

Working with Hip Mobility

By Til Luchau

When I was a student at the Rolf Institute in the 1980s, I heard a story about its founder, Ida Rolf, which underlined the importance of pelvic mobility in her work. According to the story, Rolf would regularly quiz her trainees about the aims of each of her 10 sessions, or “hours.”

She reportedly asked her classes questions such as, “What is the goal of the fifth hour?” As a demanding teacher, very few answers would satisfy her; but even though each session was different, she reportedly accepted the answer “free the pelvis” as a correct one, no matter which session she would ask about.

While this story probably has an element of folklore to it (since her death in 1979, many “Ida stories” have assumed the status of legend in the structural integration community), it illustrates the key role that pelvic adaptability at the hip joints played in her vision of an integrated body. Rolf referred to the hip’s relationship to the pelvis as “the joint that determines symmetry.” She wasn’t alone in emphasizing the key role of the hips; balanced hip-joint mobility is important in fields as diverse as athletics, dance, geriatrics, and back-pain management.

I became even more curious about the relationship of the low back to hip-joint mobility when I went to Japan to teach and practice manual therapy, a few years after graduating from the Rolf Institute.

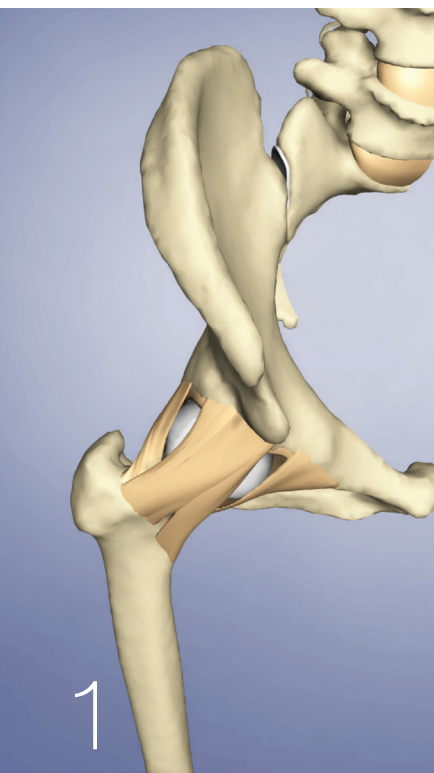
I noticed challenges to my own hip mobility as I adjusted to the Japanese practice of sitting on floor cushions more often than chairs. I noticed considerably more hip mobility (especially external rotation) in my Japanese clientele than I had seen in my American and European clients. My Japanese clients also seemed to have generally flatter spinal curves. Were these related? Conventional wisdom maintains that freer hips means happier backs, and research both in Japan¹ and in the United States² generally supports this.

In this brief article, I’ll describe three techniques for assessing and balancing hip-joint mobility, taken from Advanced-Trainings.com’s *Advanced Myofascial Techniques* DVD and seminar series.

PUSH BROOM “A” TECHNIQUE

The “Push Broom” series is an effective way to increase hip-joint mobility without undue effort or strain by the practitioner. Using gravity, we’ll take the hip through three positional techniques that will release all the structures of the hip joint: from the deep iliofemoral ligaments (Image 1), to the iliopsoas, hamstrings, hip abductors and adductors, rotators, sartorius, quadriceps, and their enveloping fascias.

The term *push broom* refers to the starting grip: hold your prone client’s leg at the ankle and knee as if holding the handle of a push broom (Image 3). Swing the knee outward as you walk the leg up into full hip flexion, bringing the knee as far toward the head as comfortably possible. Rolling the pelvis away from you as you bring the knee up will make it easier to flex the hip past the 90-degree point. With almost all clients, it will be more comfortable if you take the leg past this 90-degree position so that the femur is close to the side of the



1 The iliofemoral, pubofemoral, and ischiofemoral ligaments limit hip motion. Infants have more hip flexion as a result of their position in utero. *Image courtesy Primal Pictures; used by permission.*



Image courtesy Advanced-Trainings.com.

body, rather than perpendicular to it.

Just being put into this “baby crawling” (Image 2) or “bullfrog” position

often gives a therapeutic stretch to the hip joints; however, while we are here, we can increase hip mobility by releasing the gluteals. While stabilizing your client’s leg with your own, use the flat of your forearm to gently release the medial attachments of the gluteus maximus just below the iliac crest (Images 4 and 5). Tendinous attachments have concentrations of Golgi tendon organs, so you’ll get the best results by waiting with slow, nearly static pressure here, rather than sliding or moving your touch. Use moderate pressure, with a slight vector of pressure toward yourself, in order to ease or nudge the gluteus away from its boney attachments on the ilium.

Gently sustain this pressure until you feel the tissue respond with a subtle softening or easing; then release your pressure and move to the next segment of gluteal attachments.

PUSH BROOM “B” (EXTERNAL ROTATION)

While still in the leg-up position of the Push Broom “A” Technique, drop your client’s lower leg off the table, as in Image 6, page 116. Roll the femur into external rotation by lifting the adductors toward you with both hands. This also allows you to prevent any pressure the edge of the table might otherwise put behind your client’s knee. At the same time, use your leg under the table to augment the femoral rotation by gently pressing your client’s foot toward the head of the table. Your client should feel

no strain on the knee or anywhere else; only a stretch and release

around the hip joint. Omit the pressure on your client’s foot if it produces any discomfort.

Stay comfortable and upright in your own body. Invite your client to breathe easily and relax into the stretch. Sustain this positional technique until you feel a response—softening, easing, or relaxing. Usually this takes at least 3–5 breaths.

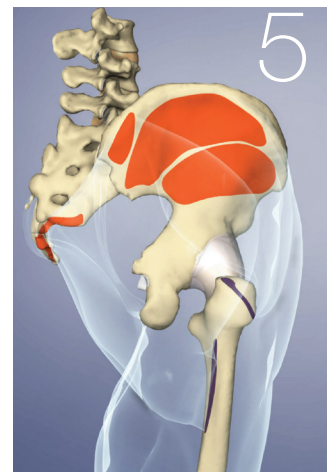
PUSH BROOM “C” (INTERNAL ROTATION)

Internal femoral rotation is one type of hip mobility that has been shown to be negatively correlated with back pain (that is, the freer someone’s internal rotation, the less chance of back pain), particularly in men.³ Although 80 percent of people are said to experience back pain at some point in their lives, most people can benefit from increased internal adaptability, whether they have low-back pain or not.

From the external rotation “B” variation, we go right into internal rotation with Push Broom “C.” Instead of dropping the lower leg below the level of the table as in “B,”



The A variation of the Push Broom Technique. Once the hip is flexed with the lower leg on the table, use your forearm to release the medial attachments of the gluteal muscles. Images 3 and 4 courtesy Advanced-Trainings.com; Image 5 courtesy Primal Pictures; used by permission.





The “B” (external rotation) variation of the Push Broom Technique. *Image courtesy Advanced-Trainings.com.*

Watch Til Luchau's technique videos and read his past Myofascial Techniques articles in *Massage & Bodywork's* digital edition. The link is available at Massageandbodywork.com, at ABMP.com, and on [Advanced-Trainings.com's](http://Advanced-Trainings.com) FaceBook page.



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we rotate the femur so that the lower leg is high. By using the grip and position shown in Image 7, gently take the femur to its soft end-range of internal rotation; hold and wait for tissue response. Remember to keep the hip flexed at least 90 degrees (that is, keep the femur perpendicular to the body, or even a little past this position toward the head). As in the “B” variation, be mindful to avoid strain or discomfort on the knee.

Once you've completed these three Push Broom variations on one leg, return it to anatomical position. Clients will often comment that this leg feels significantly longer and freer than the one you haven't worked yet. Repeat these techniques with the other leg to balance left and right sides.

OTHER CONSIDERATIONS

Although we've described these three variations as hip-joint techniques, they also affect the ligamentous adaptability of the pelvic girdle itself, mobilizing the sacroiliac joints by addressing sacrotuberous, sacrospinous, and sacroiliac ligament restrictions, and balancing the torsion and flaring movements of the ilia on the sacrum.

To drape these techniques, simply grasp the leg through the top sheet in variation “A,” and move the sheet together with the leg. Alternatively, especially for the “B” and “C” variations, the leg can be out from under the edge of the drape, with the sheet gathered around the thigh so as to give a sense of security and privacy to the client.

When applying the techniques described here, it is important that they do not cause pain. In addition to soft-tissue restrictions to mobility, there can be boney restrictions as well, such as the shape or orientation of the acetabula or femoral

heads. These can cause pain or irritation when pushed to their physiologic limit. Femoral acetabular impingement (FAI) syndrome is a painful restriction of hip movement caused by abnormal contact between the femur and the rim of the acetabulum, probably due to both genetic and usage factors. Although often addressed surgically, techniques that increase mobility are also effective in managing FAI pain, though pushing a stretch too aggressively can aggravate this condition.

WHAT ABOUT HIP REPLACEMENTS?

It is likely that maintaining balanced hip mobility can help prevent or ameliorate the joint pain, degeneration, or arthritic conditions that if otherwise unaddressed, can lead to hip replacement (Image 8) or resurfacing.

If your client has had hip replacement surgery, special considerations may apply to using these techniques. Hip replacement surgery involves cutting through tissues and dislocating the joint being replaced, either posteriorly or anteriorly, depending on the type of surgery. This can leave the hip with less support in the direction of the surgical dislocation, at least during recovery. (To learn more about the procedures involved in a posterior replacement, I recommend checking out Edheads's interactive hip surgery simulator at www.edheads.org/activities/hip. The squeamish need not be concerned—the animated procedures keep it all neat and tidy, unlike real posterior hip surgeries, which can appear downright gory and brutal to the uninitiated.)

Different types of hip surgeries have different movement restrictions associated with their recovery period. Surgeons also differ widely in their recommended movement restrictions after surgery. In a recent informal survey of hip surgeons' recommendations to yoga teachers, a third of surgeons responding said they required no movement restrictions

whatsoever after an anterior hip replacement.⁴ However, the most conservative recommendations say that for six months to one year after surgery, hip replacement patients should avoid:

- Adduction, internal rotation, and hip flexion past 90 degrees for posterior hip replacements;
- Abduction, external rotation, and hip extension for anterior replacements.

Given these variables, the best practice for manual therapists is to inquire about any movements your client's surgeon or physical therapist has recommended he or she avoid during the recovery period.

Many hip replacement patients continue to experience soft-tissue-based movement restrictions long after their surgeries have fully healed. For these older, healed hip replacements (approximately one year or more after surgery), these techniques can be a great help with longer-term recovery and maintenance of mobility. However, because we aren't trying to stretch or alter the artificial materials of the prosthesis itself, go easy on the end-range of any stretching applied to the replaced hip. Think about keeping the tissues around the joint long, easy, and mobile, rather than trying to deeply stretch the artificial joint itself.

Finally, don't hesitate to adapt these techniques with senior or physically challenged clients. By being sensitive and staying in communication about their comfort, you'll often be surprised how comfortable and effective these releases are, even for those with limited active mobility.

With practice, these techniques will become part of your technique toolbox, enabling you to assess and release many hip restrictions within the context of your regular work. Your clients of all ages and activity levels will appreciate this. **m&b**



The “C” (internal rotation) variation of the Push Broom Technique. Image courtesy Advanced-Trainings.com.



X-ray of a total hip replacement (total hip arthroplasty). Public domain image from the National Institutes of Health.

Notes

1. K. Horikawa et al., “Prevalence of Osteoarthritis, Osteoporotic Vertebral Fractures, and Spondylolisthese Among the Elderly in a Japanese Village,” *Journal of Orthopaedic Surgery* 14, no. 1 (2006): 9–12.
2. M. Harris-Hayes et al., “Relationship Between the Hip and Low Back Pain in Athletes Who Participate in Rotation-Related Sports,” *Journal of Sport Rehabilitation* 18, no. 1 (February 2009): 60–75.
3. Other types of hip mobility that correlate with less back pain are hip flexion, hip extension, and hamstring flexibility in men, and hip flexion and extension in women. G. Mellin, “Correlations of Hip Mobility with Degree of Back Pain and Lumbar Spinal Mobility in Chronic Low-Back Pain Patients,” *Spine* 13, no. 6 (1988): 668–70.
4. N.M. Jones, “Yoga After a Hip Replacement,” accessed February 2012, www.expandinglight.org/free/yoga-teacher/articles/yoga-therapy/yoga-after-a-hip-replacement.asp.

6 Til Luchau is a member of the Advanced-Trainings.com faculty, which offers distance learning and in-person seminars throughout the United States and abroad. He is also a Certified Advanced Rolfer and has taught for the Rolf Institute of Structural Integration for 22 years. Contact him via info@advanced-trainings.com and Advanced-Trainings.com's Facebook page.