# Carpal Tunnel Treatment

## Edited Video Transcript

All right, so you've got this client. They have positive symptoms consistent with carpal tunnel syndrome. We're going to work with and make it better. First, your rule of treating nerve peripheral injuries—if you zing a nerve, you make it worse. You're going to cause inflammation. You're going to cause swelling. You're going to cause damage, therefore, don't do that. If I've got a client who has a musculoskeletal thing in the shoulder, let's say, I can work them past discomfort even to mild pain, and I'm not doing damage per se. Nerves are different. So, don't zing the nerve.

## Treatments

Don’t Zing the Nerve for Treatments In our assessments, we zing the nerve because that's the assessment. When you move into treatment, we do not. Your first thing is preventing zinging the nerve. This is education on their part. “So what activities cause that numbness and tingling here? All of these things, yes!” All of these things you notice are putting the wrist into flexion. So, that's what we want to avoid. We want to keep the wrist actually pretty neutral to slightly extended. Most commonly people will need a splint to remind them.

Splinting to Remind I’ve got this splint handy. This is a simple store-bought wrist cock-up splint. You can custom make these, but there's no reason to. Your simple store-bought are fine. The idea here is keeping the wrist in neutral to ten degrees of extension. Often, when you buy these, they're in extreme wrist extension, like here [with the wrist bent back]. That's too much. You just bend it [the splint wrist] to where you want it to be. So, you want it neutral to slightly extended. You're going to have the client wear this during activities that would cause symptoms. That may be while sleeping at night—it's a very common one—while riding, while driving, while playing tennis, while typing—any activities that require the wrist out of neutral. So OTAs, what can we do? What could we do? I still want to keep this wrist in neutral, but she's saying this splint is not going to work for her. I could fabricate a custom splint. In this case, I'd switch the support from the palm to the opposite side, would be my first thought because I still want some type of support, okay? So once we do a splint, we're educating them to prevent that extension—that flexion during those activities of pain. This would require an ergonomic assessment, too, like, “What's your workspace? What's your home setup? What tools might you benefit from?” We're then going to go on, maybe do some modalities.

## Modalities

Ultrasound directly over the transverse carpal ligament can be very helpful. The OT that I took a hand therapy course from likes low-level laser therapy. I've never used, it but she said she has had phenomenal results. Don't know. I really encourage movement, both movement of the tendons and movement of the nerves. Remember our carpal tunnel—we have our carpal bones, our transcarpal ligament, our median nerve runs underneath that transcarpal ligament, as do nine tendons—the extrinsic flexors of our fingers and extrinsic flexor of our thumb. So, we're going to get these moving. First is our tendon glides.

Tendon Glides—Flat, Tiger Paw, Tabletop, Flat Fist, Full Fist On your sheet is one particular one. There are other ones. The order doesn't matter. What you're going to do is go from flat to tiger paw, right, to tabletop, to flat fist, to full fist. “So, go from open hand, tiger claw, flat hand, flat fist, okay? Does it feel different from this side to that side? Yeah, different. That's different, yeah.” That's a sign she needs it. If it's uncomfortable, they need it, okay. The idea behind this is getting those tendons moving to encourage circulation. We then have our nerve glides.

Nerve Glides Now these are designed to move that nerve, okay. They're both in the hand and the entire median nerve. It starts with the ones in the hand. “In this case, what you're going to do is start in a fist, thumbs up, bring your fingers into extension, bring your wrist into extension, bring your thumbs abduction and extension, bring your [arm to] supinate, and extend the elbows, staying extended. And then you're going to reach around and pull on that affected thumb.” Notice how she's cheating and moving out of this position? “Yeah, so no, it's okay, go nice and slow. Again, you're going to start in the fist, open hand, extension of the wrist, extension of the thumb. How you doing? Good, you're going to go into supination. That looks like really where you're wanting to cheat. Are you having any nerve symptoms?” What's our rule for nerves? Stop it! Don't zing it, right? You're going to have the client not do that. They're going to go into uncomfortable.

Notice by watching the client, I could tell. Good observation skills really help here. “So, I'm watching not only your movement but your face and shoulder.” I can detect when she starts to guard, when she starts to go into pain. So, I'm going to help the person realize that we're going to go just short of that. “Now, what I want you to do is just go from here—here, go wrist back. Go just to the point of stretchy uncomfortable, keeping that wrist extended. Good, right there, right there! And we're just going to go through that series.” Yes we're going to talk about that. We're going to talk about the why of that, okay? All right, so that's on the hand.

Glides and Tensioners for the Median Nerve Now on your other handout, the first page is our glides and tensioners for the median nerve. The second page is ulnar nerve, which we'll get to in a moment. “Now Brittany, what you're going to do now is to start with, for our median nerve tensioner, just bring your hand up and look at your ring. Show it to a child behind you. Palm up, and then look away. Again, look at your ring. Show it to a child behind you. Look away, right?” Okay, so with all of these nerve glides, you can overdo them. Typically, I tell these clients three times a day. If they overdo them, they're going to provoke symptoms. “Any changes? Any symptoms with that? Just feeling stretchy? You were feeling a little bit stretchy, yeah, that's okay, because guess where those nerve roots start? In our cervical region.

Standing Nerve Glide Now, we're going to do our standing nerve glide. “You're going to answer the phone, extend that arm at the very end. Oh yeah, you felt that one! You felt that one! Again, you're going to go just short of that zing to uncomfortable. Go to the uncomfortable, yep right there, and then back off, okay?”

Median Nerve Flossing We're going to do our median nerve flossing. “You're going to hold the tray, push it away, and dump it out. One last one—this will be our median nerve mobilization. Median Nerve Mobilization “Brittany, so what you're going to do is you're going to grab the hand, palm up. Hold the palm back, and kind of thrust that wrist back. Yeah that's good, yeah.”