

## Lumbar (Low Back) Traction

### How it works:

Lumbar traction can reduce pain and relax muscles by decreasing the amount of pressure being placed on lumbar spine nerve roots.

One way to traction the lumbar spine is to perform inversion therapy. The exact amount of tension and duration for at-home inversion therapy is relatively undefined, but there are general guidelines that can help you get the most out of your treatment.

### Tension:

More is not better. Invert only to the point at which your symptoms **begin to reduce**. This may mean you experience decreased symptoms in your leg, or back. You should stay somewhere between 25 – 60 degrees inversion. No less, and no more.

***Excessive tension may result in injury!!!***

### Duration:

- Begin with 2 minute intervals, up to 6 times (total of 12 mins. of treatment), 3-4 days per week.
- The more you can space out the treatments, the better. At a minimum, rest the same amount of time you performed the traction before repeating the procedure (e.g. traction 2 minutes, rest 2 minutes, repeat).
- If symptoms improve you can increase the duration of traction (e.g. 3 minutes, 5 times a day for a total of 15 minutes), and so on and so forth.
- Never sustain traction more than 10 minutes at a time. Do no more than 20 minutes total in one day.
- Exact parameters for lumbar traction will differ from patient to patient, and are often best found through trial and error.

### Monitoring response to traction:

- If you have a decrease in overall pain/numbness/tingling → pressure is being taken off the nerves → Continue traction.
- If you get a mild increase in low back pain, but a decrease in peripheral pain (thigh and lower leg) → pressure is being taken off the nerves → Continue traction.
- If you get more pain in the thigh and lower leg → the nerves are being irritated → STOP traction.
- If you get decreased pain & increased neurological signs (e.g., decreased sensation and/or muscle weakness) → more pressure is being put on the nerves → STOP traction.
- Severe low back pain that pain suddenly resolves during the treatment → May indicate sudden nerve root or spinal cord damage → STOP traction

### Contraindications to traction:

- Acute Sprains/Strains
- Hypermobility
- Joint instability
- Tumors/cancer/bone diseases
- Osteoporosis
- Bone/joint infections
- Pregnancy
- Hiatal hernia
- Aortic aneurysm
- Inguinal hernia
- Rheumatoid arthritis
- Uncontrolled high blood pressure
- Glaucoma and/or history of retinal detachments.
- History of stroke/TIA's

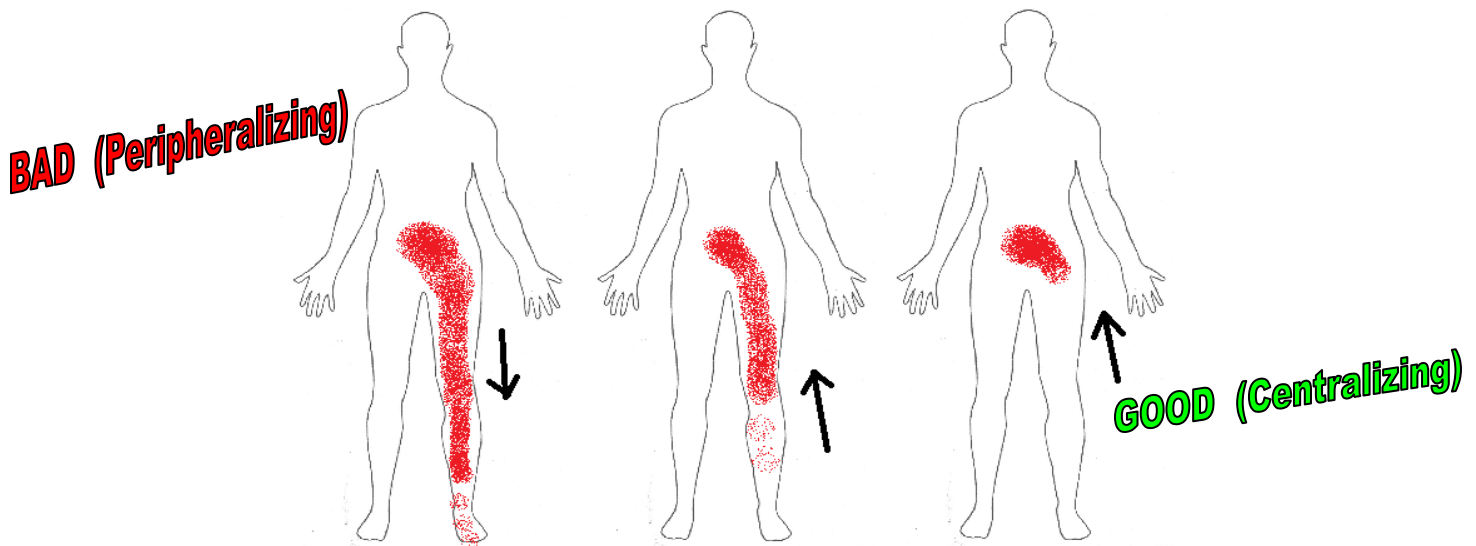
### Understanding Centralization vs Peripheralization:

If it is suspected that you have a pinched nerve in the back, you need to be aware of which positions centralize or peripheralize your symptoms. Typically flexion (bending forward), and extension (bending backwards).

As symptoms move towards the center of your spine (centralize), this indicates improvement. Less pressure is on the nerve. As symptoms move away from the midline of the body (peripheralize), into the thigh and leg, this indicates the condition is getting worse. More pressure is being put on the nerve.

Avoid positions that peripheralize your symptoms and perform stretches and exercises in positions that centralize your symptoms.

Symptoms may increase or intensify a bit near the spine as symptoms centralize. This is normal



Adapted from Source: Starkey, Chad.. Therapeutic Modalities. Philadelphia: F.A. Davis, 1999. Print.

Agresta PT,DC, J. and LeFebvre DC, R., n.d. Cervical Traction. [ebook] Available at: [https://ftp.uws.edu/udocs/public/CSPE\\_Protocols\\_and\\_Care\\_Pathways/Protocols/Cervical\\_Traction.pdf](https://ftp.uws.edu/udocs/public/CSPE_Protocols_and_Care_Pathways/Protocols/Cervical_Traction.pdf) [Accessed 16 March 2021].

Lockenour, J., n.d. Traction, Ultraviolet, Combination of Therapies, & Stages of Healing.