Case Report

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AYURVEDIC MANAGEMENT OF CERVICAL RADICULOPATHY: A CASE REPORT

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ABSTRACT

Background: Cervical radiculopathy, commonly called a pinched nerve, occurs when a nerve in the neck is compressed or irritated where it branches away from the spinal cord and causes pain that radiates into the shoulder and/or arm, as well as cause muscle weakness and numbness. However, the pain or other symptoms often radiate to the parts of the body served by that nerve. The management available in the current mainstream is not satisfactory. We present a case of cervical radiculopathy, which was treated with the combination of ayurvedic panchakarma procedures and a combination of medications internally. Rationale of the case report: A 37- year- old female patient presented with neck stiffness, neck pain, and numbness at right hand and fingers for five years. Intervention: Ayurvedic procedures such as dhanyamla kizhi, dhanyamla dhara, marsha nasyam, along with internal ayurvedic medications, were carried out for 14 days, and surgery was prorogued as the patient responded positively. Result and outcome: There was a marked improvement in pain, stiffness, and range of movements of the neck. The outcome of this case report shows that cervical radiculopathy may be successfully managed with internal ayurvedic medicines along with panchakarma procedures.

Keywords: Ayurveda, Cervical Radiculopathy, Marsha Nasyam, Panchakarma.

INTRODUCTION

Cervical radiculopathy (CS) results from chronic disc degeneration with herniation of disc material, secondary calcification, and osteophytes outgrowth changes in the disks are often called arthritis or spondylosis. A herniated disc occurs when the jelly-like centre (nucleus) pushes against the outring(annulus). When the herniated disk is injured, it bulges out towards the spinal canal, puts pressure on the sensitive nerve root[1]. As a result, one or more cervical nerve roots may be compressed, stretched, or angulated, and myelopathy may develop as a result of compression or recurrent minor trauma to the cord, causing symptoms such as neck pain, restricted head movement, occipital headaches, radicular pain and other sensory disturbances in the arms. A segmental pattern of weakness or dermatomal sensory loss may be found unilaterally or bilaterally in the upper limb and tendon reflex, mediated by the affected root. The C5 and C6 nerve roots are most commonly involved, and examination reveals muscle weakness supplied by these roots. Pain and sensory loss on the shoulders and outer border of the arm and forearm and depressed biceps and brachioradialis reflex with spastic paraparesis may also be associated with myelopathy. Statistically, at any point, about 15% of adults are experiencing neck pain. A large group of articular and extra-articular disorders is characterized by pain that involves the neck, shoulder girdle, and upper extremity. Cervical radiculopathy commonly occurs in 70% of women and 85% of men. Narrowing of the spinal canal by osteophytes and ossification of the posterior longitudinal ligaments or a prominent central disc bulge may compress the cervical spinal cord[2]. There is no satisfactory conservative treatment and requires a surgical procedure in modern medicine for cervical radiculopathy, and many limitations and complications are also encountered in these procedures. Ayurveda partakes the traditional treatment modalities and the success rate in non-surgical management of cervical spondylosis, thereby ensuring the better result which is conductive to humankind. As per Ayurveda, the symptoms are similar to the lakshanam (signs) of Asthi majja avruta vat[3] (occlusion of bone, bone marrow) at grivapradesha (neck region) due to margavarodha (obstruction of movements) and hence vatanlomana (downward trend of vayuh), abhyanga (oleation), vasti prayoga (enema) were carried out for 14 days which regularized the vata gati (motion of vayuh) and reduced the severity of symptoms. Thus we are reporting a case of cervical radiculopathy, which was successfully managed with ayurvedic treatments.

CASE REPORT

A 37-year-old female presented with complaints of gradual progressive pain around the neck region which radiated towards bilateral shoulder joints with numbness in the right upper limb, stiffness and pricking pain, along with restricted movements in neck and shoulder joints for five years.

The patient had suffered from intermittent numbness and tingling sensation in the right upper limb for two years. She gradually developed pain around the neck region radiating towards bilateral shoulders and stiffness and restricted movements in the neck for five years. The patient had undergone various neurological and orthopaedic consultations. Surgical and physiotherapy management was recommended. She was taking painkillers for pain management as prescribed by consultants. The prime aim of the patient to attend our OPD was to seek a non-surgical approach for the ailments.

On physical examination, the general condition of the patient was well. Blood pressure was 120/80 mm/hg, pulse 70/min. She was anxious appetite was moderate, her tongue was coated, her bladder habits were normal, and her bowel constipated. The patient had a normal gait and was assessed on dashavidhaprarisha [Table 1]. The active movements of the spine were restricted,

stiffness on the neck, shoulder, and pricking pain was present, and the pain aggravated on movements. On examination, the neck assessment test was conducted [Table 2]. Tenderness was examined over C4-C5, C5-C6, C6-C7 vertebrae, power of the biceps and triceps muscle of both limbs were normal. On sensory examination, the sensation of touch, temperature, vibrations, and pressure was normal. The upper limb's nutrition, power, tone, and coordination were normal on motor examination. On neurological examination, higher mental functions, consciousness, orientation to time, place, person, memory, speech were normal. The patient has Spurling sign positive.

History of present illness- not known case of diabetes mellitus, hypertension or other systemic illness.

Clinical Findings

MRI spine suggested posterior central disc bulge at C3-C4, C4-C5 with mild spinal canal stenosis and C5-C6 posterior disc osteophytic complex bulge at bilateral posterior paracentral protrusion, mild compression of bilateral neural foramina and nerve root (L>R), and moderate spinal canal stenosis. C6-C7 posterior disc bulge osteophytes complex bulge with posterior central protrusion with compression of the ventral thecal sac and severe spinal canal stenosis, suggestive of radiculopathy, were seen.

Table 1: Dasavidha Pariksha

Dasavidha Pariksha (Physical examination)	Result Interpretation
Prakrutih	Vata kapha
Vikrutih	Vata kapha
Sara	Mamsah
Samhana	Madhyama
Pramanam	Sarvarasa
Satvam	Madhyama
Vayahh	Madhyama
Aharah saktih	Pravara
Vyayama saktih	Pravara

Table 2: Neck Assessment

Movements of neck	Right Side	Left Side
Flexion	15^0	10^0
Extension	10^0	15^0
Lateral flexion	10^0	15^0
Lateral rotation	10^0	20^0

Treatment Plan

The patient was admitted on 26th august 2021, and the recommended internal mediations and external procedures are tabulated below.

Table 3: Internal medications

Internal medication	Dosage	Anupana	Duration
Rasna-erandathi kashayam	15ml + twice daily before food	45ml warm water	15 Days
Cap. Kshirabalah (101)	1 cap twice daily with kashaya	with kashayam	
Tab. Vayuh gulika	1 tab twice daily	with kashayam	
Tab. Rumanto	1 tab twice daily after food	With warm water	
Cap. Palsineuron	1 cap each thrice daily after food.	With warm water	
Nirgundi erandathi thailam	10ml at night bedtime	with warm milk	

Table 4: External panchakarma treatment

External treatment	Drugs	Date	Duration
Dhanyamla kizhi	Dhanya (cereals), amla (obtained from citrus fruits)	26/8/21 to 27/8/21	3 days
Dhanyamla dhara	Dhanya Tandula (*Oryza sativa*) Pruthuka (compressed form rice-rice flakes) Kulatha (*Macrotyloma uniforum*- horse gram) Laja (puffed rice) Kangubeeja (*Panicum sumatrense*-little millet) Kodrava (*Paspalum scrobiculatum*) Nagara (*Zingiber officinale*) Nimbuka (*Citrus aurantifolia- lime*) Deepyaka (*Trachelospermum involucratum*- carom seeds) Jala (water)	28/8/21 to 30/8/21	4 days
Marsah nasyam	Anu thailam	26/8/21 to 30/8/21	5 days
Griva lepa	Kottamchukkadi choornam Marma gulika	26/8/21 to 8/9/21	14 days

RESULT AND DISCUSSION

In cervical radiculopathy involving cervical disc degeneration, osteophytic changes with disc bulge and compression of the nerve root, intervertebral disc, and surrounding ligaments lose their regular hydration and elasticity, causing the annulus to bulge outward. This causes narrowing of the cross-section area of the canal. This uncinated process overrides the dorsal and ventral portion of foramen and disc, and degeneration marginal osteophytes will start developing changes leading to cervical radiculopathy, with the symptoms such as pain, stiffness, restricted movements of the neck, etc. Due to the radicular symptoms overlap in function between adjacent nerves, there is neck pain (worsens at night) and a limited range of movements with weakness of intrinsic muscles of the hand and diminished sensation at palmar region. Contemporary treatment includes surgical divisions of the anomalous band. However, the weakness and wasting of intrinsic hand muscles and pain at the neck and shoulder typically do not improve. Besides, multidisciplinary pain management halts the pain. However, the risk factors of surgery include vascular and neurological injury, fluid extravasation, stiffness, iatrogenic tendon injury, and infection. Hence non-surgical management is required for the management of cervical radiculopathy[4]. As per Ayurveda, it can be considered asthihmajjavruta vata at griva pradesah. due to aharah and vihara, the prakopita vayuh vitiates asthih majja dhatu due to its marganusari guna marga avarnam took place at griva pradesh. Due to this, there is derangement of bone at the level of C3-C4,

C4-C5, C5-C6 and C6-C7 and profuse disc bulge along with spinal canal stenosis hence causing the symptoms such as neck stiffness (asthihparva bedah, sandhi sulah), neck stiffness, and pricking pain (sucivad vedana) and numbness of the hand and finger. Considering this pathology and stana, Ayurvedic treatment procedures such as dhanyamla kizhi[5] and dhanyamla dhara[6] along lepa were carried out to accelerate sympathetic activity and improve sympathetic activity the blood circulation through vasodilation and relieves the ache and muscle spasm. It also increases the body temperature due to passive heating substantially increasing the cutaneous and vascular conductance[7]. Anu thaliam[8] indicated in jatrurdhva vikara as marsah nasyam gives strength to the muscle nerves of the cervical region through its diffusion activity of drugs and their greater affinity of absorptions to lipid-soluble substances[9]. rasna-erandathi kashayam[10] has tridoshajah gunah shamana, and anulomanam, sulah hara properties indicated in trika prushtva sulah (pain in joints regions), and it acts as a muscle relaxant, analgesic. Kshira balah is balya, and it strengthens and rejuvenates nerves and muscles due to its rasayana and sowmya guna[11]. Vayuh gulika[12] is used to stabilize the activity of vayuh through its sukshmah srotogamani and vatanulomanam property. In cases of cervical radiculopathy, contemporary science considers non-surgical treatments such as cervical immobilization (neck and collar brace), isometric exercises, skull, and cervical traction, and at times surgical interventions are also considered necessary, which may lead to deterioration and attributes to the development of latent instability along with kyphotic spinal deformities[13]. Hence this case is an important one as this shows clinical improvement with panchakarma procedures and combinations of internal ayurvedic medications.

CONCLUSION

This case hence shows improvement in cervical radiculopathy with noticeable improvement in the range of movements of the neck relief from other clinical symptoms such as stiffness, pain, and numbness. Hence based on clinical signs, ayurvedic treatments and medicines were safe and effective in managing cervical radiculopathy.

Patient Consent: Patient was provided written consent for publication.

REFERENCES

1. Daniel K. Park, Faaosian Rodway, FAAOS, Cervical Radiculopathy (Pinched Nerve). August 2020; Available from https://orthoinfo.aaos.org/–cervical radiculopathy[cited 12th September 2021].
2. Sn. Editor Lawrence M.Tierney.Jr., Maxine *et al*. Current medical diagnosis and treatment 2008 Lange, Chapter 24 Nervous System Disorder, Cervical Spondylosis, P 889
3. R.K Sharma, Bhagawan Dash, Charaka Samhitha, Chapter 28, Vatavyadhi Chikitsa, Verse 22 Varanasi, Chowkamba 5, P 29.
4. Denisl Kasper, Antonys Fauci *et al*. Harrisons Principal of Internal Medicine 16th edition Volume 1, Cervical Radiculopathy P 102-3
5. Dr.Vasant C. Patil, Jamnagar, Principles and practice of Panchakarma, Chapter 9 Swedana Karma, Dhanyamla kizhi, Varanasi, Chowkamba Sanskrit Sansthan: 2016, P 215.
6. Dr.Vasant C. Patil, Jamnagar, Principles and practice of Panchakarma, Chapter 9 Swedana Karma, Dhanyamla kizhi, Varanasi, Chowkamba Sanskrit Sansthan: 2016, P-231
7. Dr.Vasant C. Patil, Jamnagar, Principles and practice of Panchakarma, Chapter 9 Swedana Karma, Dhanyamla kizhi, Varanasi, Chowkamba Sanskrit Sansthan: 2016, P-247
8. T. Shreekandamurthy, Dr. K.Kavitha, Nasya Vidhi, Anuthailam, 3rd Ed, Varanasi; Chowkamba Sanskrit Series, Edition Reprint: 2015, P 118.
9. T. Shreekandamurthy, Dr. K.Kavitha, Nasya Vidhi, Nasyavidhi, Anuthailam, 3rd Ed, Varanas; Chowkamba Sanskrit Series, Edition Reprint 2015, P 108
10. Muhammed Shaffeer. V, Disease Under Neuro-Musculo Skeleton Symptoms Rasna Erandathi Kashayam, Samhitha of Ayurveda Medical Speciality, Volume 13th Ed, Kochi; 2014, P 432
11. Muhammed Shaffeer. V, Disease Under Neuro-Musculo Skeleton Symptoms Rasna Erandathi Kashayam, Samhitha of Ayurveda Medical Speciality, Volume 13th Ed, Kochi; 2014, P 439
12. Muhammed Shaffeer V. Disease Under Neuro-Musculo Skeleton Symptoms Chapter 1 Diseases related with the respiratory system, Vayuh gulika, Samhitha of Ayurveda Medical Speciality, Volume 1 Edition 3rd, Kochi: 2014, P 218.
13. Sn. Editor Lawrence M.Tierney.Jr., Maxine *et al*. Current Medical Diagnosis and Treatment 2008 Lange, Chapter 24 Nervous System Disorder, Cervical Spondylosis, P 890

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