



A RANDOMISED COMPARATIVE CLINICAL STUDY TO EVALUATE THE EFFICACY OF SARVAMAYANTAKA GHRITA NASYA AND PANCHASNEHA TAILA NASYA IN VISHWACHI VIS-À-VIS CERVICAL RADICULOPATHY

Dr. Pallavi Chandrakant Koli¹, Dr. Sanjay Kumar, M. D²., Dr. Ananta s Desai³

¹Final Year PG Scholar, Department of PG and PhD studies in Kayachikitsa Government Ayurveda Medical College, Mysuru.

²Professor, Department of PG and PhD studies in Kayachikitsa, Government Ayurveda Medical College, Mysuru

³Professor & HOD, department of PG and PhD studies in kayachikitsa, Government Ayurveda Medical College, Mysuru

ABSTRACT

Background: Vishwachi is one among the eighty Vata Vyadhis described in Ayurveda and is characterized by pain, stiffness, radiating pain, numbness, and functional disability of the upper limb. The clinical presentation closely resembles Cervical Radiculopathy, a disorder resulting from compression or irritation of cervical nerve roots.

Aim & Objective: To evaluate and compare the efficacy of Sarvamayantaka Ghrita Nasya and Panchasneha Taila Nasya in the management of Vishwachi vis-à-vis Cervical Radiculopathy.

Materials and Methods: A randomized comparative clinical study was conducted in 42 patients fulfilling the diagnostic criteria, of whom 40 completed the study. Participants were randomly allocated into two equal groups. Group A received Sarvamayantaka Ghrita Nasya, while Group B received Panchasneha Taila Nasya. Both groups received Dashamoola Bala Masha Kwatha as Shamana medication after Nasya procedure. Clinical assessment was carried out using subjective and objective parameters including neck pain, stiffness, radiating pain, tenderness, sensory disturbance, muscle weakness, cervical range of motion, and Neck Disability Index.

Results: Both treatment groups demonstrated statistically highly significant improvement in all assessment parameters after completion of therapy. However, Panchasneha Taila Nasya produced comparatively greater improvement in pain reduction, restoration of cervical movements, improvement in muscle power, reduction in neurological symptoms, and decrease in disability scores.

Conclusion: Both Nasya formulations were effective in the management of Vishwachi vis-à-vis Cervical Radiculopathy, while Panchasneha Taila Nasya showed comparatively superior therapeutic benefit and may be considered a more effective Nasya formulation in the present study.

KEYWORDS: Vishwachi, Cervical Radiculopathy, Nasya Karma, Sarvamayantaka Ghrita, Panchasneha Taila, Vata Vyadhi, Neck Disability Index.

INTRODUCTION

Vishwachi is a well-recognized Vata Vyadhi described in the classical Ayurvedic texts and is characterized by pain, stiffness, numbness, restricted movements, and functional impairment of the upper limb resulting from the vitiation of Vata Dosha affecting the Kandara and Snayu of the Greeva, Amsa, and Bahu Pradesh. The clinical features of Vishwachi closely resemble Cervical Radiculopathy, a neurological disorder caused by compression or inflammation of cervical nerve roots leading to neck pain radiating to the upper extremity, sensory disturbances, motor weakness, and limitation of daily activities. In the modern era, prolonged computer work, excessive mobile phone usage, improper posture, repetitive occupational strain, and age-related cervical spondylotic changes have substantially increased the incidence of cervical radiculopathy among adults, making it an important occupational and public health concern. Conventional treatment primarily focuses on symptomatic relief using analgesics, corticosteroids, physiotherapy, and surgical decompression in severe cases; however, these modalities often fail to provide sustained relief and may be associated with recurrence or adverse effects. ^{1,6,7,9,10}

Ayurveda considers Vishwachi to be predominantly a Vataja disorder in which aggravated Vata localizes in the Snayu, Kandara, and Sandhi of the cervical and upper limb region, leading to Bahu Karmakshaya, Stambha, Ruk, Toda, and Suptata. Nasya Karma is regarded as one of the most important Panchakarma procedures for diseases situated above the clavicle. Classical texts describe that medicines administered through the nasal route reach the Shringataka Marma and subsequently influence the structures of the head and neck, facilitating Dosha Shamana, improved circulation, nourishment of tissues, and restoration of neuromuscular function. Sarvamayantaka Ghrita possesses Vatahara, Balya, Rasayana, and Brimhana properties that help pacify aggravated Vata and nourish depleted tissues, whereas Panchasneha Taila combines the therapeutic properties of five Sneha Dravyas, producing potent Vatahamaka, Snigdha, and neuroprotective effects. The administration of Dashamoola Bala Masha Kwatha as an adjuvant further contributes through its anti-inflammatory, analgesic, Balya, and Vatahara actions, thereby enhancing the overall therapeutic response. ^{1,3,4,5}

Considering the increasing burden of cervical radiculopathy and the limited availability of comparative clinical evidence regarding different Nasya formulations, the present randomized comparative clinical study was undertaken to evaluate the efficacy



of Sarvamayantaka Ghrita Nasya and Panchasneha Taila Nasya in patients suffering from Vishwachi vis-à-vis Cervical Radiculopathy. The study aimed not only to assess the individual therapeutic benefits of both formulations but also to identify the comparatively superior intervention based on clinical improvement and functional recovery.^{6,7,8,9,10,11,12,13,15}

MATERIALS AND METHODS

The present study was designed as a randomized comparative clinical trial with a pre-test and post-test evaluation to assess the efficacy of two Nasya formulations in the management of Vishwachi vis-à-vis Cervical Radiculopathy. The study was conducted in the Department of Postgraduate Studies in Kayachikitsa, Government Ayurveda Medical College and Hospital, Mysuru, after obtaining approval from the Institutional Ethics Committee. Patients attending the Outpatient and Inpatient Departments who fulfilled the diagnostic criteria for Vishwachi/Cervical Radiculopathy were screened for eligibility. A total of forty-two patients were enrolled, of whom two discontinued treatment during the study period, while forty patients completed the entire protocol and were included in the final statistical analysis. Participants aged between 20 and 70 years presenting with classical features such as neck pain radiating to the upper limb, stiffness, tenderness, numbness, muscle weakness, restricted cervical movements, and positive clinical findings suggestive of cervical radiculopathy were included in the study. Patients with cervical myelopathy, traumatic cervical spine injury, congenital spinal deformities, spinal infections, malignancy, severe systemic illness, uncontrolled diabetes mellitus, pregnancy, and other neurological disorders affecting the upper limb were excluded from the trial.^{1,2,3}

The eligible participants were randomly allocated into two equal groups consisting of twenty patients each. Group A received **Sarvamayantaka Ghrita Nasya**, whereas Group B received **Panchasneha Taila Nasya** according to the classical Nasya procedure. Both groups additionally received **Dashamoola Bala Masha Kwatha** as Shamana therapy throughout the treatment period. All therapeutic procedures were carried out under standardized conditions with appropriate Purvakarma, Pradhana Karma, and Paschat Karma as described in Ayurvedic classics. Patients were advised to avoid activities and dietary factors known to aggravate Vata Dosha and were instructed to maintain proper cervical posture during the study period.

Clinical assessment was performed at baseline, during treatment, and after completion of therapy using predefined subjective and objective parameters. Subjective parameters included neck pain, stiffness, radiating pain, tenderness, and sensory disturbances, whereas objective evaluation comprised muscle strength, cervical range of motion, and functional disability measured using the Neck Disability Index (NDI). Appropriate non-parametric statistical tests were employed for data analysis. Intragroup comparisons were performed using the Wilcoxon matched-pairs signed-rank test, while intergroup comparisons were carried out using the Mann-Whitney U test. Statistical significance was determined at a confidence level of 95%, and the results were interpreted accordingly.

RESULTS

Among the forty patients who completed the study, the majority belonged to the middle-age group, reflecting the higher prevalence of cervical radiculopathy during the active working years. Most participants had occupations involving prolonged sitting, repetitive neck movements, or continuous use of computers and mobile devices, indicating the influence of occupational and postural factors in the development of Vishwachi. The disease was observed in both genders with a slight predominance among females. Most patients presented with chronic symptoms lasting several months, suggesting that delayed healthcare seeking and progressive degenerative changes contribute significantly to disease chronicity. Dietary habits, occupational strain, prolonged static posture, and lifestyle factors were identified as important contributors to Vata aggravation and disease manifestation.

Both treatment groups demonstrated statistically highly significant improvement in all clinical parameters following completion of therapy. Significant reductions were observed in neck pain, stiffness, radiating pain, tenderness, sensory disturbances, and restriction of cervical movements. Improvement in muscle strength and reduction in Neck Disability Index scores further indicated enhanced functional recovery and better quality of life. Although both interventions were clinically effective, intergroup comparison revealed that patients treated with **Panchasneha Taila Nasya** exhibited comparatively greater improvement in pain relief, muscle power, cervical mobility, tenderness, radiating pain, and functional disability than those receiving **Sarvamayantaka Ghrita Nasya**. The overall assessment also demonstrated superior percentage improvement in Group B across most clinical parameters, indicating a comparatively better therapeutic response.

DISCUSSION

The present randomized comparative clinical study was undertaken to evaluate and compare the therapeutic efficacy of **Sarvamayantaka Ghrita Nasya** and **Panchasneha Taila Nasya** in the management of **Vishwachi vis-à-vis Cervical Radiculopathy**. The study demonstrated statistically highly significant improvement in both treatment groups across all subjective and objective parameters, indicating that Nasya Karma is an effective therapeutic modality in managing Vata-dominant disorders affecting the cervical region and upper limb. However, the overall therapeutic response was comparatively superior in patients treated with Panchasneha Taila Nasya, suggesting its enhanced efficacy in relieving pain, improving neurological function, restoring cervical mobility, and reducing disability.^{1,3}

Vishwachi is described in Ayurveda as a Vata Vyadhi caused by the vitiation of Vata Dosha affecting the Snayu, Kandara, Sira, and Sandhi of the Greeva, Amsa, and Bahu Pradesh, resulting in Bahu Karmakshaya, Ruk, Toda, Stambha, and Suptata. From a modern perspective, Cervical Radiculopathy results from compression or inflammation of cervical nerve roots caused by disc prolapse, degenerative spondylosis, osteophyte formation, or foraminal narrowing, producing neck pain radiating to the upper limb



with sensory and motor deficits. The close similarity between these two conditions supports the Ayurvedic correlation adopted in the present study and justifies the selection of Nasya Karma as the principal intervention for Urdhvajatrugata disorders. ^{1,6,7,9}

The demographic observations of the present study revealed that most patients belonged to the middle-age group and were engaged in occupations requiring prolonged sitting, computer work, repetitive cervical movements, or sustained improper posture. Such occupational factors promote continuous mechanical stress over the cervical spine, leading to gradual degeneration of intervertebral discs and irritation of cervical nerve roots. From an Ayurvedic perspective, prolonged sitting, Ati Vyayama, Ati Prajagarana, Vega Dharana, improper posture, and repetitive strain constitute important Vata-provoking factors that ultimately result in Sthana Samshraya of aggravated Vata in the Greeva and Amsa Pradesh, producing the characteristic manifestations of Vishwachi. ^{10,11}

Pain was the predominant presenting complaint in almost all patients. The marked reduction in neck pain observed after therapy can be attributed to the Vatahara, Vedanasthapana, and Snigdha properties of both formulations. Nasya facilitates rapid drug absorption through the highly vascular nasal mucosa and enables therapeutic action over structures above the clavicle. The Sneha administered through the nasal route nourishes depleted tissues, pacifies aggravated Vata, improves local circulation, reduces neuromuscular irritation, and enhances cervical tissue lubrication. These mechanisms collectively contribute to significant reduction in pain intensity and restoration of functional activity. ^{1,3,12,15}

Improvement in cervical stiffness may be explained by the Snigdha, Guru, and Brimhana properties of the medicated Ghrita and Taila, which counteract the Ruksha, Laghu, and Chala qualities of aggravated Vata. Lubrication of soft tissues surrounding the cervical spine improves flexibility of muscles, ligaments, and tendons while reducing muscle spasm and protective guarding. Consequently, patients experienced gradual restoration of normal cervical movements with reduced discomfort during flexion, extension, rotation, and lateral bending. ^{1,3}

Radiating pain and sensory disturbances also showed remarkable improvement following therapy. From the Ayurvedic viewpoint, these symptoms arise due to vitiated Vata affecting the Snayu and Kandara, whereas in Cervical Radiculopathy they result from inflammation and compression of cervical nerve roots. The Vata-Shamaka action of Nasya, together with the nourishing and Rasayana properties of the medicated Sneha, may reduce neural irritation, improve nerve conduction, and facilitate recovery of neurological function. The associated reduction in numbness and paresthesia observed in the present study supports this explanation. ^{1,3,9}

Muscle weakness improved significantly in both groups, with comparatively greater improvement observed in the Panchasneha Taila group. Muscle weakness in Vishwachi reflects Bahu Karmakshaya due to impaired Vyana Vata and involvement of Snayu, Kandara, and Mamsa Dhatu. Panchasneha Taila contains multiple Sneha Dravyas possessing Balya, Brimhana, Vatahara, and Dhatu-poshaka properties that help restore neuromuscular function and improve muscular strength. The observed improvement in muscle power indicates recovery of motor nerve function together with enhanced nourishment of affected tissues. ^{1,5}

Tenderness and restriction of cervical movements also decreased considerably after treatment. Reduction of inflammation surrounding cervical nerve roots, improvement in muscle relaxation, and normalization of Vata contribute to decreased local tenderness. Improved range of motion further indicates reduction in muscle spasm and restoration of normal biomechanical function of the cervical spine.

The Neck Disability Index (NDI) demonstrated statistically significant reduction in both groups, reflecting improvement in activities of daily living. Reduction in disability indicates that patients experienced meaningful clinical recovery beyond mere pain relief, enabling improved personal care, occupational performance, reading, driving, sleeping, and recreational activities. Functional recovery is one of the most clinically relevant outcomes in patients with Cervical Radiculopathy because restoration of daily activities directly improves overall quality of life. ^{7,11}

Although both interventions produced highly significant improvement, Panchasneha Taila Nasya consistently demonstrated comparatively superior results in most assessment parameters. This enhanced efficacy may be attributed to its combined Vatahara, Brimhana, Snigdha, and Balya actions arising from the synergistic effect of five Sneha Dravyas. The greater unctuousness and tissue-penetrating properties of Panchasneha Taila may facilitate deeper nourishment of Snayu, Kandara, and Asthi-related structures while simultaneously alleviating Vata more effectively. The concurrent administration of Dashamoola Bala Masha Kwatha in both groups likely contributed additional anti-inflammatory, analgesic, and Vatahara effects, thereby enhancing the overall therapeutic outcome. ^{1,5}

No serious adverse events or complications were observed during the treatment period, indicating that both Nasya formulations were safe and well tolerated when administered according to classical Ayurvedic principles. The absence of treatment-related complications supports the suitability of Nasya as a minimally invasive and clinically acceptable therapeutic modality for the management of Vishwachi. ^{1,3}

The findings of the present study suggest that Ayurvedic management targeting the underlying Vata pathology can provide substantial symptomatic relief and functional improvement in patients suffering from Cervical Radiculopathy. While both Sarvamayantaka Ghrita Nasya and Panchasneha Taila Nasya proved effective, the latter demonstrated comparatively better therapeutic efficacy and may therefore be considered the preferred Nasya formulation for the management of Vishwachi vis-à-vis Cervical Radiculopathy. Nevertheless, larger multicentric clinical trials with longer follow-up periods, objective radiological assessment, and electrophysiological evaluation are recommended to further validate these findings and strengthen the evidence for integrating Nasya Karma into the comprehensive management of cervical radiculopathy. ^{12,13,15}



CONCLUSION

The present randomized comparative clinical study demonstrated that both **Sarvamayantaka Ghrita Nasya** and **Panchasneha Taila Nasya**, administered along with **Dashamoola Bala Masha Kwatha**, are effective therapeutic interventions in the management of **Vishwachi vis-à-vis Cervical Radiculopathy**. Both treatment modalities produced statistically significant improvement in major clinical manifestations, including neck pain, stiffness, radiating pain, tenderness, sensory impairment, muscle weakness, restriction of cervical movements, and functional disability. The observed clinical improvement indicates that Nasya Karma effectively pacifies aggravated Vata Dosha, nourishes the affected Snayu, Kandara, and associated musculoskeletal structures, and restores the normal functional integrity of the cervical region and upper limb. The overall improvement in Neck Disability Index further demonstrates that the therapeutic benefits extended beyond symptom relief and resulted in meaningful enhancement of daily functional activities and quality of life.^{1,3}

Although both interventions were clinically effective, **Panchasneha Taila Nasya** exhibited comparatively superior therapeutic efficacy in most clinical and functional outcome measures. Its enhanced Vatahara, Brimhana, Balya, and Snigdha properties may have contributed to better neuromuscular recovery, greater reduction in pain and neurological symptoms, improved cervical mobility, and superior restoration of upper limb function. No adverse effects or treatment-related complications were observed during the study, indicating that both Nasya formulations are safe and well tolerated when administered according to classical Ayurvedic principles. The findings of the present study support the role of Nasya Karma as an effective conservative treatment modality for patients suffering from Vishwachi and Cervical Radiculopathy. However, further multicentric studies with larger sample sizes, longer follow-up, advanced imaging techniques, and electrophysiological assessments are recommended to validate these findings and establish stronger scientific evidence for the integration of Ayurvedic therapies into the management of cervical radiculopathy.^{1,5,12,13,15}

REFERENCES

1. Agnivesha. *Charaka Samhita of Agnivesha, revised by Charaka and Dridhabala, with Ayurveda Dipika commentary of Chakrapani Datta. Edited by Yadavji Trikamji Acharya. Varanasi: Chaukhambha Surbharati Prakashan; Reprint 2023.*
2. Sushruta. *Sushruta Samhita with Nibandha Sangraha commentary of Dalhana. Edited by Yadavji Trikamji Acharya. Varanasi: Chaukhambha Surbharati Prakashan; Reprint 2022.*
3. Vagbhata. *Ashtanga Hridaya with Sarvangasundara commentary of Arunadatta and Ayurveda Rasayana commentary of Hemadri. Edited by Pt. Hari Sadashiva Shastri Paradakara. Varanasi: Chaukhambha Surbharati Prakashan; Reprint 2022.*
4. Sharma PV. *Chakradatta. Varanasi: Chaukhambha Orientalia; Reprint 2021.*
5. Govinda Das. *Bhaishajya Ratnavali. Edited by Brahmashankar Mishra. Varanasi: Chaukhambha Prakashan; Reprint 2021.*
6. Fardon DF, Williams AL, Dohring EJ, Murtagh FR, Rothman SLG, Sze GK. Lumbar disc nomenclature: Version 2.0. Recommendations of the Combined Task Forces of the North American Spine Society, American Society of Spine Radiology and American Society of Neuroradiology. *Spine J.* 2014;14(11):2525–2545.
7. Bono CM, Ghiselli G, Gilbert TJ, et al. An evidence-based clinical guideline for the diagnosis and treatment of cervical radiculopathy from degenerative disorders. *Spine J.* 2011;11(1):64–72.
8. Childress MA, Becker BA. Non-operative management of cervical radiculopathy. *Am Fam Physician.* 2016;93(9):746–754.
9. Iyer S, Kim HJ. Cervical radiculopathy. *Curr Rev Musculoskelet Med.* 2016;9(3):272–280.
10. Radhakrishnan K, Litchy WJ, O'Fallon WM, Kurland LT. Epidemiology of cervical radiculopathy: A population-based study. *Brain.* 1994;117(Pt 2):325–335.
11. Wainner RS, Gill H. Diagnosis and non-operative management of cervical radiculopathy. *J Orthop Sports Phys Ther.* 2000;30(12):728–744.
12. Kizhakkeveetil A, Rose K, Kadar GE, Hurwitz EL. Integrative approaches for chronic neck pain: A systematic review. *Pain Physician.* 2014;17:E751–E772.
13. World Health Organization. *WHO Guideline on Chronic Primary Musculoskeletal Pain. Geneva: World Health Organization; 2023.*
14. Ministry of AYUSH, Government of India. *Ayurveda Standard Treatment Guidelines. New Delhi: Ministry of AYUSH; Latest edition.*
15. Cramer H, Lauche R, Haller H, Dobos G. Complementary therapies for chronic neck pain: A systematic review and meta-analysis. *Clin J Pain.* 2016;32(6):519–533.