

Understanding Z-Plasty Lengthening of the IT Band

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Introduction

- This is designed to provide you with a better understanding of:
 - Anatomy and Biomechanics of the Snapping Hip
 - Risks and Benefits of Z-Plasty Lengthening of the IT Band
 - Expectations of the procedure



My Training

- Washington and Lee University
 - BS Chemistry
- Georgetown University School of Medicine
 - Medical Degree
- NYU/Hospital for Joint Diseases
 - Orthopaedic Surgical Residency
- Steadman-Philippon Research Institute: Vail, CO
 - Sports Medicine Fellowship in Knee, Shoulder and Hip
 - Mentors: Dr. Steadman and Dr. Philippon

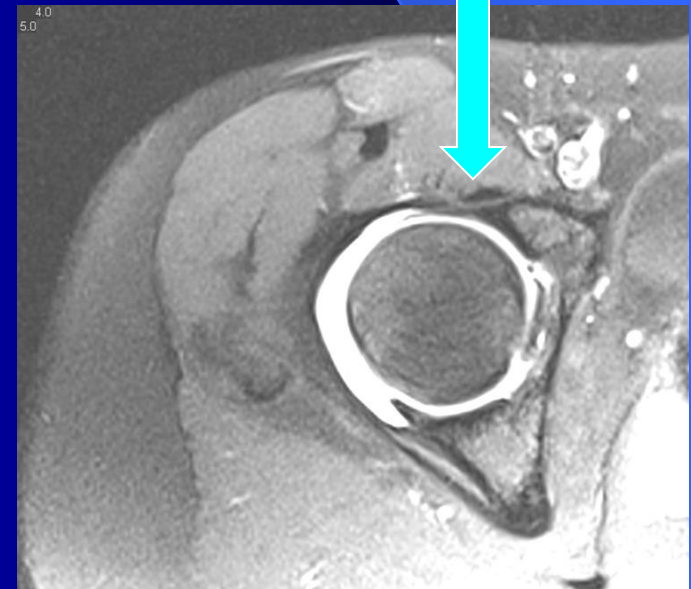
Snapping Hip

- The 2 Common Tendons that can cause snapping of the hip are:
 - The Iliopsoas Tendon-typically pops in the front of the hip that happens with hip flexion or bringing the hip down from a flexed position. This is Internal snapping hip.
 - The IT Band- on the side of the hip. It is often confused with popping the hip out of the socket. This is External snapping hip.

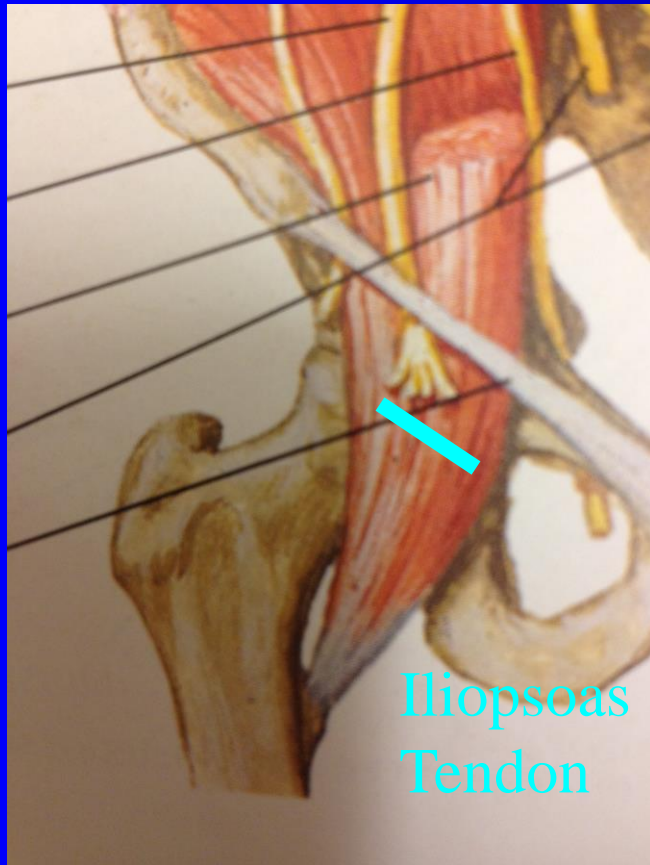
Internal Snapping of Iliopsoas

- Snapping is in the Front of the hip
- Mostly in Women
- Usually a consequence muscular imbalance around an irritable hip joint
- Happens with hip flexion or lowering the hip from a flexed position

The Psoas tendon runs right over the front of the hip joint. It can get "hung up" and snap.

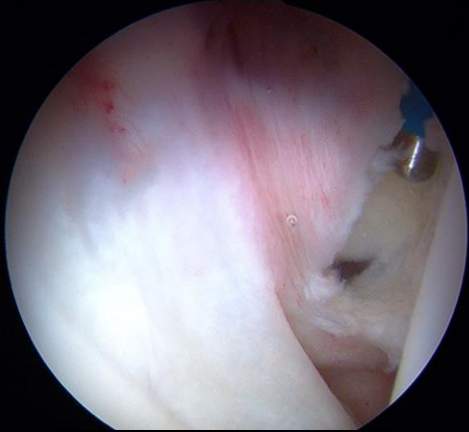
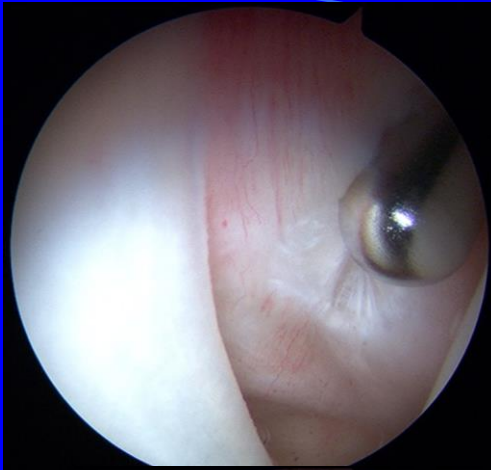


Iliopsoas Provides Dynamic Compression and Stabilization



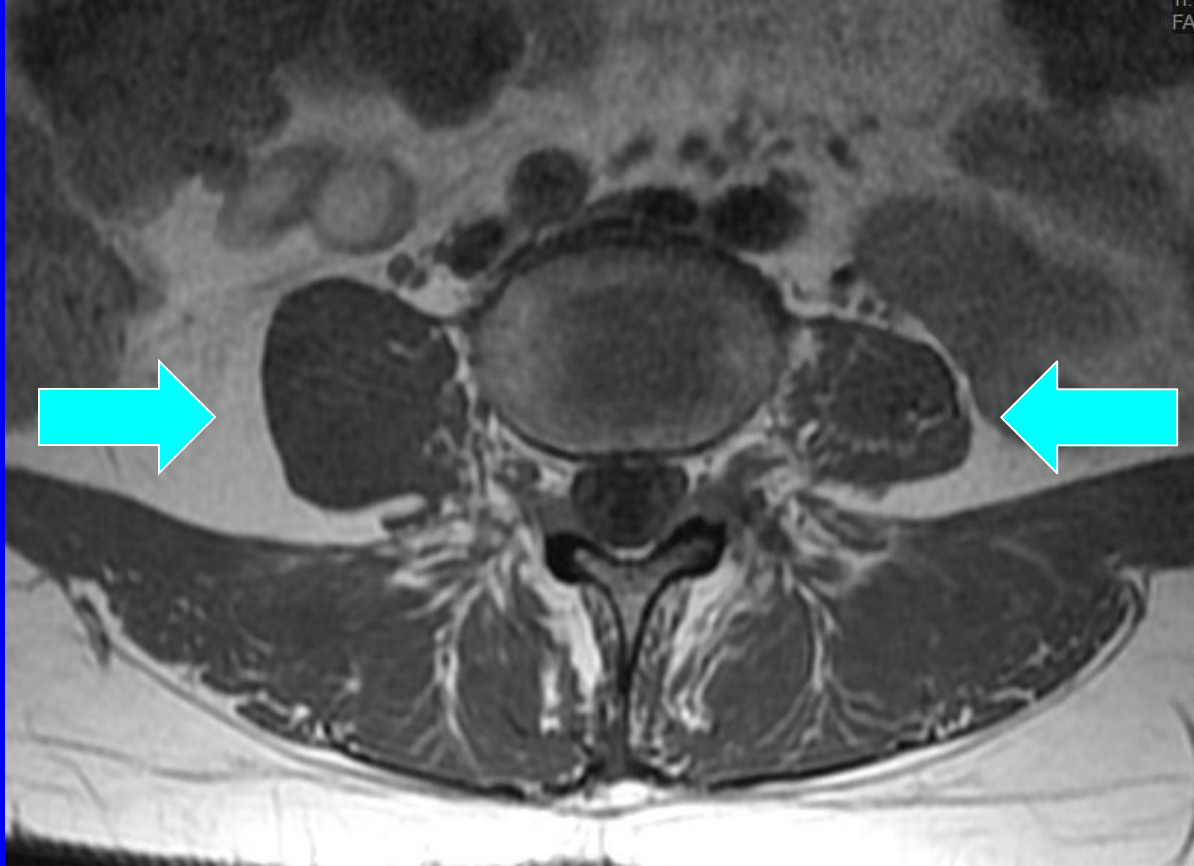
- I do not ever release the Iliopsoas tendon, but I used to.
- Can create weakness in hip flexion and potentially instability of the hip
- Especially important in a shallow and Anteverted Cup

Iliopsoas Release



- Generally should be avoided as it can not be fixed once performed
 - Dynamic compression and anterior stabilization of the hip joint provided by the Iliopsoas Tendon are lost.
 - Releasing the tendon can imbalance the hip and pelvis.

Potential Complications of a Psoas Release



Normal sized Iliopsoas muscle belly

Atrophied Iliopsoas muscle belly on a hip that underwent psoas release

- Lumbar Spine MRI 2 yrs after after a psoas release
- Release can cause hip flexion weakness and Spine issues

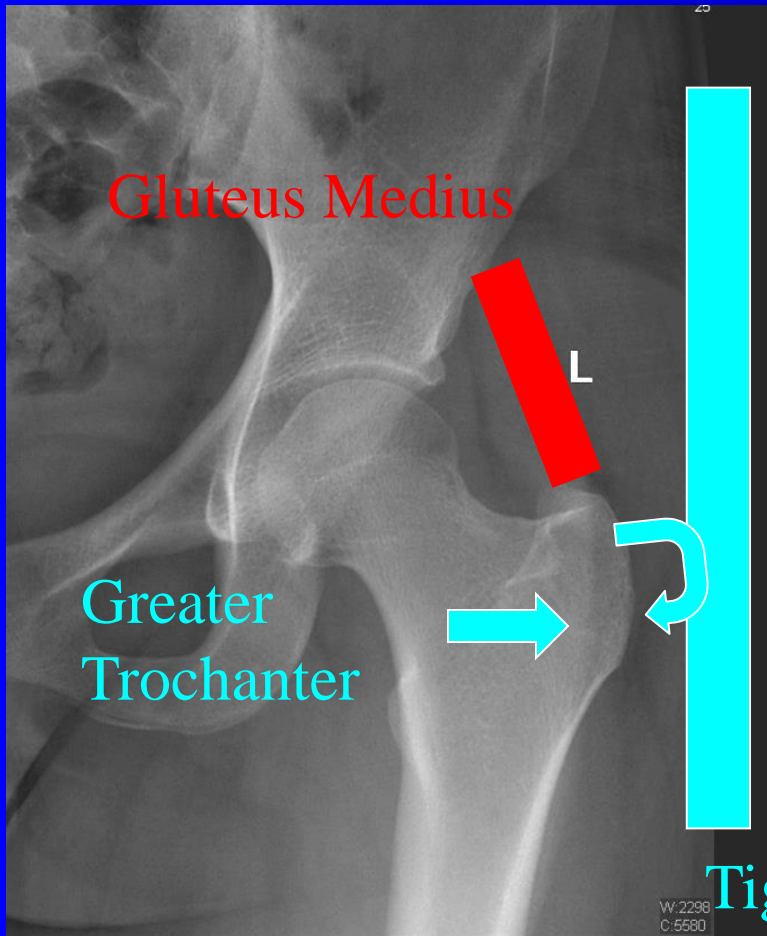
Iliopsoas Snapping

- I do not release the Iliopsoas Tendon-the snapping will improve once the hip is fixed.
- As the hip recovers from hip arthroscopy, the inflammation in the hip joint goes down, the muscles balance and often the snapping will go away.
- Physical Therapy after your hip arthroscopy will help balance the hip.

External Snapping of the Hip

- Violent, Lateral and is often confused with a dislocating hip
- Patients can often voluntarily make this snap in a hula hoop position moving the hip front to back
- Tight IT band gets stuck on the Greater Trochanter and snaps going from the front to the back
- Key: Has it become involuntary and does it cause pain?

External Snapping Hip

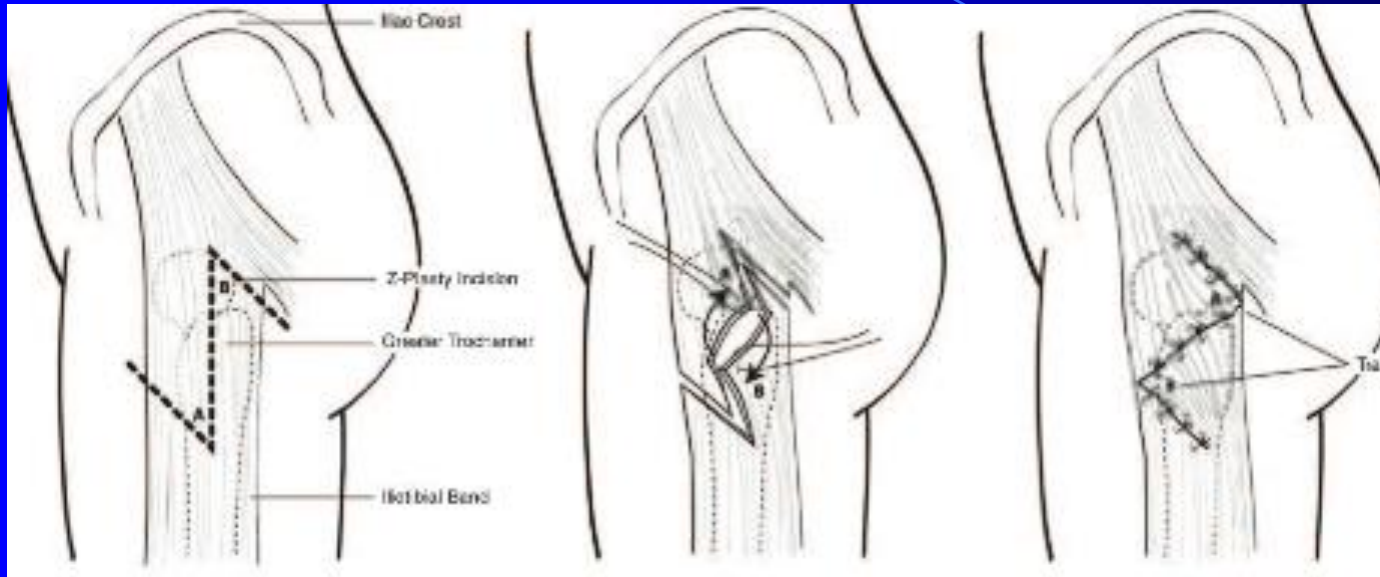


- As the hip dips, the IT band, which runs from the pelvis to just below the knee, snaps over the greater trochanter
- As the hip deconditions, the snapping gets more frequent and painful

Surgical Intervention

- Surgery is considered if the popping has become involuntary, painful and if you want it to go away.
- It is an open operation and not performed arthroscopically

External Snapping Hip



The IT band is cut in a Z and rotated to keep the IT band intact and lengthen it 2 cm

- **Open approach** – Z plasty lengthening of the IT band
 - My preferred technique
- **Arthroscopic** – Nothing Reliable
- This is done in addition to your hip arthroscopy
- It lengthens the IT band 2 cm and keeps it intact. Now that it is longer it can move back and forth over the greater trochanter without catching or snapping.

Recovery

- The wound is closed cosmetically
- The IT band needs to be protected for 6 weeks
- No movement of the hip across the midline (no adduction)
- No lifting of the hip out to the side (no abduction)
- After 6 weeks, the Z-plasty of the IT band is healed and the normal hip arthroscopy protocol is resumed. The hip is free to move in all directions without restrictions.

Cosmetic Wound Closure

- I use the Prineo wound closure system.
- It is a mesh covered with a glue that gives strength to the closure and also makes your wound waterproof to reduce your infection risk.
- I do not use this in people who are sensitive to adhesives or tapes as they can have a blister type reaction to this.



My Commitment

- When a patient decides to have surgery with me, I take that responsibility very seriously. I put everything I have into every surgery that I perform to ensure that my patients have the best possible outcome.

Thank you

- I hope this has allowed you to better understand your diagnosis of Snapping Hip and what Z-plasty lengthening could do for you.
- Please feel free to call us if you have any further questions. 303-321-1333



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