# Thoracic Outlet Assessment and Treatment

## Edited Video Transcript

All right. Now we have our third client who comes in. This client is, again, complaining of numbness, pain, tingling down their arm. But it's not following our peripheral nerve distributions, all right. “Well, I’ve got pain, and it's my entire darn hand extending up into my arm, or it's the middle fingers, right. Or it's here [wrist], and then it comes up here [elbow], and then it's here [shoulder]. The pain may shift. They may have, yeah, sometimes it's here [fingers]. Sometimes it's here [forearm]. Sometimes it's here [upper arm]. Again, typically night is very problematic because we're in these static postures. Overhead tasks are particularly problematic. Tasks where the scapula is depressed for prolonged periods of time—carrying a purse or backpack can be problematic. “Am I hitting the nail on the head? Uh-huh, so this we're thinking is more thoracic outlet.”

Thoracic Outlet—A Mysterious, Mysterious Beast Reasons why it doesn't fall into our peripheral nerve distributions is because it's coming out through her thoracic outlet, either at her scalenes, in between the first rib and clavicle, or through pectoralis minor. Somewhere in there, it's getting compressed. Thoracic outlet could be any one of these places—any three of these places—that you can have vascular involvement. It is a more complex diagnosis. I recommend before you start treating someone with thoracic outlet, you get some additional training. MedBridge has some really nice courses on this. That's also why you see this [pain] shifting. Because it may well be that in some activities, the scalenes are pinching. In some activities, it's this first rib. It does not always, but it can. Does whatever it wants. It's a mysterious, mysterious beast, right.

Assessments

So you're going to do a very similar assessment. You're going to look at posture. You're going to look at the activities that they complain about, right. You're going to look at sensory distributions. You're going to look at strength. Very commonly on postures, they'll carry their two sides differently. This shoulder may be slightly elevated. It may be internally rotated, right. So you need to pay attention to all that stuff. Then, we're going to do our assessments. There are several specific assessments.

Roos’ Test The one that I really like is called Roos’ test or EAST, the elevated arm stress test. In that case, what you're going to have them do is hold their arm up, abducted right, and then open and close the fist for thirty seconds. “Already! Go and tell me what you're feeling. Yeah, okay. That's telling me something. That's telling me that we're increasing compression, right. Go ahead and put it [your arm] down. Don't need to do any more now.”

Once you get some more knowledge, you can actually pin down specifically where you think it's compressed. That will target your interventions. After this, we're going to show you our upper-limit tension tests, which are ways to tell you which nerve is being compressed, right. But you can also kind of look at the activities that are problematic, okay. So, once we've confirmed this diagnosis, we can go into treatment.

## Treatment Interventions

Your first treatment really starts with that posture piece—training [your client] to normalize their posture. “This shoulder is more internally rotated with the scapula protracted. I can see that, you know.” So we are working to remobilize this stuff. Because of that, I would want to do some interventions at pectoralis minor. Easiest one here, tennis ball. Have them either lie prone or stand up against a wall with a tennis ball on pectoralis minor. It can be very effective. “Yes, pushing up against the wall. Uh, depending on how bad it is, pushing up a wall may be enough. If you want more intervention, do a little bit more. So yeah, typically what I'm going to do is simply take this [tennis ball]. I'm going to come up to a wall, and I'm going to find that pectoralis minor. I'm going to lean into it, and I find if I can just do a little bit of scapular action, it increases it just a little bit, okay. I'm also going to do stretches here. So for your pectoralis minor, your doorway stretch can be very helpful.

Pectoralis Minor Doorway Stretch Have your client stand in a doorway like this [with the arm straight], or [with the arm bent at the elbow] like this. I find it to be very helpful. I also like scalene and first rib mobilizations. “So holding the clavicle down, turn [your head] up, and look away. So with your head [turned], keep that shoulder blade down, okay, and [look] back, look up towards the TV on the wall over there. What are you feeling? Mm-hmm. Guess what? Yeah, [turn your] head back.” Guess what that means? She needs it. “Are you getting zings? Yeah, okay. You can do this yourself.”

I also even like it isolated, first-rib clavicle mobilization. “So taking a towel or a strap over that shoulder—with this hand, hold here—other hand, reach behind you. Yep, it's pull down. Really think about the shoulder going down, trying to create space. You can do nerve mobilizations. Like I said before, we're going to look at our upper-limb tension test, which gives us an idea what nerve is affected. You can then look for your mobilizations, your glides, for that nerve.