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#### Traction For Non-Surgical Treatment Of The Cervical Herniated Disc

Traction is something that can be done to treat a cervical herniated disc. I like traction because I understand the mechanics of applying traction to the neck and creating a distraction force on the disc and maybe creating some movement when the disc moves away from the nerve. I had a chance to talk to Hema, a licensed physical therapist, about how she uses traction in her practice.

- Oue 1: So for the patient with a cervical herniated disc, traction is one of the treatment options for them. What exactly is traction?
- Ans 1: Traction is distraction of the cervical spine. Pulling, yes. Either, it can be done manually by the therapist or it can be done using a machine or a mechanical unit.
- Que 2: Let me just interrupt you on that, really just means pulling on the head, pulling it up, and creating tension on the neck? And how does that help a cervical herniated disc?
- Ans 2: So when the distraction forces are applied, the basic concept that they say, I do not know if it is really proven or not, but I do see results with the traction, is when you stretch two vertebrae, it causes the suction pressure inside, so the suction causes the disc to go back in and not press on the nerves.
- Que 3: So this is something that is incorporated into many treatments, physical therapy, all sorts of ...?

Ans 3: Yes.

Oue 4: So it is something that patients can look for when they go to somebody. It is just there is traction or there is something that they would do it more with chiropractic or physical therapy or how do they get that?

Ans 4: It is a part of physical therapy. I would not say this patient only benefits from traction. It is a combination, that is what studies have proven, not just traction by itself, very rarely some cases, that yes, just doing traction does help them, but most often, we have to address the soft tissue structures that is causing these muscle spasms or tightness, release that, and do modalities and exercises that are more cervical stabilization exercises or even incorporate McKenzie exercises into them and add on traction. I have had a handful of patients who, not just with McKenzie exercises, but adding traction made a good difference.

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Que 5: So in your clinical practice, you have seen traction help?

Ans 5: Yes.

Que 6: Do you see an immediate result? that is if the patient comes in with arm pain, numbness, tingling, if you do the tractions, within 3 seconds, they feel better or how does that work?

Ans 6: I will say 50% of the patients, yes. They do get some immediate relief and sometimes it is usually later during the day or sometimes even the next day.

Que 7: How often should a patient do traction? Is it every day or three times a day or...?

Ans 7: Every day. Every day, they could do once a day depending on where they are, are they acute, subacute, or chronic, the amount of time that they spend and how prolonged are the traction \_\_\_\_\_chains\_\_\_\_. So is it a static traction or is it intermittent which means that they pull and release, pull and release; it changes depending on which stage they are.

Que 8: So, a lot of patients can obtain the home cervical traction which is a device, so that gives a constant traction. In the physical therapy setting, do you do a constant traction or do you do a pull and release?

Ans 8: We could change again depending on what the patient's needs are?. We can actually put a setting of constant static traction and they stretch it for about 8 minutes.

Que 9: So how do you know which one to do? Is it just based on how the patient responds at that time?

Ans 9: Acute patients, I do not put a constant traction. I do give some time for them to relax, the tissues to relax, but in more than about 5-6 weeks, then we could go towards more longer pull. It does not necessarily mean the longer the pull, the better it is. It really depends on the patient. Some patients, they cannot just tolerate a long traction.

Que 10: When you say long, you are talking about 1 minute or 30 minutes?

Ans 10: I would say, 30-40 seconds of pull and 10-15 seconds of release.

Ques 11: That is for the \_\_\_\_pulsing\_\_\_\_ on and off?



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Ans 11: Yes.

Que 12: For a home cervical traction, they can keep it on for 20 minutes?

Ans 12: The home cervical unit is mostly a static traction. They cannot like let go their arms. They have to, you know, pump it and they have to distract it. I would say leave it on. Depending on the acute pain that you have or the relief that you get about 2 to 3 minutes on and then you release it and relax it for a minute or two and then again 2-3 minutes, so total could be about 10 minutes under the direction of therapist. If the therapist wants you to do just static traction, the max you will go about 8 minutes.

Que 13: Is there a pound weight?

Ans 13: Yes.

Que 14: How do you know what to do? How much weight to do? Because you are setting the machine.

Ans 14: Mostly, we go anywhere from about 12-15 pounds to about even 30 pounds. It depends, I think on the size of the patient and how much pull they can really tolerate. Whenever for the first time I do, I range between 12-18 pounds and ask them, "do you really feel a pull? Does it feel good?" If they feel it is more painful, it is a lot of pull, I cannot stand it, we got to, you know, go down and you try it for a couple of sessions. If they do not have any changes, if they do not get any relief, then I would not continue doing it.

Que 15: So this is a typical traction setup in a physical therapist's office, right? and tell us what we are looking at now?

Ans 15: So, this is the unit where the patient lays on her back and the head goes here and the neck is here. This part supports just below the suboccipital area.

Que 16: It is hooked up obviously with, it looks like, a cable here, like a piece of rope and that is hooked up to a machine which is now going to pull, so we can follow this rope down to here and that puts a mechanical pull on the neck and it is controlled by this box.

Ans 16: Yeah. So, if you see here, this says the whole time, so how long am I going to keep the neck in the distracted position? Is it 30 seconds, 40 seconds, 60 seconds and this is where the rest time, so how long I am going to give rest for that particular patient, is it 10 seconds of rest in between 30 seconds of pull.



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Que 17: I see. So you can control all the different...and you do that based on the symptoms that the patient has, right? So let us see what it looks like to hook it up.

Ans 17: It is here you see progressive intermittent, so once I set there, it is going to do 30 seconds of pull and 10 seconds of release, but if I set as static, it is just going to keep it, the minutes do not count any more, so as long as they keep it at 10-15 pounds, whatever I decide, I keep it on a static traction, it just keeps it pulled for that amount of time that I have set here. Just for demonstration purpose for 10 minutes and we will switch on and when I increase a pound, right now it is about 15 pounds there, you could see a small pull occurring. When I increase a little bit more, it is about 20 pounds, so it is just distracting her neck comfortably enough.
Que 18: How are you feeling now? Does it feel like a lot of pressure?
Ans 18: No.
Que 19: It does not hurt at all?
Ans 19: It feels like it is stretching out my spine.
Que 20: I see. We actually saw now your neck just moved a bit as she pulled. Did you put more weight on it?
Ans 20: Yeah, it was 11 pounds, so it was just not enough, so I changed it to 20, now it is releasing, 10 seconds, let me just change it.
Que 21: You can actually see it. That feels okay?
Ans 21: Yeah.
So, we have pulled it for 30 seconds and released for 10 seconds, that is what I have set it for now and we can change depending on the patient. If they are really acute, I would go for less time in traction and a little bit more time rest and change given subacute phase or chronic phase on how much they can tolerate.
"It is actually relaxing. It feels like it is just pulling my neck and my spine and straightening my back out. It feels good. I can actually as they do this."
So the bottom line is, I love traction and if I had a cervical herniated disc and I was not having severe pain, numbness, tingling or weakness, but more milder symptoms and I did not have a tremendous herniated disc on MRI, I would do traction. I would do it

either with a home cervical traction, I would do it with a physical therapist or I would do it with my chiropractor. I think I understand the principles of the traction and I

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always like things that make sense. So if you do not have a tremendous herniated disc or it is a danger to the spinal cord, traction is a good bet and certainly worth trying. I will put this high on my list and I endorse it.

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