



CLINICAL CORNER

Chiropractic: The First Choice for Cervical & Lumbar Radiculopathy

Mark Studin, DC, FASBE(C), DAAPM

Rhee, et al., (2021)¹ reported that cervical radiculopathy typically manifests as pain radiating from the neck into the distribution of the affected root. The exact location and pattern of pain may vary widely, and a classic dermatomal distribution of pain is not always present. Associated sensory, motor and reflex disturbances may or may not be present. Lumbar radiculopathy is similar in clinical presentation, except it affects the low back and legs.

Cervical and lumbar radiculopathy are typically (but not always) accompanied by compressive forces along a specific nerve root, and often associated with herniated, bulged, protruded, and extruded comminuted and sequestered discs. Radiculopathy can also be associated with spondylolisthesis, ligamentous hypertrophy, increased epidural fat deposits, neoplasm, or infection.



Berry, et al., (2019)² reported that lumbar radiculopathy has been estimated to affect 3-5 percent of the population, with symptoms typically in males in the 40s, and females in the 50s and 60s.

Ghasabmahaleh, et al., (2021)³ reported that cervical radiculopathy has a far lower incidence, estimated between 63.5 to 107.3 per 100,000 people per year.

Berry, et al., suggest first-line treatment should be nonsurgical and include patient education, staying-active exercises, McKenzie exercises, nonsteroidal anti-inflammatory drugs, tapered oral corticosteroids, and facet or transforaminal injections.

When considering outcomes as a primary treatment plan, spinal manipulation (chiropractic spinal adjustment, CSA) should be considered the first-line treatment for many radiculopathies. Ghasabmahaleh, et al., reported that with nonacute lumbar radiculopathy, there were increased ranges of motion in all planes. Three months after manipulation (CSA), these patients maintained favorable outcomes in pain control vs. the control group.

For disability indices, the outcomes were better with patients getting a chiropractic spinal adjustment. The CSA (manipulation) group) for back pain Visual Analog Scale (VAS) went from 5.5 to 4.5 immediately after treatment and at three months was 3.5. Leg pain VAS went from 7 to 5 immediately after treatment and at three months was 4.5. Oswestry Index went from 42 to 25 immediately after treatment and at three months was 22.

Borella-Andres, et al., (2021)⁴ conducted a systematic review in the manual therapy management of cervical radiculopathy, considering 17 clinical trials over the past 10 years. Although they did not

define the type of manual therapy, they concluded that manual therapy was effective in treating symptoms related to cervical radiculopathy in all studies. They reported that manual therapy appears effective in reducing chronic cervical pain and decreasing the index of cervical disability.

The above assessment is consistent with Cifuentes, et al., (2011)⁵ who reported disability outcomes utilizing chiropractic as the primary care provider vs. physical therapy and medicine. They found a 24 percent decrease in disability duration of the first episode compared to physical therapy and a 250 percent decrease in disability duration of the first episode compared to medical physician care.

The above studies confirm why a doctor of chiropractic should be considered a primary spine care provider - the *first* option for spinal care.

References

1. Rhee JM, Yoon T, Riew KD. Cervical radiculopathy. *JAAOS*, 2007;15(8):486-494.
2. Berry JA, et al. A review of lumbar radiculopathy, diagnosis, and treatment. *Cureus*, 2019;11(10): e5934.
3. Ghasabmahaleh SH, et al. Spinal manipulation for subacute and chronic lumbar radiculopathy: a randomized controlled trial. *Am J Med*, 2021;134(1):135-141.
4. Borrella-Andrés S, et al. Manual therapy as a management of cervical radiculopathy: a systematic review. *BioMed Res Int*, 2021 Jun 3;2021:9936981.
5. Cifuentes M, Willets J, Wasiak R. Health maintenance care in work-related low back pain and its association with disability recurrence. *J Occup Environ Med*, 2011;53(4):396-404.

MAY 2022