Notes

Pelvis Pro Miniseries

Part 1: Tight Hip Flexors

Are your hip flexors actually tight?

Functional Tightness: When someone's hip flexor muscles feel like they are in a shortened position, or feel tight even when they are not. They are responding to positioning from the rest of the kinetic chain.

- **Thomas Test: Determine how tight your hip flexors are or if you have lengthened hip flexors that just feel tight. This will tell you whether or not stretching would be helpful.**

Tight *Loose*

- When laying on the table, does their knee hang down a bit below the level of the table? Plenty of flexibility is indicated by the knee passing lower than the hip. This shows looseness in the hip flexor.
- Does their knee stay up above the table? This would indicate hip flexor tightness.
- Can they pull their knee into their chest? When they do this, do they feel any pinching?
- Do they feel like their hip flexor is tight but their knee is below the table?
- Does the knee want to rotate out, indicating psoas tightness?
- Does the knee want to migrate in, indicating more TFL tightness?
- Bending the knee more by pushing their foot in indicates rectus femoris tightness.
- Switch sides and test again, and then compare the sides and note the differences.
- Conclusion: Do they need to stretch, or do they just feel tight and when tested they are loose even though it feels tight?

If the the hip flexor is objectively short, try this:

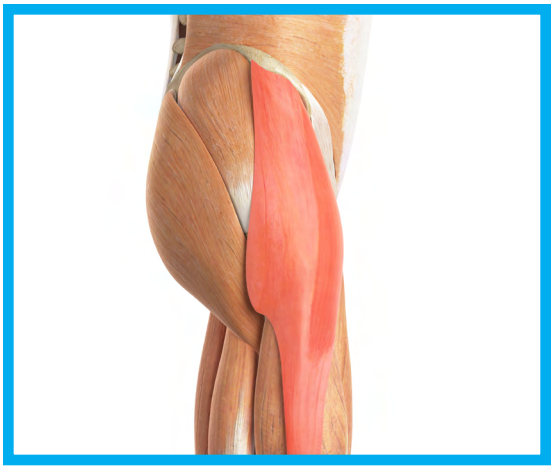
- Get in a lunge position. Place a pillow under your back knee if needed.
- Come tall and lengthen.
- Take the back foot out to the side. The psoas does external rotation, so if you internally rotate the femur you get more of a stretch without having to push the femur forward.
- Turn a little bit so you lengthen from where the psoas inserts into the spine.
- Layer in breathing: Inhale into the psoas in the back where it inserts into the diaphragm.

If you have hip flexors that feel short but when you tested you found out they are long, try this:

- Foam rolling helps to dampen the signals that go back and forth between the muscles and the brain, downregulating and calming everything down.
- Foam rolling can be really helpful prior to exercise.

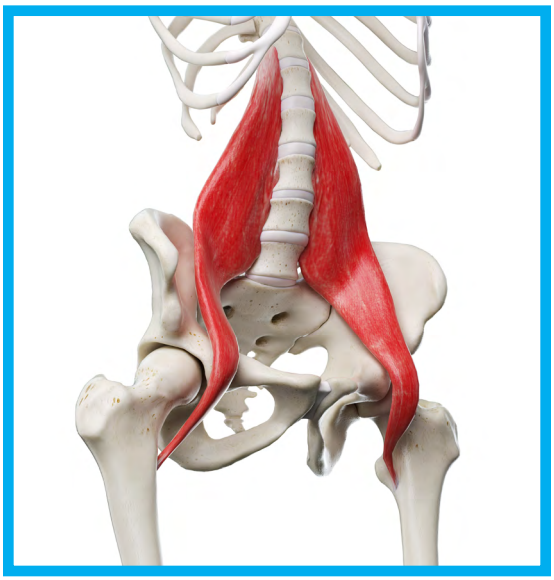
Why are the hip flexors feeling so tight? We have several different hip flexor muscles that can hold tension for different reasons:

- **Tensor fasciae latae (TFL)**



This is the muscle that sits in the front pocket area and goes down into the iliotibial band (IT band). The IT band is where the glute max joins the TFL and it acts as a primary stabilizer for the outside of the hip and the knee.

- **Psoas**



A very deep hip flexor muscle that inserts into your spine and does external rotation. The psoas inserts along every lumbar vertebrae and disc from T12-L5 and runs down and wraps around the femur.

- **Rectus Femoris**

A hip flexor muscle as well as a quad muscle. The rectus femoris comes into play when someone is in a quad-dominant pattern. The sartorius can also come into play when executing exercises in flexion, like clams.

Not a hip flexor, but also of note:

- **Diaphragm**

Plays a role in postural stability and works with the psoas. Breathing plays a role in pelvic positioning and hip flexor tightness.

Notes

Notes

Why are the hip flexors feeling so tight?

- Abdominal muscles lengthen during pregnancy, so the psoas steps in to help and becomes the primary vertical stabilizer for the spine. In this capacity it is less effective as a hip flexor, so the TFL picks up the slack and helps with hip flexion.
- To help with hip flexor tightness, use a multi-faceted approach of core strength and strengthening the psoas in its role of hip flexion.
- Put the psoas in a position to move into greater hip flexion and femoral external rotation.

Two exercises to add in hip flexion:

1. **Deadbug variation core and psoas strengthening:** A deadbug type of core exercise combined with resisted hip flexion and external rotation.

- Goal: Getting hip flexion while bracing through abs to hold the pelvis still.
- Inhale and exhale, breathing through the brace.
- Focus on holding the pelvis still while lifting the leg.
- Troubleshooting: High hinge point, anterior pelvic tilt, needs help with stability, rectus doming → Put a small towel roll under your back and press into it.

Once they have mastered that, move on to:

2. **Psoas strengthening**

- Find TAs and prebrace, using a towel roll under the low back if needed.
- Bring the leg up, turn it out, rotate the leg open into external rotation (more psoas, less TFL) and resist with the hand.
- Push into your hand on the knee, exhale, then release a bit on the inhale. Take 3 big breaths.
- This is an isometric hold with breathing.
- Repeat on the other side.
- Pretend you are blowing through a stiff pool float to help with the resisted exhale, or grab a balloon or breathing trainer for even further challenge. This should help the TAs engage because they are one of the first muscles to kick in with forced respiration.