PENATALAKSANAAN FISIOTERAPI PADA KASUS *CERVICAL ROOT SYNDROME ET CAUSA HERNIA NUCLEUS PULPOSUS CERVICAL*

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Abstrak

Latar Belakang: *Cervical Root Syndrome* merupakan gangguan pada akar saraf *cervical* akibat penekanan atau inflamasi karena *protrusi diskus intervertebralis cervical.* Kondisi ini dapat menyebabkan nyeri leher yang menjalar ke bahu dan lengan, *parestesia*, penurunan sensibilitas, spasme otot, keterbatasan lingkup gerak sendi *cervical*, serta kelemahan otot sesuai dermatom dan miotom saraf yang terkena. Gangguan tersebut dapat memengaruhi aktivitas fungsional dan menurunkan kualitas hidup pasien sehingga diperlukan penatalaksanaan fisioterapi untuk membantu mengurangi gejala dan meningkatkan kemampuan fungsional pasien. **Tujuan:** Penulisan ini bertujuan untuk mengetahui penatalaksanaan fisioterapi pada kondisi *cervical root syndrome et causa hernia nucleus pulposus cervical*. **Metode:** Metode dalam penyusunan karya tulis ilmiah akhir ini dengan menggunakan pendekatan studi kasus dengan meneliti satu pasien perempuan berusia 23 tahun yang didiagnosis mengalami *Cervical Root Syndrome et causa Hernia Nukleus Pulposus Cervical* C2:3. Terapi dilakukan sebanyak 4 kali pertemuan yang dimulai pada tanggal 14 April 2026 dan pertemuan terakhir pada tanggal 30 April 2026 dengan memberikan intervensi fisioterapi berupa modalitas elektroterapi *Transcutaneous Electrical Nerve Stimulation* (TENS), *Ultrasound (US)* dan terapi latihan berupa *chin tuck* dan *neck calliet*. Selain itu, juga dinilai kemampuan aktivitas fungsionalnya dengan menggunakan instrumen *Neck Disability Index* (*NDI*). Selain itu, diberikan juga edukasi beserta *home program* yang sesuai dengan kondisi yang dialami oleh pasien. **Hasil:** Dalam pemeriksaan yang dilakukan pertama kali, ditemukan pasien mengalami nyeri, gangguan sensibilitas, penurunan kekuatan otot, keterbatasan lingkup gerak sendi dan juga keterbatasan dalam aktivitas fungsionalnya. Setelah dilakukan empat sesi pertemuan, ditemukan hasil berupa adanya sedikit penurunan pada tingkat nyeri, sedikit peningkatan pada lingkup gerak sendi leher dan kemampuan aktivitas fungsionalnya, namun, masih adanya gangguan pada sensibilitas dan kekuatan otot belum ada peningkatan. **Kesimpulan:** Setelah empat sesi terapi yang telah dilakukan, pasien mengalami sedikit penurunan nyeri, adanya gangguan sensibilitas, kekuatan otot belum ada peningkatan, dan sedikit peningkatan pada lingkup gerak sendi leher dan kemampuan aktivitas fungsionalnya setelah dilihat perbandingan skor pada *NDI*. **Saran:** Pasien diharapkan untuk rutin mengikuti sesi terapinya dan melakukan latihan *home program* yang telah dibuat di rumah.

Kata Kunci: *Cervical Root Syndrome*; *Hernia Nucleus Pulposus Cervical*; Latihan *Calliet*; Latihan *Chin Tuck*; Indeks Disabilitas Leher.

PHYSIOTHERAPY MANAGEMENT IN A CASE OF CERVICAL ROOT SYNDROME CAUSED BY A CERVICAL NUCLEUS PULPOSUS HERNIA

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Abstract

Background: *Cervical Root Syndrome is a disorder of the cervical nerve roots caused by compression or inflammation resulting from a protrusion of the cervical intervertebral disc. This condition can cause neck pain that radiates to the shoulders and arms, paresthesia, decreased sensation, muscle spasms, limited range of motion in the cervical joints, and muscle weakness corresponding to the dermatomes and myotomes of the affected nerves. These conditions can affect functional activities and reduce patients quality of life, therefore, physical therapy is necessary to help alleviate symptoms and improve patients' functional abilities.* ***Objective:*** *The purpose of this study is to determine the physiotherapy management for cervical root syndrome caused by a cervical herniated disc.* ***Method:*** *This final scientific paper was prepared using a case study approach, examining a 23-year-old female patient diagnosed with cervical root syndrome caused by a herniated nucleus pulposus at the C2-C3 level. Therapy consisted of four sessions, beginning on April 14, 2026, and concluding on April 30, 2026, involving physical therapy interventions such as Transcutaneous Electrical Nerve Stimulation (TENS) and ultrasound (US), as well as exercise therapy including chin tucks and neck calliet exercises. In addition, functional activity was assessed using the Neck Disability Index (NDI). In addition, patients are provided with education and a home exercise program tailored to their specific condition.* ***Results:*** *During the initial examination, the patient was found to be experiencing pain, sensory disturbances, decreased muscle strength, limited range of motion, and limitations in functional activities. After four sessions, the results showed a slight reduction in pain levels and a slight improvement in the range of motion of the neck joints and functional ability; however, there was still no improvement in sensory function or muscle strength.* ***Conclusion:*** *After four therapy sessions, the patient experienced a slight reduction in pain, continued sensory disturbances, no improvement in muscle strength, and a slight increase in the range of motion of the neck joints and functional ability, as indicated by a comparison of NDI scores.* ***Recommendation:*** *Patients are encouraged to attend their therapy sessions regularly and perform the home exercises prescribed for them.*

Keywords: *Cervical Root Syndrome; Cervical Herniated Disc; Calliet Neck Exercise; Chin Tuck Exercise; Neck Disability Index.*