Wrist are amazing structures. They mediate the relationship between our stable larger-boned arms, and the highly mobile, sensitive dexterity of our hands. Additionally, key structures pass through the wrists from arms to hands: tendons, nerves, and vessels. In this issue’s article, I’ll talk about two effective techniques for working with the wrist, drawing on the myofascial work as taught in Advanced-Trainings.com’s “Advanced Myofascial Techniques” workshop and DVD series. As always, you can see video related to these techniques by visiting Massage and Bodywork’s digital edition, which features a clip from Advanced-Trainings.com’s “Advanced Myofascial Techniques for the Arm, Wrist, and Shoulder” DVD set. Link available on ABMP.com and Massageandbodywork.com

The *carpus* is the name of the boney structure formed by the two rows of small carpal bones. Wherever these bones meet each other, they have slippery hyaline cartilage and fluid-filled synovial joints between them. They are also secured by a complex system of strong interlocking ligaments (Figure 1). In other words, the carpal bones are built to both move against one another, and to provide stability. By combining these two qualities, the integrated structure of the carpus provides a stable but adaptable base for the varied movements of the hand, fingers, and thumb.

*Figure 1:* The structure of the wrist balances movement and stability, combining slippery articular cartilage (white areas), synovial joints, and a strong system of interlocking ligaments between the carpal bones (right).
Loss of movement between the carpal bones can be associated with the symptoms of carpal tunnel syndrome; arthritis; wrist pain; and diminished hand function. Images ©Primal Pictures.

Problems can occur when either mobility is lost (hypo-mobility), or when stability is lost (hyper-mobility). Hypo-mobility issues can arise from several causes, including past injuries that have self-splinted as they healed; surgeries; arthritic conditions; and/or adaptations to heavy or repetitive work. Generally speaking, hyper-mobility issues are usually the result of injury or congenital conditions. Typically, bodyworkers will see more clients with issues related to lack of mobility than clients with too much mobility, and so it is here that we will focus.¹

Lost carpal mobility can play a large part in the numbness and pain of carpal tunnel compression symptoms. Together with the bowstring-like flexor retinaculum, the bowed arch of the carpus forms the carpal tunnel—the space through which the tendons, vessels and nerves of the hand pass.

Figure 2: The distal row of the carpus and the carpal tunnel, in cross section. The flexor retinaculum, on the palm side, is labeled FR. The capitate bone (C) is prone to being fixed anteriorly (or volar, towards the palm), and so contributing to carpal tunnel narrowing.

Structurally, it is all too easy for the contents of this tunnel to become crowded and unhappy. Although there are many things that can contribute to carpal tunnel narrowing, an immobile capitate bone is often a prime factor (Figure 2). If the capitate is unable to move dorsally with wrist extension, the carpal tunnel flattens, and neurovascular compression symptoms of pain, weakness, and numbness can occur, especially in the median nerve distribution area of the thumb pad and the ends of fingers 2-3.²

1. Carpal Assessment and Release: “Scrubbing” Technique

Our first step will be to check the mobility of the carpal bones. With a firm grip on the carpals as shown in Figure 3, move the carpal bones against one another in an anterior/posterior (A/P) direction (in the hand, this is referred to as dorsal/volar motion). Firmly but gently, “scrub” all the carpal bones against one another, much like you would if you were scrubbing a stain in a piece of clothing. Be thorough, moving each of the carpal articulations in turn.

Feel specifically for the bones—instead of working only with soft tissue in this technique, we are feeling for the mobility of the carpal bones themselves. There isn’t any kneading, petrissage, traction, or wrist stretching in this technique—focus instead on encouraging carpal movement in the A/P dimension. Be slow, full, and sensitive; but you can be quite firm (as long as it is comfortable for your client and he or she...
isn’t recovering from an injury or instability issue). Lean into it, and wait for a release in the end-range in each direction. Be sure to keep your own hands as soft and adaptable as possible.

When working with people who use their hands a lot, you’ll often find one or two areas that are particularly immobile, as if two or three of the carpal bones had fixed themselves into a non-moving coalition. Often these “coalitions” involve the central carpals (particularly the trapezoid, scaphoid, and/or the capitate). As mentioned, the capitate is in a position to be particularly troublesome to the carpal tunnel, so be sure it is as mobile as possible, especially in a posterior or dorsal direction (Figure 2).

For a variation on this technique, you can passively flex, extend, and side bend your client’s wrist as you monitor their A/P carpal motion. Because the carpal tunnel tends to close with wrist extension, checking carpal mobility together with various movements can reveal restrictions that are easy to miss in a neutral wrist position.

Incidentally, the proximal row of carpal bones generally has more inter-carpal movement than the distal row, in order to allow the adaptability needed for movement between the hand and arm. The greater stability of the distal row plays a role in maintaining the carpal tunnel’s space, but as a result, is more prone to being fixed and hypo-mobile.

In the next part of this article, we’ll show how, once you’ve thoroughly checked and released A/P carpal mobility, you can use the “back door” of the wrist to make sure the carpal tunnel itself is open. You can read this article online at http://advanced-trainings.com/articles/article_wrist_pt2.pdf

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\( ^{i} \) Even clients with hyper-mobile patterns will often have local areas of hypo-mobility. With these clients, you can help the overall balance of the wrist by applying these techniques to the areas where there is less motion. Referring to an orthopedist, physical therapist, occupational therapist, or other medical professional who specializes in hand issues is of course indicated for recent or unresolved injuries, or when your clients has symptoms you think might be related to overly-mobile wrist joints.

\( ^{ii} \) There are many good sources for more about carpal tunnel issues, diagnostic tests, and neurovascular compression symptoms. Two of our recommendations are: