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# REVIEW OF VISHWACHI (CERVICAL RADICULOPATHY) AND ITS MANAGEMENT BY SAHACHARA TAILA NASYA

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#### **ABSTRACT**

Cervical radiculopathy is a common disorder in the contemporary age, which most often develops as a result of degenerative changes in the cervical spine, usually occurring in people in their fourth and fifth decades of life. These issues are largely caused by excessive screen time, insufficient physical activity, and work-related stress, all of which contribute to an increased number of cases. It interferes with daily life, causing neck pain, radiating pain and sensory changes. The increasing prevalence of cervical radiculopathy highlights the overwhelming role of changing lifestyle patterns on musculoskeletal well-being, necessitating the adoption of preventive measures ahead of time. Ayurveda's Sushruta Samhita Nidana Sthana categorizes Vishwachi as Vata Vikara in the neck and upper limbs with symptoms very much akin to cervical radiculopathy. Both conditions have clinical manifestations of Ruka (Pain), Stambha (Stiffness), Toda

(Pricking sensation), *Karmakshaya* (Functional impairment), and *Chestapaharan* of *Bahu* (Arm weakness), with the dominating *Dosha* being *Vata*, which is responsible for *Shoola* (Pain). The article discusses the role of *Nasya Karma* in the management of *Vishwachi*. As per *Acharya Dalhana*, the treatment of *Vishwachi* is the same as that of *Gridhrasi*, a disease of the lower limbs, which is divided into *Vataja* and *Vatakaphaja* types. Vishwachi also shows remarkable parallels with cervical radiculopathy, a condition of degenerative nature of the cervical spine. In *Ayurvedic* texts, *Nasya Karma* is widely used for the treatment of *Shirogata Vyadhis* (Diseases of the head and neck region). *Dhatukshaya* (Tissue depletion) has been regarded as a major causative pathological factor in the formation of *Vishwachi*. The

study intends to augment the knowledge base of the disease and its total management. Being an *Urdhwajatrugata Vikara* (Upper body disorder), *Nasya Karma* has been projected as the first line of management. *Dhatukshaya* (Tissue degeneration) and *Margavarana* (Obstruction of channels) have been considered chief causative factors responsible for symptoms such as *Vishwachi*. Thus, to evaluate an effective therapy, the current study includes *Snehana Nasya* with *Sahachara Taila*.

KEYWORDS:- Vishwachi, Cervical radiculopathy, Nasya Karma, Sahachara Taila.

#### INTRODUCTION

With the passing of time in the present age, cervical disorders have increasingly gained prominence as a result of widespread use of electronic gadgets and working conditions. Considering the unavoidable status of such contributing factors, totally avoiding the occurrence of such ailments is practically often not possible, and therefore seeking effective therapeutic modalities is all the more important. *Nasya Karma*, one of the *Panchakarma* procedures indicated for disorders associated with *Urdhwajatru*, is provided in *Ayurveda*, an ancient school of medicine. As stated in *Ashtanga Sangraha*, "*Nasa hi Shirasodwaram*," which means that the nose is the entrance of the *Shiras* (Head). Shiras is the most important part of the body since it accommodates the five sense organs and is the seat of *Prana*, hence the name *Uttamanga*.

While explaining the *Phalashruti* of *Taila*, *Acharyas* have stated that *Taila* mitigates *Vata* without significantly increasing *Kapha*.<sup>[8]</sup> Keeping this principle in mind, and considering the beneficial effects of *Nasya Karma* in strengthening the *Urdhjatruta* and *Griva*, *Snehana Nasya* has been chosen for this study. The present research aims to evaluate the therapeutic impact of *Snehana Nasya* with *Sahachara Taila* in the management of *Vishwachi*.

Cervical radiculopathy, a condition resulting from pressure or irritation of the cervical spine nerve root, is usually related to disc prolapse or injury. It is characterized by symptoms including radiating neck pain to the upper limbs, limited neck movement, arm pain, numbness, and tingling in the hands and fingers. The incidence of cervical radiculopathy is said to be 107.3 per 100,000 men and 63.5 per 100,000 women per year, most commonly occurring in the fourth and fifth decades of life. <sup>[9]</sup> The condition presents as severe, aching pain extending from the neck to the shoulder, arm, forearm, and fingers, with accompanying numbness and atrophy of the upper limbs. Considering its increasing prevalence, it is most

important to discover an effective and safe treatment for cervical radiculopathy. While contemporary medicine offers numerous analysesics to treat symptoms, these medications usually have considerable limitations, such as serious side effects and a potential for addiction. Even with the wide variety of drugs available to treat this disease, the quest for a treatment that is effective and free of negative consequences continues to be a significant challenge. Thus, the requirement of a safer and integrated method is essential.

Nasya is known to be an effective treatment for *Urdhwajatrugata Vyadhi*, as drugs taken via the nasal passage spread throughout the body and assist in eliminating vitiated *Doshas*. [10] As *Vishwachi* is an *Urdhwajatrugata Vyadhi*, it can successfully be treated with *Nasya*. As elucidated by *Acharya Charaka*, *Sahachara Taila* is especially useful for the management of *Daruna Vata Vyadhi*, since it easily suppresses an imbalance of *Vata Dosha*. [11] When used with *Nasya*, *Sahachara Taila* is capable of treating symptoms of *Vishwachi* by targeting the origin, maintaining a balance of *Vata*, and ensuring the health of the entire cervical spine, thus rendering it a very hopeful and effective method of treatment.

#### Ayurvedic review

In *Sushruta Samhita Nidana Sthana (Shu. Ni. 1/75), Vishwachi* is included in *Vata Vikara*. According to *Vagbhatta*, when there is excessive pain in *Gridhrasi* and *Vishwachi*, they are termed as *Khalli*. However, in *Charaka Chikitsa* 28/57, *Khalli* is mentioned differently from *Vishwachi*. [13]

According to *Sushruta Samhita*, the disease in which the enraged *Vayu* affects the nerve trunks (*Kandara*), extending from the roots of the upper arms to the tips of the fingers, rendering them incapable of movement and depriving them of the power of flexion or expansion, is termed *Vishwachi*. [14]

According to *Chakradatta*, *Vishwachi* is characterized by lameness and burning and tingling sensation in lower limbs. Treatment of *Vishwachi* as described in the clinical text includes various procedures like *Siravedhana*, *Vata-Nashaka* (*Snehana*, *Swedana*) *Chikitsa*, and *Nasya Karma*.<sup>[15]</sup>

#### Samprapti ghataka

Samprapti Vighatana plays an important role in every disease for its treatment. Samprapti of Vishwachi includes Samprapti Ghatak as follows-

- Dosha Vata-Pradhana
- Dushaya Sira and Kandara of Bahu
- Vyaksthana Manya, Bahu, Hasta, Pratyanguli
- Rogmarga Madhyama

#### Mode of action of nasya karma

Ayurvedic literature emphasizes a strong connection between the *Nasa* and *Shiras*. Acharya Charaka states that *Nasa* serves as the *Dwara* (Gateway) to the *Shiras*, implying that medications administered through the nasal route directly reach the *Shiras* and influence the aggravated *Doshas*. A similar perspective is found in *Ashtanga Sangraha*, which explains that medicines introduced via the *Nasa* reach the *Shringataka Marma*—a vital *Sira Marma* formed by the convergence of *Siras* supplying the *Nasa*, *Karna*, *Akshi*, and *Jihwa*. According to *Acharya Indu*, this *Marma* is located in *Shiraso Antarmadhyam*, corresponding to the middle cephalic fossa.

Anatomically, the ethmoidal and sphenoidal sinuses are closely associated with the middle cephalic fossa. The sphenoidal sinus is connected inferiorly to the nasopharynx and posteriorly to the brainstem. The choice of the drug administration route plays a crucial role in the effectiveness of treatment. Based on these references, *Nasya* is considered an essential therapeutic approach in the management of *Vishwachi*.

Through its *Dhatuposhaka* property, *Snehana Nasya* induces the *Snehana* effect and provides strength to all *Dhatus*. In conditions involving *Vata Vikara*, instilling *Vatashamaka Aushadha* through the nasal passage is the most effective way to promote *Dhatuposhana*. *Snehana Nasya*, when performed using *Anu Taila*, plays a significant role in achieving this therapeutic effect. [18]

#### Mode of action of nasya karma on the level of neurovascular stimulation

Peripheral olfactory nerve stimulation



Chemoreceptors in the peripheral olfactory nerve



Chemoreceptors are used to identify particles.



Stimuli are delivered to the olfactory bulbs.



Higher brain centres (hypothalamus and limbic system) are stimulated.



Anterior and Posterior pituitary are linked to higher centres.



Impact on the endocrine and neurological systems



Vishwachi

#### Sahachara taila

According to *Charaka Samhita*, *Sahachara Taila* is highly beneficial in the treatment of various *Vatika* disorders. <sup>[19]</sup> It can be administered through four different modes—oral intake, *Abhyanga*, *Nasya*, and *Basti*—making it a versatile remedy in *Ayurvedic* practice. <sup>[20]</sup>

#### **Preparation method**

To prepare *Sahachara Taila*, 1 *Adhaka* of *Taila* is processed with the decoction of 1 *Tula* of the whole *Sahachara* plant, along with a paste made from 10 *Palas* of *Sahachara* root. Additionally, 4 *Adhakas* of milk are incorporated during the cooking process. Once the *Taila* is fully prepared, 18 *Palas* of sugar powder is added as per the physician's recommendation. [21]

This medicated *Taila* is particularly effective in managing *Daruna Vata Vikara*, offering significant therapeutic benefits in pacifying aggravated *Vata* and alleviating symptoms associated with *Vatika* disorders.

#### Modern review

#### Cervical Radiculopathy: Pathophysiology and Underlying Mechanisms

Cervical radiculopathy is a neurological condition caused by compression or irritation of nerve roots in the cervical spine. It results in radiating pain, sensory disturbances, and muscle weakness in the upper limbs. The condition is primarily associated with degenerative changes in the spine, although trauma, infections, or inflammatory diseases can also contribute to its development. The pathophysiology of cervical radiculopathy involves complex interactions between mechanical compression, inflammatory responses, and neural dysfunction.<sup>[22]</sup>

#### **Pathological Causes and Mechanisms**

#### 1. Degenerative Disc Disease and Spondylosis

One of the primary causes of cervical radiculopathy is cervical spondylosis, a progressive degenerative condition affecting the intervertebral discs and facet joints. Over time, the discs lose hydration and elasticity, leading to reduced disc height and increased mechanical stress on adjacent structures. This degeneration results in the formation of osteophytes (Bone spurs), which can encroach upon the neural foramina, causing nerve root compression.

#### 2. Disc Herniation and Nerve compression

Disc herniation occurs when the nucleus pulposus protrudes through a tear in the annulus fibrosus, exerting pressure on the nerve root. The herniated disc material not only compresses the nerve but also triggers an inflammatory cascade, leading to further irritation and dysfunction of the affected nerve root. Inflammatory mediators such as cytokines and prostaglandins contribute to pain hypersensitivity and nerve edema, worsening the symptoms of radiculopathy.

#### 3. Foraminal stenosis

Foraminal stenosis is another key pathological mechanism in cervical radiculopathy. It occurs when the intervertebral foramina, the openings through which nerve roots exit the spinal column, become narrowed due to bony hypertrophy, ligamentous thickening, or disc degeneration. This narrowing reduces space for the nerve root, leading to compression, ischemia, and chronic irritation.

#### 4. Vascular Compromise and Neural ischemia

Chronic nerve compression can lead to vascular insufficiency, restricting the blood supply to the affected nerve root. Ischemic conditions further contribute to neural dysfunction, axonal degeneration, and demyelination, exacerbating sensory and motor deficits. Prolonged ischemia may result in irreversible nerve damage if left untreated.

#### 5. Inflammatory and Autoimmune factors

In addition to mechanical compression, inflammation plays a crucial role in the pathology of cervical radiculopathy. Autoimmune responses, particularly in conditions like rheumatoid arthritis, can cause synovial inflammation, joint erosion, and eventual nerve root involvement. Inflammatory cytokines released in response to chronic irritation further sensitize nerve fibers, amplifying pain and neurological dysfunction.

#### **Symptoms and Diagnosis**

Cervical radiculopathy presents with a range of neurological symptoms depending on the affected nerve root. The most common signs include:<sup>[23]</sup>

- Neck pain radiating to the shoulder, arm, forearm, or fingers
- Numbness and tingling sensations in the upper limbs
- Muscle weakness in the arms and hands
- Decreased reflexes in the affected nerve distribution
- Difficulty in gripping or holding objects

A diagnosis is typically made through clinical evaluation, medical history, and imaging studies such as MRI, CT scans, or X-rays. Electromyography (EMG) and nerve conduction studies may also be used to assess nerve function.

Cervical radiculopathy is a multifactorial condition driven by degenerative, mechanical, vascular, and inflammatory processes. Understanding its pathophysiology is essential for developing targeted interventions to alleviate nerve root irritation and prevent long-term neurological deficits. Early recognition of these pathological mechanisms can help in formulating preventive strategies to mitigate disease progression.

#### **DISCUSSION**

As discussed above, cervical radiculopathy, a condition arising from nerve compression in the neck, significantly impacts daily life. Manifesting as pain, numbness, or weakness radiating down the arm, it hampers routine activities. Simple tasks like typing, lifting, or turning the head become arduous, diminishing work efficiency. Sleep disruptions due to discomfort further exacerbate fatigue and cognitive challenges. Social interactions may suffer as individuals grapple with pain, limiting their ability to engage in recreational activities. Coping with the emotional toll of chronic pain adds another layer of complexity. Seeking

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timely medical intervention and adopting adaptive strategies are crucial for mitigating the profound effects of cervical radiculopathy on daily life.

Treatment in the contemporary system is often inadequate due to side effects and its symptomatic approach. Allopathic medicine tends to offer only temporary relief and may lead to dependency. Spine surgery is expensive and has a high recurrence rate. Therefore, there is a growing need for a cost-effective, safe, and holistic remedy.

Ayurveda offers superior treatment options for cervical radiculopathy, aiming not just at symptomatic relief but also at addressing the root cause. In the Sushruta Samhita's Chikitsa Sthana, Raktamokshana is mentioned as a line of treatment for Vishwachi. [24] According to Acharyas, the management of Vishwachi includes comprehensive Vata Nashaka Chikitsa, incorporating procedures like Nasya, Sneha, Swedana and Basti. Among these, Nasya—the administration of medicated oil through the nasal route—is particularly effective for *Urdhva*-Jatrugata Vikaras<sup>[25]</sup> (disorders above the clavicle), such as cervical radiculopathy. Sahachara Taila Nasya, due to its Snigdha Guna and Ushna Veerya, proves especially beneficial. It possesses Vata-Kapha Shamaka, Vedanasthapana, and Shothahara properties. Barleria prionitis (Sahachara) has been recognized for its remarkable antioxidant and antiinflammatory effects. Various studies have showcased its potential in treating inflammatory conditions. In particular, the anti-inflammatory efficacy of Baleria prionitis has been demonstrated through in vitro enzyme-based cyclooxygenase (COX-1 and COX-2) assays. These studies showed that dichloromethane, petroleum ether, and ethanol extracts from leaves, stems, and roots significantly inhibited COX enzymes, thereby reducing prostaglandin synthesis associated with pain (Amoo et al., 2009). [26]

Hence, *Sahachara Taila Nasya* can provide effective pain relief and help in long-term management of *Vishwachi* (Cervical radiculopathy) by pacifying *Vata Dosha* and targeting the root pathology. This approach ensures a holistic and sustainable treatment strategy in line with *Ayurvedic* principles, ultimately promoting lasting relief and improved quality of life.

#### **CONCLUSION**

*Vishwachi* is a predominantly painful condition caused by partial damage or irritation of nerve membranes, making them hypersensitive to mechanical and chemical stimuli. The resulting pain may present as either a burning, superficial (dysaesthetic) type or a deep, stabbing sensation. Hence, the development and use of effective *Vedanahara* (Analgesic) and

nerve-nourishing therapies are essential for successful management. Since *Vishwachi* mainly affects the nerve roots of the upper limbs originating from the *Greeva Pradesh* (Cervical region), a comprehensive *Ayurvedic* treatment approach is indicated—one that includes *Raktamokshana*, *Nasya*, *Abhyanga*, *Swedana*, and *Basti*, as mentioned in classical texts. Among these, *Nasya* plays a crucial role in managing *Urdhva-Jatrugata Vikaras* (Disorders above the clavicle), such as cervical radiculopathy. The present study concludes that *Sahachara Taila Nasya* is an effective modality for the treatment of *Vishwachi*. Its Vata-*Kapha Shamaka*, *Shothahara*, and *Vedanahara* properties help alleviate pain and reduce inflammation by targeting the root cause of the disease. Thus, *Sahachara Taila Nasya* offers a promising, non-invasive, and holistic treatment option in line with *Ayurvedic* principles. Further research-based clinical studies are recommended to validate and expand upon these findings.

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