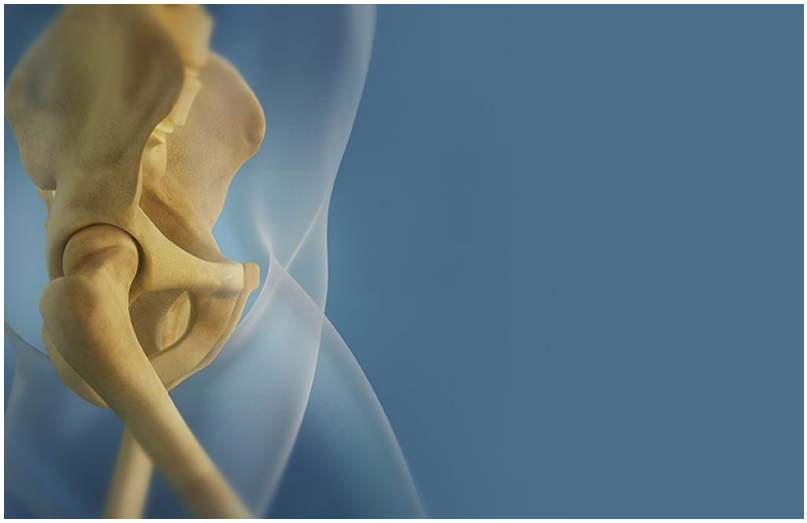
Dynamic Chiropractic



CLINICAL CORNER

Evaluating Hip Pain Isn't Always as Easy as You Think

Marc Heller, DC

When your patient says, "My hip hurts," where do you start? You won't be effective unless you know exactly what to address. The word *hip* is misused by both patients and practitioners. *Hip* can refer to the SI, lateral structures or groin.

The first question: Where does the patient hurt? Is it the groin, the front of the thigh, the side of the thigh, the posterior thigh, or over the sacroiliac region? My previous two articles, "A Pain in the Butt" (Part 1 and Part 2), addressed the posterior and lateral pain in depth. This article focuses on anterior hip and/or groin pain.

Second question: Can you, the doctor, touch the pain, or find a motion or position that provokes or reproduces the pain? Is there weakness or sensory changes associated with the pain? Does the patient have trouble going up stairs? If the difficulty is in lifting the thigh, this would indicate hip flexor weakness. If the patient has trouble pushing off, the problem could be either the glutes or the toe plantar flexors; both posterior chain weaknesses.

Don't forget, the patient has the right to more than one problem. If you are treating pain lasting more than two weeks that has become subacute or chronic, the odds increase that more than one problem is contributing. The body's attempts to compensate are not always useful.

Locating the Pain Sources: 4 Key Indicators of Dysfunction

For anterior pain, ask the patient to point specifically to the spot of discomfort, ideally with one finger. The groin is a sensitive, charged area; use appropriate cautions. I usually examine through a layer of clothing. Tender spots may or may not be directly over the patient's painful areas.

When examining the hip joint, here are four indicators of dysfunction:

1. Examine hip range of motion (ROM) and compare to the hopefully nonsymptomatic opposite side. Limitation of internal rotation is key here. Sometimes the normal for an individual may be 10-15 degrees, especially in an older male, versus 60 degrees in a flexible, younger female. Also look for relative change and evaluate end feel. Don't be fooled when the symptomatic side has 35 degrees of internal rotation. Check the opposite side as well. Also check flexion, extension and external rotation.

If you only find a lack of ROM, this may represent that patient's normal. Use these other tests to confirm that the hip is a problem.

2. Palpate for tenderness over the head of the femur, located by bisecting a line from the ASIS to the pubic bone and then moving inferior 1 cm. This formula will place you directly over the bony head of the femur. Tenderness here is an indicator of an anterior femur, which accompanies functional hip

impingement. Once you are familiar with this palpation, you will understand the anterior "feeling."

3. Palpate more generally. In hip impingement, the entire anterior groin, when, palpated with a flat hand, will feel stiff, rather than soft.

4. Assess weakness by manual muscle testing of the hip flexors at 30 degrees of flexion. The leg may need to be bent at the knee if there is concomitant sciatica. This weakness correlates with difficulty lifting the thigh.

The correctable problem in this situation is functional hip impingement; the femur is jammed forward, usually stuck in external rotation. (Thanks again to Lucy Whyte Ferguson, my mentor on the hip.)

This is not an article on treatment, but the key to successful resolution of this problem is often to have the patient stop forcing the hip into external rotation. Yoga lovers try to solve all hip problems by "opening" the hip.

Differential Diagnosis Considerations

The differential diagnosis, the rule-outs, include severe DJD of the hip. A worn-out-hip patient rarely achieves lasting improvement of motion, often has 0 degrees of internal rotation, and flexion is usually limited to less than 90 degrees.

Femoral acetabular impingement is a recent popular surgical diagnosis based on anatomical changes in the joint itself. Another source of anterior thigh and/or groin pain is an upper lumbar disc issue irritating the femoral nerve. A prone femoral nerve-stretch test will help rule out an upper lumbar disc.

Other Anterior Tender Points

1. Is the pubic symphysis tender, especially on the side of the groin pain? Palpate the front and side of the pubes. This can be an anterior SI (pubic) alignment issue, usually corrected by resisted adduction and abduction of the bent knees. Sometimes you need to do a more direct correction to the inferior or superior pube. Address the (posterior SI) ilial misalignment as well.

2. Pubic tenderness or any groin pain can also be caused by irritated ilio-inguinal nerves, which run obliquely through the groin.

How to Evaluate the Anterior Nerves

I can't leave you without providing a bit more detail on the anterior nerves.

Begin by finding a tender point. I palpate the area just medial to the ASIS in the soft tissue over the iliacus muscle, often finding a tender point along the oblique line from the ASIS toward the pubic symphysis. This tender spot can represent any of the three nerves that run through the groin. These nerves are difficult to differentiate by palpation.

Here are the three main groin nerves:

- The *ilio-inguinal nerve* is likely to cause medial groin pain. In males, it may feel like testicular pain; in females, it can contribute to pelvic floor issues.
- The *ilio-hypogastric nerve* has a posterior branch that can be palpated over the upper gluteus

medius just below the iliac crest. Ilio-hypogastric nerve irritation is a major contributor to lateral hip pain.
- The *lateral femoral cutaneous nerve* (think *meralgia paresthetica*) will cause sensory changes over the upper anterior thigh or lateral thigh.

Treating the Nerves

Treatment for these three nerves is similar: address them through spinal manipulation at L1 or L2, perform anterior release of the nerves, and apply gentle neuromobilization such as dermal traction, formerly known as the "Yank Away Pain" model. (These strategies are outlined in the referenced article.)

Address other contributing factors including an overweight, protruding abdomen, or use of a heavy tool belt.

Palpate the obturator foramen. Is it tender? This orifice is covered by the obturator membrane and the obturator internus and externus muscles. The obturator foramen is the exit point for the obturator nerve, which supplies all the adductor muscles.

When the obturator foramen is tender, a nerve exit point (one hand-width above the knee between the medial hamstring and the adductors) will usually be tender. (The high gain locations for nerves are wherever they come close to the surface.)

Don't just stretch the adductors; pay attention to nerves. I also like to release the obturator foramen with a gentle myofascial release approach.

Take It to Your Clinic

I've outlined several contributors to anterior groin and thigh pain. You can see that my approach has become more neurocentric. Thanks again to Phillip Snell and Justin Dean (dermal traction) for their contributions to our understanding and treatment of nerves. Hopefully, you can use this information to expand your knowledge and help your challenging patients.

Resources

- Heller M. "Pain in the Butt, Pt. 1." *Dynamic Chiropractic*, Feb. 1, 2019.
- Heller M. "Pain in the Butt, Pt. 2." *Dynamic Chiropractic*, April 1. 2019.
- Heller M. "Functional Hip Impingement, Pt. 1: Evaluation, Hip Sparing and Mobilization." *Dynamic Chiropractic*, April 15, 2015.
- Heller M. "Functional Hip Impingement, Pt. 2: Rehab Exercises." *Dynamic Chiropractic*, May 1, 2015.
- Heller M. "Treating Hip & Groin Pain With Abdominal Release of Upper Lumbar Nerve Impingements." *Dynamic Chiropractic*, June 15, 2016.

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