

Research increasingly suggests a relationship between hip strength and urinary continence (a.k.a. bladder control)

What do we know so far?

Based on studies published over the past 10 years, hip muscle weakness appears to correlate to stress urinary incontinence in females. Specifically, weaker hip strength has been found in those who leak compared to those who do not, while pelvic floor muscle strength has been found to be similar between the groups! In other words, pelvic floor muscle strength alone is not related to leaking. The fact that hip function is different between groups of leakers vs. non-leakers suggests that a more integrated approach is required to treat urinary incontinence.

Clinically, pelvic health physical therapists have observed this for years. Leaking outcomes tend to be better for athletic clients who are also training their lower body. And people who struggle to get up off the floor or lift children seem to leak less after they have re-mastered a strong functional lunge and squat. There's magic in a treatment approach that includes good body mechanics, good pelvic floor function, and strong hips.

How do you know if hips are “strong”?

In the clinic, hip strength is measured against a resistance force with the leg in positions that occur from movement at the hip joint - the leg out to the side, the leg in towards midline, the leg back behind you, the leg in front of you, and the leg rotating inwards or outwards. Examples of exercises that demonstrate hip movements are the “side lying leg raise”, “clamshell” and “standing hip extension”. Hip strength can also be loosely assessed via functional movements like squatting and lunging, which we use daily to pick things up, get in and out of the car, rise from the floor, etc. Potential signs of weakness with these tasks are when a person “uses their back” instead of their legs, struggles with these tasks, or experiences pain or bladder leaking with them.

Why would the hips affect continence?

Based on anatomy, the hips can be considered part of the pelvis, or at least neighbors of the pelvis. And we all know neighbors can make your life better or worse! The hip muscles cross over the pelvis at several points, and even attach together with the deep pelvic floor muscles. Based on this, force generated by hip muscles should increase force generated by the pelvic floor muscles. In other words, hip muscle contraction can enhance pelvic floor muscle contraction. This is a synergistic effect - muscles that co-contract tend to help each other out to produce a desired effect...closure of the urethral sphincters for continence, for example.

What do we still need to learn?

Continued research is recommended on this topic to confirm the exact aspects of hip strength that have the strongest relationship to continence, the most effective exercises to treat leaking, and to which populations this is most relevant (age, birth status, type of incontinence, etc.).

How can I use this information?

In choosing exercises to support urinary continence, hip exercises should be included as a best practice. Think about it as part of general conditioning for pelvic floor function. These are peppered throughout the K+ Training circuits, and often provided by pelvic health physical therapists if you attend PT for leaking. Additionally, you can start to think about how you move throughout the day. Remember, leaking may occur from compensation patterns when a person lacks leg strength or avoids using their leg strength due to pain or injury, to do things like get up from the floor, step onto a high step, and pick something up. Are you avoiding fully squatting down to pick up children or move furniture? Do you sit for long periods of time for work? Have you noticed a “flat butt” since having kids or changing to a desk job? If so, simply working in more basic squats, lunges, and basic floor exercises for the hips like side leg raises and clamshells, may be just what the bladder needs.