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Hip Disorders in Active People

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Disclosures

I have no relevant financial relationships with ineligible companies to disclose.

Hip Disorders in Active People

INTRA-ARTICULAR:

- HIP OSTEOARTHRITIS/CHONDRAL DAMAGE
- FEMORAL ACETABULAR IMPINGEMENT SYNDROME
- ACETABULAR LABRAL TEARS
- DYSPLASIA
- LOOSE BODIES
- AVASCULAR NECROSIS
- LIGAMENTOUS AND CAPSULAR (LIG TERES, CAP LAX)
- INFLAMMATORY AND INFECTIOUS (RA, SYNOVITIS)
- POST-TRAUMATIC (FX)

Hip Disorders in Active People

EXTRA-ARTICULAR:

- GLUTE MEDIUS/MINIMUS TENDINOPATHY/TEARS
- ILIOPSOAS TENDINOPATHY OR INTERNAL SNAPPING HIP
- RECTUS FEMORIS TENDINOPATHY/AVULSION
- HIGH HAMSTRING TENDINOPATHY
- ADDUCTOR TENDINOPATHY
- BURSAL PATHOLOGY (GT, ILIOPSOAS, ISCHIAL)
- IT BAND / EXTERNAL SNAPPING HIP
- NEUROLOGICAL (MERALGIA, SCIATIC, FEMORAL ENTRAP)
- BONY (STRESS FX, H.O., AVULSIONS
- MUSCLE (STRAINS, SPORTS HERNIAS)

The Active Patient Who is Not Getting Better…..

- Patient has Labral Tear and/or FAIS. They are strong, active, educated, hard-working, motivated, compliant…….but they are just not getting better in PT.

- **What is the PT missing?**

Three Most Common Objective Findings that Prevent Recovery

- 1. Capsular Restrictions
- 2. Hip Flexor Hyperactivity or Hypertonicity
- 3. Pelvis and Sacral Dysfunctions

1. Capsular Restrictions

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- **Goniometers: It is critical to use for intra-articular conditions.**
  - WNL or WFL on the uninvolved side is not going to cut it. You must measure the specific ROM on both sides.
  - But Tony, I am a physical therapist of 150 years, I can use my eye-balls just as good as a goniometer…….No, you cannot! This is too important!

1. Capsular Restrictions

- Must assess both motions in each plane on each side.
- I.e. Right Internal Rotation and Right External Rotation. Then Left IR and ER.
- You must compare the total rotation in each plane from right to left. This is the ONLY way to know if one motion is restricted
- Normally, we should have equal total rotation from right to left, within 5-8 deg.
- But how each side gets to that total is almost always, if not always, asymmetrical.
- I.e. R70/30 = L50/50 = 100 (Due to -version) IT'S NORMAL!

1. Capsular Restrictions

- **Benefits of using a Goniometer:**
  - 1. It's the only ***accurate*** way to know if you have capsular restrictions.
  - 2. Share the numbers with the patient to validate their experience, light a fire, create a meaningful goal and create a true partner.
  - 3. You turn this into an exciting and fun goal. "Wow, Mrs. Johnson, remember when you only had 65 deg on your injured side? Now it's up to 91. PT is working, you are totally getting better!" It builds motivation and compliance. Oftentimes, they won't feel the subjective improvements initially, but if they know the objective improvements, they will keep working hard. 'Objective' typically comes before 'Subjective.'

1. Capsular Restrictions

- How do you restore full capsular mobility or at least as much as is possible in this patient?
  - Manual Joint Capsule Mobilization in clinic AND at home
  - Specific Therapeutic Exercises daily at home

2. Hip Flexor Hypertonicity

- **The most common complaint I hear from these patients:**
  - "No matter how much I stretch, the tightness never seems to go away and no matter how much I strengthen, my leg just feels weak, doesn't work right."

2. Hip Flexor Hypertonicity

- **The most controversial statement of all-time:**

"HIP FLEXORS DO NOT GET WEAK (and I can prove it)"

- Ok, Ok, how about this? – "Very *rarely* is HF weakness the problem?" How often do you find true Upper Trap weakness?
- Upper traps and hip flexors do get very dysfunctional, but hypertonicity is almost always the problem, not weakness and tightness!

2. Hip Flexor Hypertonicity

- In reality, they **"TEST"** weak with MMT, but they are **NOT** actually weak. We can prove this!

- Answer this…how long does it take strengthening exercises to change true weakness ?
  - Abou 4-6 weeks in a healthy individual

- We can change most 4-/5 hip flexors to a 5/5 in 3 minutes. Can't be weakness.

2. Hip Flexor Hypertonicity Test

- **Why is this important?**
  - At least 50-60% of pts referred to me after seeing other PT's, tell me that the PT had them doing hip flexor strengthening like SLR's and standing resisted hip flexion with band.
  - They say they just kept getting irritated and feeling worse and worse. Some even tell me that they just lied to their PT and stopped doing them, just got more irritated.
  - If you keep yelling at something that is already overworking and mad, it's not going to calm down. Remember how we used to tell everyone with urinary incontinence to do more Kegels, more Kegels, more Kegels then we realized their pelvic floors were not actually weak, they were 'hypertonic'….. **Same exact thing!!!**

2. Hip Flexor Hypertonicity

- **Hip Flexor Hypertonicity Test:**
  - Patient in supine, have them grab onto the top of the table above their head. The other leg is out straight. Instruct them that they can use their arms, core, hip flexors, and anything they want. They have one mission: **"Keep your hip at 90 deg flexion."**
  - Bring their involved leg up to 90 deg of hip flexion with open palm on distal quad above patella and start off slow to get them engaged, then start to ramp up. Do not go all out on 1st trial as you will do 3 trials.
  - Hold for a few seconds, up to 4-5 sec, then tell them to relax and immediately take their leg down to table, otherwise they will cramp (active insufficiency). Repeat the test and challenge them verbally, "Hold it, hold it harder, come on, use your arms, hold it!"

2. Hip Flexor Hypertonicity Test

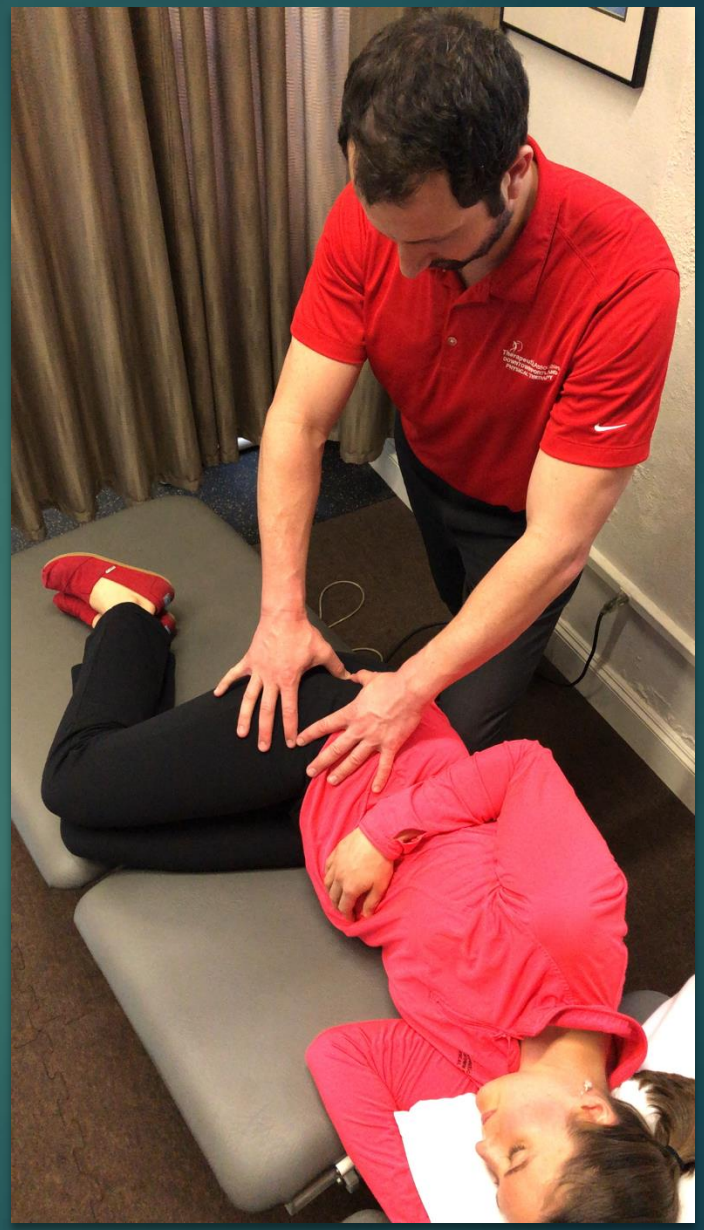
- **Hip Flexor Hypertonicity Test cont…..**
  - The first trial helps to get past the nervousness, apprehension and worries about it hurting. It will not hurt, About 1 in 500 will actually hurt. It is more of a feeling of, "weird, it doesn't really hurt/hurt, more like I am trying to hold it, but I just can't. It feels weak."
  - Always test their uninvolved side first so they know what to expect. And do it 3 times so you can build up harder and harder, safely and for you to really get to know their power.

Functional Release Technique – Hip Flexors

- **Just superior and medial to ASIS** – Do not look for the most painful spot, do only this spot as it obtains the best results.
- 0 = no massage pain, 10 = 'stop, I'm dying' massage pain. Need to work in 4-7/10 range. Ensure pt knows there is no danger. The more they can take the better.
- Leg moves in all 3 planes with foot into table: knee bends (sagittal), Bent-knee Fall-outs (Transverse), and Snow Angels (Frontal) – not slow, 10-15 reps. Repeat twice, 2nd one better.

Functional Release Technique – Rotators

- Common deep rotator insertion into greater trochanter.
- Hook fingers around ASIS, press thumbs together and into tissue during the movements. Move around a bit in concentric half circles around ASIS
- Pt moves in all 3 planes: Leg press (sagittal), Abductions (frontal), Reverse Clam (transverse).
- Do TFL region with front plane movement as well.



Home Release Techniques

- Works through accumulation like antibiotics on an infection (can't take just one).
- Pso-Rite (levels 1-4)
- Hip Hook (the Mark)
- Lacrosse balls, various tools
- Active and Passive

3. Pelvis and Sacrum

3. Pelvis and Sacrum

- In ALMOST EVERY patient that comes to me after not resolving their hip pain with other PT's, I find a Dysfunctional and/or Restricted Innominate or Sacral Torsion.

- In some parts of the USA and abroad, some healthcare providers, including PT's, do not believe there are dysfunctions that occur here and even if there is, there is nothing a PT can do about it.

- What I, and many others, know to be true: ***I find objective findings here, I correct them so that I don't find the objective findings and patients tell me they feel better.***

3. Pelvis and Sacrum

- **Most Common Restrictions:**
  - Anterior Rotated Inominate Restriction
  - Posterior Rotated Inominate Restriction
  - Upslip
  - (R) on (R) Sacral Torsion (ST)
  - (L) on (L) ST
  - (R) on (L) ST
  - (L) on (R) ST

3. Pelvis and Sacrum

- Remember for Patellofemoral dysfunctions, we used to blame the quads and the patella for the dysfunction? Then we learned that perhaps, for patellofemoral problems, it was the femur and gluteals that may be the bigger contributor?

- In other words, we like to blame "the train" when in fact, perhaps we should be blaming "the train tracks." For TMJ, we start with upper cervical….for the shoulder….scapula and thoracic…..**for the hip, I start with pelvis, sacrum and lumbar spine!**

3. Pelvis and Sacrum

- If the (R) SI joint is Hypomobile, oftentimes, the (L) will compensate and become Painfully Hypermobile or Functional Unstable.
- A joint compensating with hypermobility or hyperactivity, will stimulate associated muscles to become 'hyper'active or hyper'tonic' as well. The most common are hip flexors and deep rotators as we discussed.
- The muscles that become 'hypo' active are gluteals.
- We need to **DOWN-TRAIN** the hip flexors and deep rotators and **UP-TRAIN** the gluteals in functional weight-bearing positions

Conclusion

- For Active People with Hip Disorders, no matter Intra- or Extra-Articular, need to make sure:
  - Truly recognize Capsular Restrictions and Optimize Mobility
  - Downtrain the Hyper-compensators (hip flexors) and Uptrain the lazy muscles (gluteals).
  - Make sure the Train Tracks (SI, Sacrum, Lumbar) are optimized before you can worry about how great your Train (hip) is performing.

THANK YOU!

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