Common Conditions and Injuries of the Hip

Sacroiliac (SI) Joint Dysfunction

What is it?

Occurs when there is either too much or too little motion at the SI joint, or when trauma knocks it out of alignment. Problems can occur at one or both SI joints.

Causes:

- Increased ligamentous laxity (generalized hypermobility)
- Repetitive jumping or a single particularly hard landing
- > A hard fall onto the buttocks
- Dancing on floors with inadequate shock absorption
- > Tight quadriceps or hamstrings muscles
- Rapid leg movements, increasing the forces on the SI joint
- Decreased core stability or poor spinal posture (more often hyperlordosis)
- Flat feet

Common Signs and Symptoms:

- Pain at the SI joint (dimple in low back); may also be felt in the buttocks, groin, hip, or knee
- Stiffness or "locking" felt at the SI joint
- Apparent difference in leg length, causing limping
- Spasm of the gluts, piriformis, or low back muscles
- Pain worst with hard landings on that leg, stairs, walking

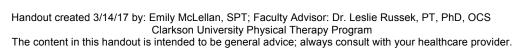
Prevention:

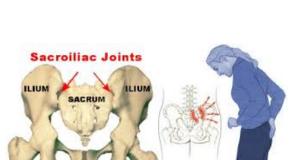
- Use good body mechanics when performing jumps and repetitive motions
- Practice proper posture and abdominal stabilizing techniques to avoid hyper/hypolordosis that can lead to SI joint misalignment
- > Wear proper footwear and practice on floors that have an appropriate amount of spring/shock absorption

- > Ice over the joint
- Physical therapy
 - A therapist can help manually re-align the joint and give exercises that will help promote joint stabilization
- Medication, as prescribed by a physician (typically NSAIDs)
- Stretching of tight muscles
- > Strengthening weak stabilizing muscles
- Specific joint stretches, but you need to know which ones are correct for you









Piriformis Syndrome

What is it?

- The piriformis is a small muscle located deep to the gluteal muscles in the buttocks. It helps externally rotate and stabilize the hip.
- Piriformis syndrome is a condition in which the piriformis becomes tight and compresses the sciatic nerve.

Piriformis syndrome Piriformis Sciatic nerve www.clinicalexams.co.uk

Causes:

- Tightness of the piriformis muscle
- Overuse of the piriformis muscle (repetitive external rotation of the hip)
- > SI joint misalignment
 - o Can result in spasm of the piriformis muscle
- Direct trauma to the buttocks
- Sitting/driving for an extended period of time

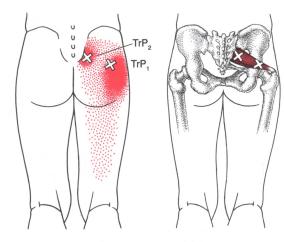
Common Signs and Symptoms:

- > Pain, tingling, or numbness in the buttocks or hip
 - Pain can extend down back of leg to the foot in extreme cases
- Pain may be triggered or increase with compression of the piriformis
 - Prolonged sitting, walking, running, climbing stairs

Prevention:

- Proper stretching of the piriformis
- > Avoid overuse of the piriformis, when possible
- > Avoid activities that can result in SI joint misalignment

- Piriformis stretches if the muscle is tight
 - Chair stretches, floor stretches, or foam roller
- Strengthening hip external rotators (if muscle is not tight, it may be weak)
- Look for underlying SI joint misalignment, as this may be the primary cause
- Medications, as prescribed by physician (typically NSAIDs)
- Applying ice to the area
- Adequate rest to avoid increase in sciatic nerve irritation





Snapping Hip Syndrome

What is it?

- One of the most common conditions dancers experience.
- External snapping hip: the iliotibial (IT) band moves over the greater trochanter, resulting in a "snap" that can be felt or heard with walking, dancing, or going to sit in a chair.
- Internal (or anterior) snapping hip: the iliopsoas tendon snapping over the front of the femur
- ➤ Labral tear of the hip (aka intra articular snapping hip syndrome see next section of handout).

Causes:

- ➤ Tight IT band/iliopsoas
- ➤ Hip labral tear
- Repetitive extreme hip flexion/extension and external/internal rotation

Gluteus maximus Gluteus maximus tendon External snapping hip syndrome occurs when the gluteus maximus tendon or iliotibial band catch on the greater trochanter during flexion. MendMeShop™ ② 2011

External Snapping Hip Syndrome

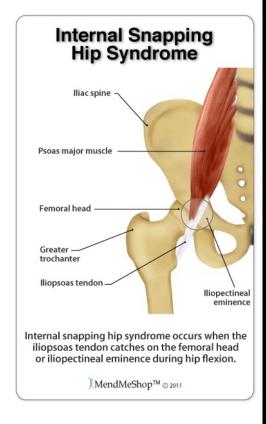
Common Signs and Symptoms:

- "Snapping" sound or sensation at the hip or deeper in the groin
- > Pain at the hip or in the groin that is typically dull or achy
- Pain with weight bearing activities (dancing, walking, jumping)
- Increased tenderness over the greater trochanter

Prevention:

- Avoid overuse of the hip and get adequate rest
- Regularly stretch and strengthen the IT band and iliopsoas
- Perform movements with proper leg control while dancing

- Rest
- Ice the area that is painful
- Modify dance activities practice performing in a painfree range that does not cause snapping
- Stretch the IT band and iliopsoas (static stretching or with foam roller)





Hip Labral Tear

What is it?

The labrum is a ring of cartilage that goes around the inside rim of the hip joint. It provides cushioning to the joint and helps provide stability of the hip. A tear to the labrum can result from either a single traumatic event or occur over time.

Causes:

- A fall while dancing
- Repetitive stresses to the hip joint (jumping, dancing, kicking, running, etc.) while using improper techniques
- > Structural abnormalities of the hip joint
- > Acetabular dysplasia (abnormal development of the "socket" portion of the hip joint)
- Tightness or weakness of hip muscles
- Hypermobility

Common Signs and Symptoms:

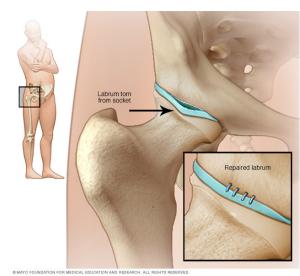
- > Locking, clicking, or catching feeling in the hip
- Pain felt at the hip, groin, or buttocks
 - o Pain is typically a deep ache
- ➤ Pain or hip instability felt when pivoting, kicking, thrusting the hip forward, or walking
- Sharp pain at the groin when squatting
- Stiffness or limited movement of the hip

Prevention:

- Strengthening and stretching muscles around the hip
- > Avoid putting entire body weight on your hip when it is at the end of it's range
- Avoid pivoting/twisting on the hip and excessive loading (squatting/hip extensions)

- ➤ The labrum has poor blood supply and does not heal well; symptoms may decrease if the torn flap is not catching or pressing on sensitive joint structures.
- > Rest
- Physical therapy can address muscle weakness/tightness around the hip, improve balance, and provide re-education on proper movement to decrease forces on the hip joint
- A physician may recommend a cortisone shot to the hip joint or the temporary use of crutches or a cane
- Surgical repair of the labrum or removal of damaged tissues may be considered if conservative measures are ineffective





Information was adopted from the following sources:

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