joints locking.



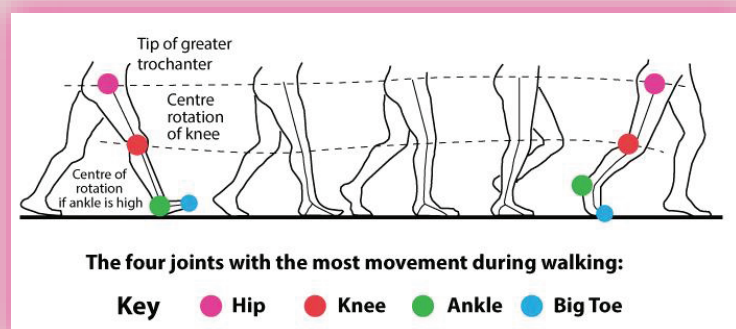
3.) PREVIOUS INJURIES WHICH WERE NOT HEALED CORRECTLY

-Many of us had previous injuries growing up that did not get taken care of properly. Most of us do not even remember these traumas because we were too young and they may have hurt for only a short amount of time. Because these injuries were not taken care of properly, at the beginning, they healed with excess scar tissue. Excess scar tissue formation will cause the surrounding tissues to become less mobile (locked joints and tight muscles). Over time, the scar tissue becomes laden with sensitive pain fibers and calcium deposits (osteoarthritis). The scar tissue also becomes more predisposed to inflammation, causing the pain fibers to become excited.



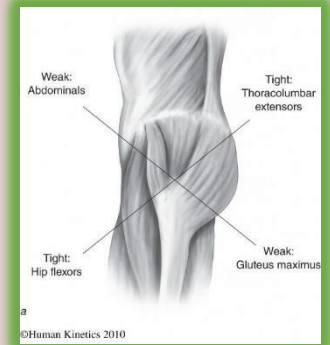
4.) POOR GAIT AND POOR POSTURE

-Gait refers to the way we walk or run. Poor gait can be a source of significant hip pain^[1]. Faulty mechanics in the way we walk or run may lead to early degeneration of the hip over time^[2]. Poor posture can lead to low back and hip pain^[2]. This occurs when the pelvis becomes displaced forward due to tight hip



flexors, weak gluteal muscles and hamstrings. This will eventually cause the joints to lock up, muscles to spasm, and inflammation, resulting in pain. Contributors of poor posture are prolonged sitting, prolonged computer use, lack of exercise, muscle imbalance, etc.

5.) MUSCLE IMBALANCE-Caused by certain muscles being too tight and other muscles being too weak, relative to other muscles. This condition is called crossed posture syndrome. Crossed Posture Syndrome causes joint locking, muscle spasm, and inflammation. Uncorrected, crossed posture syndrome results in pain and disability. Examples of muscle imbalance conditions causing hip pain are: tight hip flexors and weak gluteal muscles leads to low back and hip pain [2] and hip adductor/abductor imbalance leads to groin pain [3].



OTHER CAUSES OF HIP PAIN

Advanced degeneration of the hip joint (osteoarthritis) can cause significant hip pain and disability. The degeneration, over time may have been caused by an old injury or faulty mechanics. Faulty mechanics is caused by muscle imbalance, poor posture, or in rarer cases a hip deformity.

Treatment of Hip Pain

Hip pain is treated by many practitioners. Chiropractors, physical therapists, medical doctors, massage therapists, acupuncturists, etc. *By enlarge, most hip pain is caused by inflammation irritating the pain fibers. By reducing the inflammation and muscle spasm the pain will decrease accordingly. However, the underlying causes for the pain will not necessarily be addressed.* Chiropractors will adjust the hip joints that are locked up, use physical therapy modalities to help reduce the inflammation and muscle spasm, and instruct the patient to ice, stretch and rest at home. Physical therapists will use physical therapy modalities to help with reducing the inflammation and muscle spasms, do gentle stretches with the patient, maybe some short massage work and instruct the patient on home stretches Medical doctors will use medication in the form of anti-inflammatories, pain meds, and muscle relaxants to reduce the inflammation and muscle spasms, instruct the patient to rest. In more severe or advanced cases surgery may be needed. All of them have some benefit but again may not be addressing the underlying cause.

HERE'S THE REAL PROBLEM: The underlying cause of most hip pain cases is mechanical (the tissues noted above are not functioning correctly). When there has been injury(s) to the hip, poor gait, or there has been long-term postural problem or a combination of any of these, and they are not corrected, consequences to the integrity of the hip occur over time. Joints become locked, muscles tighten, inflammation ensues, and scar tissue eventually forms. Then, calcium deposits in the scar tissue, forming degenerative arthritis. The longer this is allowed to degenerate the more risk of severe damage occurs. **Symptoms, often do not correlate with the**

extent of damage until the end stages. This degenerative condition can lead to disability and more pain. At some point, the tissues may degenerate so severely, that surgery may become an option. Unfortunately, success with surgery is usually minimal at best.

HERE'S THE REAL SOLUTION: *CORRECT THE FAULTY MECHANICS*, which in most cases should be done conservatively. The challenge is that over a lifetime a person may have had numerous injuries to the hip (known, unknown or unremembered). In addition, our society places our body in abnormal postures causing muscle imbalances to occur from a very early age. **To use a computer analogy, this is like an operating system that has been infected by numerous viruses. A total reformat is needed.** Correcting the faulty mechanics begins with a comprehensive examination assessing posture, gait, muscle strength, flexibility, joint mechanics, balance, mobility, stress, range of motion, and neurologic/orthopedic integrity. Once all the mechanical deficits are known a comprehensive treatment approach can be devised. Treatment should include posture and gait correction, exercises to increase: mobility, strength, flexibility, balance, and nerve function (CNS and PNS). Treatment should also include chiropractic care to increase joint motion, physical therapy modalities to be used to address the inflammation and muscle spasm, and programs to decrease stress. ***In our office, this is achieved with the Advanced Corrective Care Program.***

LITERATURE CITATIONS

[1] Nicholas J. and Hershman E., *The Lower Extremity & Spine*. Mosby-Year Book, Inc. 1995; page 1038.

[2] Page P., Frank C., Lardner R., *Assessment and Treatment of muscle Imbalance*. Human Kinetics 2010; pages 232-235.

[3] Morrissey D. et al. *Manual Therapy*. 2012 April; 17 (2) : 145-9

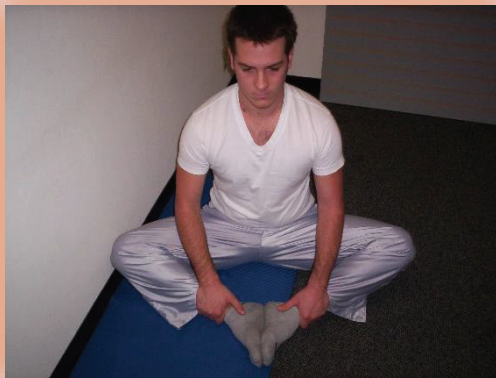
STRETCHES FOR THE MUSCLES AROUND THE HIP

INSIDE HIP

Abductors

Put the soles of your feet together. Grasp the right ankle with the right hand and the left ankle with the left hand. Place the left elbow on the left thigh and the right elbow on the right thigh. Gently push down with the elbows until a stretch is felt on the inside of both thighs.

Hold the stretch _____seconds
Do this stretch _____times per day

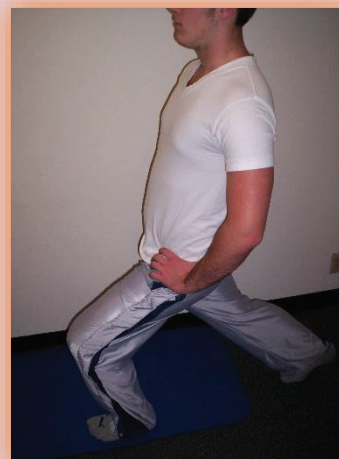


FRONT OF HIP

Iliopsoas

Start with hands on your sides with feet shoulder width apart. Take 1 step forward with the leg on the side not to be stretched. Bend both knees, shifting your body weight forward and down until you feel a stretch in the front groin.

Hold the stretch _____seconds
Do this stretch _____times per day



OUTSIDE OF HIP

Tensor Fascia Latta and Gluteus Medius

Start by standing with the side to stretch closest to the wall. The foot closest to the wall should be about 2 feet away from the wall. Gently lean on the wall with forearm bracing the wall. Cross the outside foot over the inside foot. Sink the hips in toward the wall until a stretch is felt in the outside of the hip.

Hold the stretch _____seconds
Do this stretch _____times per day