



## Review Article

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### ROLE OF VACHALASUNADI TAILA IN THE MANAGEMENT OF NEUROLOGICAL DISORDERS AS PER CLASSICAL AND CONTEMPORARY STUDIES: A REVIEW

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#### ABSTRACT

Neurological disorders represent a major global health concern due to their chronic, progressive, and debilitating nature, often resulting in long-term functional impairment and reduced quality of life. Such states are mainly classified in Ayurveda as Vatavyadhi (neurological disorders), Unmada (insanity/psychiatric disorders) and Apasmara (epilepsy) with the vitiation of Vata dosha, loss of Dhatu (tissues) and Srotorodha (obstruction in body channels), being the prominent pathologic factors. Vachalasanadi Taila is an Ayurvedic medicine oil which is traditionally used to treat neurological and neuropsychiatric disorders. The purpose of the present review is to critically assess the role of Vachalasanadi Taila in the treatment of neurological disorders by compared classical Ayurvedic ideas with the modern scientific suggestions. Classical texts of authoritative books like Charaka Samhita, Ashtanga Hridaya, Bhaishajya Ratnavali and Chakradatta were consulted in order to comprehend its composition, pharmacological properties, indications and its therapeutic uses. The modern experimental and clinical research was also reviewed to determine the neuroprotective, antioxidant, anti-inflammatory and neuro-stimulatory properties. The formulation, which includes ingredients such as Vacha (*Acorus calamus*), Lasuna (*Allium sativum*) and other pacifying drugs of the Vata-Kapha type, which are processed in an oil base, possesses Ushana (hot), Tikshna (sharp) and Medhya (nootropic/intellect-promoting) properties. The qualities aid in appeasing aggravated Doshas, unblocking channel blockages, nourishing the Majja Dhatu (nervous tissue) and enhancing sensual-motor and cognitive abilities. Medical reports indicate that the therapeutic practices like Abhyanga (body massage) and Nasya (nasal administration) using Vachalasanadi Taila help to achieve functional recovery and neurological recovery. The review concludes that Vachalasanadi Taila has a great prospective as an effective and integrative Ayurvedic intervention in managing neurological disorders that should be pursued in systematic clinical research.

**Keywords:** Vachalasanadi Taila, Neurological Disorders, Vata Dosha, Medhya Dravya, Ayurveda.

#### INTRODUCTION

Vachalasanadi Taila is a classical Ayurvedic medicinal oil that is traditionally prescribed in the treatment of the nervous system and diseases that are caused by vitiation of Vata dosha. It is prepared with various herbs which include Vachā (*Acorus calamus*), Lasuna (*Allium sativum*), and other Vatahara and Medhya drugs that are prepared in an oil base to increase neuroprotective and nerve-stimulating activity. It has been prescribed in such conditions as Pakshaghata (paralysis), Ardita (facial palsy), Kampavata (tremors), and Unmada (neuropsychiatric disorders) primarily by Abhyanga (body massage) and Nasya treatment.<sup>2</sup> It has been studied in terms of its pharmacological effects that contain anti-inflammatory, antioxidant, neuroprotective, and neuro-modulatory effects of its constituent herbs in modern research. Both experimental and clinical observations indicate that it is effective in the promotion of neuromuscular coordination, minimization of spasticity, as well as functional recovery in neurological disorders. Therefore, Vachalasanadi Taila is a representation of the meeting of Ayurvedic knowledge and modern integrative methods of neurological treatment.<sup>2</sup>

The neuroprotective, antioxidant, antiphlogistic, and neuro-stimulatory effects of its essential components have been confirmed by current researchers and in experimental research. As the discoveries of modern pharmacology indicate, such elements as Vacha have cognition-stimulating and neurogenerative effects, and Lasuna has antioxidant and circulatory-stimulating effects that promote the health of the

neurons. Clinical observations during integrative medicine settings reveal that Vachalasanadi Taila which is a subset of Panchakarma and supportive therapy helps in symptomatic management, quality of life and functional betterment of the patients with neurological disorders. In one way or another, therefore, both the ancient wisdom and modern facts point to the therapeutic applicability of Vachalasanadi Taila in the field of neurology.<sup>3</sup>

Neurological disorders constitute a major health burden worldwide and are often chronic, progressive, and debilitating in nature. Conventional management primarily focuses on symptomatic relief and may not adequately address tissue degeneration, functional impairment, and long-term quality of life. Ayurveda offers a holistic understanding of neurological disorders under Vatavyadhi (neurological disorders), emphasizing Dosha imbalance, Dhatu depletion, and Srotorodha (obstruction in body channels) as core pathogenic factors. Vachalasanadi Taila is a classical Ayurvedic formulation traditionally indicated for neurological and neuropsychiatric conditions; however, its therapeutic potential is scattered across classical texts and limited contemporary studies.

#### Vachalasanadi Taila

Vachalasanadi Taila is an Ayurvedic ointment of Ayurvedic medicines commonly employed in the treatment of neurological and neuropsychiatric diseases. It is cooked with powerful herbs like Vacha (*Acorus calamus*), Lasuna (*Allium sativum*) among other Vata-Kapha pacifying medicines cooked in an appropriate

oil base. Its formulation is mostly suggested in such conditions as Apasmara (epilepsy), Unmada (mental disorders) and Pakshaghata (paralysis) and speech-related impairments. Vachalasanadi Taila works by feeding the nervous tissue, developing sensory and motor activity, and raising mental capabilities. It has Tikshna, Ushna, and Medhya qualities that aid towards decongesting the channels, empowering the nervous system and restoring normal functioning. The neuroprotective, anticonvulsant, and anti-inflammatory capabilities are also proposed by the contemporary research that substantiates the therapeutic importance of this compound in the neurological care.<sup>4</sup>

### Concept of Neurological disorders in Ayurveda

Ayurvedic neurological disorders are mainly explained using the principles of Dosha imbalance especially that of vitiation of Vata Dosha that controls movement, conduction of nerve impulses and sensory-motor aspects. The disorders of the nervous system are widely explained in terms of Vatavyadhi, Unmada (psychiatric disorders), Apasmara (epilepsy), Pakshaghata (paralysis) and Kampavata (tremors). Ayurveda focuses on the pathogenesis of the neurological diseases, in which Agni (impaired), Ama (accumulated toxins) and Srotas (obstructed body channels) play a role.<sup>5</sup> The mind (Manas), intellect (Buddhi) and sensory organs (Indriyas) are regarded as parts of neurological wellbeing therefore a very close linkage between the mind and the body. Among the etiological factors, there are the incorrect diet, lifestyle, psychological stress, traumas, and aging. The management is aimed at regaining the Dosha balance by the help of Shodhana therapy (purification), Shamana therapy (pacifying), Rasayana (rejuvenation) therapy, and auxiliary interventions, such as Abhyanga, Nasya (nasal administration), and Basti (therapeutic enema) to reinforce and re-energize the nervous system.<sup>6</sup>

### Classical references and composition of Vachalasanadi taila

A popular classical Ayurvedic preparation is known as Vachalasanadi Taila which is mentioned in the authoritative Ayurveda texts like Bhaishajya Ratnavali, Chakradatta, and Ashtanga Hridaya in the management of Vatavyadhi, Unmada, and Apasmara.<sup>7</sup> The preparation of the formulation is done by a Sneha Kalpana process that involves the processing of the desired herbal drugs in an oil base in order to help extract and preserve their medicinal value. Vacha (*Acorus calamus*) and Lasuna (*Allium sativum*), Shunthi (*Zingiber officinale*) and the Vata Kapha alleviating herbs are the key ingredients, which are usually cooked in Tila Taila (sesame oil). The selected ingredients are selected based on their Tikshna, Ushna and Medhya properties, which aid in the removal of Srotorodha (channel obstruction) and the improvement of functions of the nervous system. Classical literature prescribes the use of such oil internally and externally and the main point is that the oil is good in strengthening nerves, enhancing cognition and restoring the balance of the nerves.<sup>8</sup>

### Pharmacological properties of ingredients

Vachalasanadi Taila mainly contains Katu (pungent) and Tikta (bitter) Rasa in its ingredients. Such flavours assist in decreasing Kapha Dosha, digesting Ama, and activating the nervous system, which is essential in the nervous system disorders.

**Guna (Qualities)** - Laghu (light), Tikshna (sharp), and Ruksha (dry) Guna (properties) are exhibited by most drugs. These traits make it easier to get through narrow channels, block them, and improve the way nerves send signals to muscles.

**Virya (Strength)** - The main ingredient in the recipe is Ushna Virya, which means it is hot in potency. Ushna Virya soothes aggravated Vata and Kapha Dosha, improves blood flow, and helps nerves and muscles work together.

**Vipaka (Post-digestive Effect)** – Katu (Spicy/Pungent) Vipaka is major, which fosters the normal metabolism, prevents the accumulation of toxins and maintains Dosha balance with the long term. All these pharmacological properties lead to the neuroprotective and restorative effect of Vachalasanadi Taila.<sup>9</sup>

### Mode of action of Vachalasanadi taila in Neurological conditions

Vachalasanadi Taila has the therapeutic effect in neurological diseases since it treats the Ayurvedic principles underlying the dysfunction of the nervous system, specifically, the vitiation of Vata Dosha. Srotorodha (blocking of channels), Dhatu Kshaya (depletion of tissues) and malfunctioning of Agni are often related to neurological conditions, resulting in the disruption of nerve conduction and sensory-motor dysfunction. Vachalasanadi Taila has the Ushna(hot), Tikshna(sharp) and Sukshma (subtle) properties which are useful in penetrating deep tissues and cleaning the obstructions in the Manovaha (mind/emotion carrying) and Pranavaha (life force/oxygen carrying) Srotas (body channels). The oil base helps spread the active substances evenly, which gives Snigdha and Brimhana effects and feeds Majja Dhatu (nervous tissue). Medhya and Rasayana properties of the formulation strengthen cognitive processes, increase memory, and stabilize the mental processes. People say that the Taila calms down furious Vata and Kapha Doshas, keeps the neuromuscular system in rhythm, improves sensory perception, and brings the neurological system back into balance. Continued therapeutic application in terms of Abhyanga, Nasya or oral intake will facilitate functional healing and inhibit disease progression.<sup>10</sup>

### Mode of Action -Important Mechanisms

**Vata Kapha Shamana (Pacification)** - Vata and Kapha Doshas are major factors found in the neurological disorders and pacified by these qualities: Vata and Kapha.

**Sroto shodhana (Cleaning the Channels)** - The Sukshma and Tikshna properties assist clear microchannels, which makes it easier for nerve impulses to pass through them.

**Majja Dhatu Poshana (Nourishment)** - The Snigdha and Brimhana properties of oil nourish nerve tissue, helping to rebuild and strengthen neural circuits.

**Medhya and Manobalya (increase morale) Effect** - Improves mental processes, stabilizes the mental condition, and promotes emotional stability in the neuropsychiatric disorders.

**Neuroprotective and Rasayana Effects** - Both inhibit degeneration, make the nervous system more flexible, and help keep the brain healthy over time.

**Better bioavailability** - The Taila form is better at being absorbed and having a longer-lasting effect on tissues.<sup>11</sup>

### Therapeutic applications in specific Neurological conditions in classical Ayurvedic texts

The classical Ayurvedic texts refer substantively on the use of medicated oils such as Vachalasanadi Taila in the treatment of neurological disorders with a holistic approach to treatment. Disorders of the nervous system are primarily included in Vatavyadhi, Manasika Roga (mental disorder), and Majjagata Vikara and aggravated Vata Dosha is a major cause in these disorders. Vachalasanadi Taila containing its Ushna, Tikshna, and Medhya qualities is advised to calm down vitiated Doshas, to purify Srotorodha, and to nourish Majja Dhatu. The use of Sneha preparations in the internal and external treatment of neurological conditions is promoted in texts like Charaka Samhita, Ashtanga Hridaya or Bhaishajya Ratnavali. Depending on the severity of a disease and involvement of Dosha, the Taila is applied by Abhyanga, Nasya, and by mouth. It is thought to regain sensory-motor coordination and enhance mental abilities and prevent the

recurrence of neural conditions, which makes it important in classical neurological treatment.<sup>12</sup>

#### **Specific Neurological Conditions and Therapeutic Applications**

**Apasmara (Epilepsy)** - As a means to stabilize neuronal activity, and to reduce the frequency of seizures and to make Manas calm by means of a combination of Medhya and Vata-shamaka actions.

**Unmada (Psychiatric Disorders)** - This is the medicine that is used to bring a balance of the mental functions, relieve agitation, and also improve the clarity of mind by nourishing Manovaha Srotas.

**Pakshaghata (Paralysis)** - This is used in Abhyanga and Nasya to enhance motor strength, circulatory, and neuromuscular coordination.

**Kampavata (Tremors)** - This is utilized to calm Vata and strengthen Majja Dhatu, which helps reduce involuntary movements.

**Ardita (Facial Paralysis)** - Use as an external agent to regain muscle tone and nerve activity of the face.

**Smritibhramsha (Memory Loss)** - Its Medhya and Rasayana properties help keep the mind sharp, focused, and smart.

**Badhirya and Vakgraha (Speech and Hearing Disorders)** - Sharpens the sense perception and speech articulation by clearing up the obstructions of the channels and nurturing the body organs of the senses.<sup>13</sup>

#### **Role of Vachalasanadi taila in Vata vyadhi management**

Vachalasanadi Taila is also important in the treatment of Vata Vyadhi that includes a broad spectrum of neuromuscular and neurological infections due to Vata Dosha stimulation. Vata plays a role in movement, nerve impulses and coordination and when it is not in balance, it causes conditions like Pakshaghata, Kampavata, Ardita, and other degenerative and functional disorders. Vachalasanadi Taila has the Ushna and Tikshna and Snigdha properties which successfully neutralize the Ruksha and the Sheeta of aggravated Vata. The Sneha base gives Brimhana (nourishment to body tissues) and Balya (gives strength) effects, enlivening the drained Dhatu, the direct reliance of which is on the nervous system, the Majja Dhatu.

By penetrating deep tissues, the Taila enhances neuromuscular transmission and eradicates Srotorodha through treatments like Abhyanga and Nasya. Internal, it balances Dosha, prevents Ama accumulation, and supports Agni, among other things. Medhya and Rasayana qualities also enhance the mental powers and avoid disease development. Vachalasanadi Taila is therefore a complete therapeutic agent in the restoration of functional balance, quality of life and longterm management of Vata Vyadhi.<sup>14</sup>

#### **Evidence from contemporary and experimental studies on Vachalasanadi taila**

Modern studies and experiments have taken a growing interest in the therapeutic value of Vachalasanadi Taila in neurological diseases and scientifically validate the Ayurvedic assumption of the classical claims. Preclinical research has revealed that the main constituents of this Taila which include Vacha (*Acorus calamus*), Lasuna (*Allium sativum*) and Shunthi (*Zingiber officinale*) have vital neuroprotective, antioxidant and anti-inflammatory effects. Oxidative stress and inflammatory mediators are typical pathological causes of neurodegenerative disorders such as Parkinson, Alzheimer, and epilepsy, and these pharmacological activities assist in the reduction of these pathological factors. Vachalasanadi Taila has been shown in experimental models involving topical administration on rats to enhance motor coordination and nerve conduction velocity, as well as decrease muscular atrophy which validates its use in Pakshaghata and Kampavata management.<sup>15</sup>

According to the clinical observations, treatments such as the Abhyanga and Nasya using this Taila enhance the sensory-motor functions, cognitive performances, and general neurological performances in patients with chronic neurological conditions. Further, it has been shown to increase memory, attention capacity, and decrease tremors, which are qualities of Medhya shamaka and Vata-shamaka. The pharmacokinetic analysis also demonstrates that the lipid-based formulation provides improved absorption and selective delivery of active components to nervous tissue which improves the therapeutic effectiveness. Recent studies highlight the synergistic functions of Brimhana, Snigdha, Ushna and Tikshna properties to provide nourishment to tissues, detoxification and neuronal normalcy restoration. These results strengthen the classical Ayurvedic principles yet give a scientific explanation of why Vachalasanadi Taila should be included in the current neurological practice. In general, the multifaceted action of it in neuroprotection, functional restoration, and symptom management has been supported by modern and experimental studies, which makes it an effective adjunct in both preventive and curative approaches of neurological disorders.<sup>16</sup>

#### **Clinical utility and scope in Neurological disorders**

Vachalasanadi Taila has a profound clinical importance in the treatment of many neurological conditions because it has multiple effects on the nervous system. Its classical and modern validation emphasizes its efficiency both in the prevention and treatment situations. In practice, the Taila has been used in the treatment of disorders like Pakshaghata (hemiplegia), Ardita (facial paralysis), Kampavata (tremors), Apasmara (epilepsy), Unmada (psychiatric disorders) and memory-related disorders. The Tikshna, Ushna and Snigdha qualities of the formulation allow penetration of deep tissues, elimination of Srotorodha (microchannel blockage) and nourishment of Majja Dhatu, hence, enhancing the motor and sensory activities. Such therapies as Abhyanga, Nasya and localized massage using Vachalasanadi Taila increase neuromuscular coordination and decrease stiffness and shorten the time of recovery of impaired functions. It's Medhya and Rasayana effects and further add to its cognitive, emotional stability, and long-term neurological health.<sup>17</sup>

The effects of Vachalasanadi Taila are not limited to classical findings because modern research indicates possible advantages in degenerative neurological disorders, neuroinflammatory disorders, and as an adjunctive treatment in post-stroke rehabilitation. The oil formulation that is based on lipids enhances bioavailability and allows the active phytoconstituents to be delivered continuously to the nervous tissues. It can be used as long term management and integrative therapy with conventional treatments as it has few side effects and its non-invasive method makes it very suitable. Vachalasanadi Taila is becoming a popular treatment option in both outpatient and chronic neurological rehab therapies because it protects the brain, heals it, and balances Vata.<sup>18</sup>

#### **DISCUSSION**

These results of the review indicate that the Vachalasanadi Taila has significant therapeutic potential in the treatment of neurological and neuropsychiatric diseases and can be interpreted based on classical Ayurvedic ideas and modern scientific approaches. Its usage in classical texts is always mentioned in terms of Vata vyadhi, Apasmara, Unmada, and so on, and its efficacy is due to Ushna, Tikshna, Medhya, and Vata-Kapha shamaka. The Sneha-based delivery system of the formulation assists in deep tissue penetration and proper nourishment of the Majja Dhatu, which is the centre of the neurological activity. Such classical descriptions are in line with the current findings that

show neuroprotective, antioxidant, anti-inflammatory, and neuro-stimulatory effects of its major components like Vacha and Lasuna.

Recent experimental and clinical research that has been searched suggests that there is improvement of motor coordination, cognitive functions, tremor and sensory-motor impairment particularly in the effects of Vachalasanadi Taila with Panchakarma or supportive therapy. Such meeting of conventional knowledge and scientific confirmation creates the possibility that the formulation is not only acting on a symptomatic level, but also leading to functional restoration and the prevention of progression of the disease. The interpretative analysis also suggests that Vachalasanadi Taila can be a useful adjunct in a case of integrative care in neurology, especially in chronic and degenerative disorders where long-term treatment is needed. In general, this discussion indicates the topicality of Ayurvedic formulations based on evidence and the necessity of designing high-quality clinical studies that allow to further standardize its use and increase its application in modern neurology.

## CONCLUSION

The present review concludes that Vachalasanadi Taila has significant therapeutic importance in the treatment of neurological conditions when considered in the context of both Ayurvedic traditional concepts and modern science. The aim of the research to review the classical references, pharmacological properties, and mechanisms of action as well as the current research results are sufficiently met. The textual tradition always reports of its Vata-Kapha śamaka, Medhya, and Majja Dhatu nourishing qualities that directly deal with the pathogenesis of the fundamental neurological disorders. Modern experimental and clinical research continues to support its neuroprotective, antioxidant, anti-inflammatory, and neuro-stimulatory effects to confirm the historic assertions. The integrated research shows that Vachalasanadi Taila does more than merely relieve symptoms; it also helps with functional recovery, tissue nourishment, and the long-term equilibrium of the neurological system. Therefore, it can be concluded that it is a promising and evidence-based Ayurvedic treatment of neurological and neuropsychiatric disorders, and its application as a component of holistic and integrative neurological care has much room to be expanded.

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