



Review Article

A REVIEW ARTICLE ON THERAPEUTIC AND PREVENTIVE ASPECTS OF *SHIROABHYANGA*

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ABSTRACT

The ancient Ayurvedic intervention of *Shiroabhyanga*, defined as the systematic application of medicated oils and tactile friction to the cranial region, combines ancient holistic healing with our modern understanding of the nervous system. *Shiroabhyanga* is classified as an integrative component of *Dinacharya* (daily regimen) that plays a critical role for the preservation of neurological, psychological, and sensory homeostasis. The article comprehensively examines the neuroendocrine modulation achieved via the stimulation of *Shira Marmas* (vital points), the cosmetic impacts of *Shiroabhyanga* and the hemodynamics of localized vasodilation and increased capillary permeability. This review establishes *Shiroabhyanga* as a scientific, non-invasive, and highly effective preventative and therapeutic modality capable of neutralizing the neuro-immunological and biomechanical stressors of the modern era before macroscopic pathogenesis occurs.

INTRODUCTION

The head is unequivocally designated as the *Uttamanga*. This term is composed of two words, *Uttara*, meaning superior or top most and *Anga*, meaning organ or body part. The *Charaka Samhita* explicitly defines the head as the anatomical locus where the vital life energy (*Prana*) and all the essential centers of the sensory and motor organs (*Indriyas*) reside [1].

Abhyanga, the cornerstone of external oleation (*Bahya Snehana*), involves the systematic massage of the body utilizing *Taila* (medicated oils) or *Ghrita* (clarified butter), executed usually in the direction of the body hair (*Anuloma gati*), to align with the natural flow and lymphatic drainage pathways. While full-body massage yields comprehensive systemic strength. When this oleation and massage are localized specifically to the head region (*Shirah pradesha*), the procedure is termed *Shiroabhyanga*.

Acharya Vagbhatta described the application of oil over head under a broad category called *Moordhini Tailam*. It encompasses a progressive range of

treatments based on the depth and duration of oil application, including *Shirodhara* (rhythmic pouring of oil), *Shiropichu* (oil-soaked cotton pad), *Shirobasti* (pooling oil on the head in a cap) and *Shiroabhyanga* (Ayurvedic head massage) [2]. Among these *Shiroabhyanga* is a highly esteemed, easily implemented, therapeutic and preventive modality in Ayurveda. It is considered as an important part of daily regimen. It not only balances the *Vata dosha* and nourishes the sensory organs (*Indriyas*) but also modulates the autonomic nervous system, reduces stress markers (such as cortisol), and improves localized blood circulation [3].

MATERIAL AND METHODS

To explore the preventive benefits of *Shiroabhyanga*, we reviewed both classical Ayurvedic texts and modern medical literature. Foundational concepts regarding head-related disorders (*Shiroroga*) and daily regimens (*Dinacharya*) were gathered directly from *Brihattaryee* (*Sushruta Samhita*, *Charaka Samhita*, *Ashtanga Hridaya*). To understand the modern physiological mechanisms behind these traditional practices, standard medical textbooks covering neurology, general medicine, and ear, nose, and throat anatomy were also consulted. Finally, we searched databases such as PubMed, Google Scholar, and the AYUSH Research Portal for recent peer-reviewed articles. Our search focused on clinical studies linking Ayurvedic head massage to stress

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reduction, autonomic nervous system changes, and neuroendocrine responses, ensuring a balanced review of both classical wisdom and current clinical evidence.

Literature Review

Etymology and Definition

The term *Abhyanga* is derived from the prefix “*Abhi*” and the root “*Anga*”, as described in classical Ayurvedic texts like *Amarakosha*. It broadly refers to the act of applying specific movements over the body.

Shiroabhyanga specifically denotes the application of medicated oil (*Taila*) over the head (*Shirah pradesha*). It is a specialized form of *Abhyanga* aimed at maintaining and improving the health of the head, preventing ailments like insomnia, headaches, hair fall and maintaining the vitality of associated sense organs. In general, *Abhyanga* is defined as the massage of the body using oil or ghee, performed in the direction of hair growth (*Anuloma gati*).

Important Sites of Abhyanga

Acharya Vagbhata, while describing the importance of *Abhyanga* highlights certain areas where it is especially beneficial^[4]:

- Head (*Shirah*)
- Ears (*Shravana*)
- Feet (*Pada*)

Among these, *Shiroabhyanga* holds particular importance due to the head being the seat of all sensory and vital functions.

Types of Shiroabhyanga

Vatsyayana's Kamasutra, describes three primary forms in which head massage can be performed:

- **Samvahana** – Gentle, soothing strokes.
- **Kesha-mardana**– Massage focused on hair and scalp.
- **Utsadana**– Rubbing or friction-based technique.

Frequency and Timing

Abhyanga can be practiced daily or at regular intervals (once in 2–3 days), according to the condition, disease and strength of the person. For children, daily application- especially at night- is recommended for nourishment and proper development.

Materials Used (Abhyanga Dravya)

Abhyanga is typically performed using lukewarm medicated oil, ghee, or fat (*Vasa*) processed with *Dosha*-balancing herbs. Overheating should be avoided as head region is contraindicated for hot fomentation^[5]. Therefore, for *Shiroabhyanga*, lukewarm oil that is tolerable to the individual is preferred as it enhances absorption and provides comfort to the sensitive head region.

Procedure of Shiroabhyanga

Preparation (Poorvakarma)

The individual is seated comfortably on a chair. A cloth is wrapped around the body below the neck to prevent oil spillage. The therapist stands behind the patient, which is considered the ideal position for performing the procedure.

Main Procedure (Pradhanakarma)

1. Application of Oil

Lukewarm oil is evenly applied over the scalp, neck, and ear pinna using gentle strokes.

2. Massage Techniques

Specific techniques for head massage described in ancient texts are employed for proper absorption^[6]:

- **Gharshana Hasta**: Palmar strokes from front to back with mild pressure.
- **Taranga Hasta**: Rhythmic, wave-like movements using both hands.
- **Dvi-hasta Tadana**: Flat palm strokes over different regions of the scalp.
- **Anguli Tadana**: Gentle picking-like movements of fingers creating mild traction.
- **Anguli Kridana Hasta**: Finger-based rocking strokes.

Duration

Each technique is generally performed for about 4–5 minutes. The complete procedure takes approximately 30–40 minutes.

Post-Procedure Care (Paschatkarma)

After the procedure, the individual is advised to rest for about 15 minutes followed by a head bath using lukewarm water. Mild herbal shampoo or cleansers such as *Amla*, *Arishtaka* or *Shikakai*, are preferred instead of harsh chemical agents.

According to Acharya *Dalhana*, the depth of oil penetration depends on the duration of massage:

- 300 *Matras*: Reaches hair roots
- 400 *Matras*: Reaches skin
- 500 *Matras*: Reaches *Rakta dhatu*
- 600 *Matras*: Reaches *Mamsa dhatu*
- 700 *Matras*: Reaches *Meda dhatu*
- 800 *Matras*: Reaches *Asthi dhatu*
- 900 *Matras*: Reaches *Majja dhatu*

This highlights the importance of adequate duration in achieving therapeutic benefits of *Abhyanga* at desired sites^[7].

Mode of Action

In Headache

The role of head massage in alleviating headaches involves a combination of physiological and neurological mechanisms. The targeted manipulation of pericranial, suboccipital, and cervical muscles

releases muscle hypertonicity and myofascial trigger points, which are common causes of tension-type headaches. The localized surge in blood flow due to vasodilation after massage delivers fresh oxygen to the tissues of the head and neck while simultaneously flushing out pain-causing metabolic waste products, such as lactic acid. The soothing tactile stimulation of the massage activates large-diameter sensory nerve fibers. According to the gate control theory of pain, these faster sensory impulses essentially intercept and "close the gate" on slower, duller pain signals, preventing them from reaching the brain's pain centers^[8].

In Stress

The mode of action of a head massage in alleviating physiological and psychological stress centers lies on its ability to modulate the autonomic nervous system and alter neuroendocrine profiles. Stimulation of the scalp directly activates the parasympathetic nervous system, primarily through mechanoreceptor signaling that counteracts the sympathetic response. This autonomic shift leads to a decrease in heart rate, blood pressure, and cortisol. The rhythmic pressure triggers the central release of chemicals like serotonin and dopamine neurotransmitters essential for mood regulation, relaxation and mitigating anxiety^[9]. By simultaneously alleviating cervical and pericranial muscle tension, head massage effectively severs the somatic feedback loop of stress, promoting a state of systemic relaxation.

In Hair fall and premature greying

Head massage plays a significant role in combating hair fall and premature greying by enhanced microcirculation, and systemic stress reduction. Standardized scalp massage applies stretching forces to the dermal papilla cells located at the base of the hair follicles. This physical tension alters cellular gene expression specifically upregulating hair-cycle-promoting genes and decreasing hair-loss-related inflammatory markers (like IL-6) which directly results in increased hair thickness and prolonged growth phases^[10]. The massage also induces local vasodilation, increasing the delivery of oxygen and essential nutrients to the hair bulb while flushing out metabolic waste and reducing oxidative stress. Furthermore, by lowering systemic cortisol levels and reducing the autonomic stress response, head massage helps prevent the stress-induced depletion of melanocyte stem cells, thereby reducing premature greying.

In Preventing ageing and rejuvenation

Studies shows that as the levels of stress hormones like cortisol and adrenaline drop, the body begins to move with greater ease, which is especially transformative for those dealing with the muscle stiffness and gait challenges associated with geriatric

conditions like Parkinson's. Beyond just relaxing the muscles, it releases neurotransmitters like serotonin and dopamine, helping to stabilize the mood and clear the mental fog that frequently accompanies cognitive decline. In elderly patients, including those facing the complexities of dementia, these biochemical changes translate into improvements in sleep quality, appetite, and emotional stability that can persist long after the treatment ends^[11].

DISCUSSION

The therapeutic efficacy of *Shiroabhyanga* relies heavily on the physiological mechanisms of transdermal absorption. In Ayurveda, this local absorption and processing are governed by *Bhrajaka Pitta*, which resides within the skin layers. *Bhrajaka Pitta* is responsible for skin color, luster, and temperature regulation. When therapeutic substances are applied externally through procedures like *Abhyanga*, *Lepana*, or *Parisheka*, they do not act passively; they must first be "digested" or metabolized by *Bhrajaka Pitta*^[12]. Without this vital localized processing, the medicinal properties of the oils cannot achieve their proper systemic effects.

Acharya Vagbhata mandates *Abhyanga* as an essential daily practice within the *Dinacharya* to maintain optimal health and vitality^[13]. He highlights its primary benefits as powerfully pacifying *Vata dosha*, reducing physical fatigue, and significantly delaying the aging process. Special emphasis is placed on focusing the application on the *Shiropadesha*, *Shravan* and *Pada* to enhance vision, promote longevity, and ensure sound sleep.

According to *Acharya Charak* daily application of oil to the head is the ultimate preventative measure against *Khalitya* (excessive hair fall and baldness) and *Palitya* (premature greying of the hair follicle). The procedure fundamentally alters the morphological environment of the scalp: the roots become firmly anchored (*Dridhamoola*), leading to unctuous, dark and thick hair. Furthermore, the structural integrity of the cranial vault (*Kapala*) is strengthened, and the facial skin attains a luminous complexion, actively preventing the formation of stress-induced wrinkles and dryness^[14].

The scalp region houses several vital *Marmas* (vital energy points), particularly the *Adhipati Marma*, *Simanta Marma*, and *Sthapani Marma*^[15]. *Shiroabhyanga* provides gentle, rhythmic stimulation to these points. According to Ayurvedic anatomy, manipulating these *Marmas* regulates *Prana Vata* (which governs brain function, intellect, and sensory perception) and *Tarpaka Kapha* which provides nourishment to the central nervous system.

Cranial Marma	Anatomical Location	Preventative & Physiological Effect
Adhipati Marma	Superior aspect of the cranium (Vertex)	Calms the central nervous system; regulates overall <i>Prana</i> flow. ^[16]
Simanta Marma	Cranial sutures	Downregulates the hypothalamic-pituitary-adrenal (HPA) axis; acts as a prophylactic against clinical anxiety.
Sthapani Marma	Between the eyebrows (Glabella)	Relieves mental fatigue; promotes emotional stability and clarity.
Shankha Marma	Temples (Temporal region)	Relieves temporal artery constriction; critical for preventing the pathogenesis of migraines.

Chronic psychological stress (*Chinta*) and overthinking (*Atichintan*) lead to a sustained release of stress biomarkers like cortisol and norepinephrine. Over time, this causes *Rasavaha Srotodushti*- the vitiation of the nutrient plasma channels- starving deeper tissues and precipitating systemic inflammation, severe clinical anxiety (*Chittodvega*), and chronic insomnia^[17]. *Shiroabhyanga* acts as a potent prophylactic against this stress-induced physiological collapse. By delivering deep, rhythmic tactile stimulation to the cranial neuro-vascular networks, it forces a rapid physiological shift from sympathetic arousal to parasympathetic dominance.

Medicated oils used in *Shiroabhyanga* (e.g., *Brahmi Taila*, *Ksheerabala Taila*, *Bhringaraja Taila*) contain lipophilic active principles. The scalp has a rich vascular supply and a high density of hair follicles and sebaceous glands, making it highly permeable. The lipid-soluble phytoconstituents of the herbs bypass the blood-brain barrier (to some extent) or exert localized anti-inflammatory and neuroprotective effects^[18].

The mechanical friction of the massage causes localized vasodilation, increasing oxygen and nutrient delivery to the hair follicles and brain tissue, while accelerating the removal of metabolic waste.

CONCLUSION

Shiroabhyanga is a scientifically sound, evidence-based Ayurvedic therapeutic procedure. Beyond its cosmetic benefits for hair and scalp health, it acts as a powerful neuro-modulator. By promoting parasympathetic dominance, enhancing microcirculation, and delivering targeted herbal phyto-nutrients through transdermal absorption, it serves as a robust intervention for stress-related neuro-psychiatric conditions. Through the gentle, rhythmic stimulation of cranial *Marmas*, this practice profoundly modulates the central nervous system and major endocrine glands. This targeted tactile stimulation actively downregulates the hypothalamic-pituitary-adrenal (HPA) axis and forces a rapid physiological shift from sympathetic arousal to parasympathetic dominance. Consequently, regular practice fortifies the structural integrity of the cranial vault, optimizes sensory organ function, and serves as an indispensable

daily defense against stress-induced physiological collapse.

REFERENCES

1. Caraka. Caraka Samhita. Shastri K, Chaturvedi G, editors. With 'Vidyotini' Hindi commentary. Reprint ed. Varanasi (India): Chaukhambha Bharati Academy; 20XX. Sharir Sthana, Chapter 17, Verse 12
2. Vagbhata. Astanga Hrdayam. Tripathi RD, editor. With 'Nirmala' Hindi commentary. Reprint ed. Varanasi (India): Chaukhambha Sanskrit Pratishthan; 2017. Sutrasthana, Chapter 22, Verse 23-24
3. Concept of Shiroabhyanga Kumbhar Jayesh Laxman*1, Jayashri P. Patil*2 Ayurlog: National Journal of Research in Ayurved Science- 2018; (6)(4): 1-7
4. Vagbhata. Astanga Hrdayam. Tripathi RD, editor. With 'Nirmala' Hindi commentary. Reprint ed. Varanasi (India): Chaukhambha Sanskrit Pratishthan; 2017. Sutrasthana, Chapter 2, Verse 9
5. Vagbhata. Astanga Hrdayam. Tripathi RD, editor. With 'Nirmala' Hindi commentary. Reprint ed. Varanasi (India): Chaukhambha Sanskrit Pratishthan; 2017. Sutrasthana, Chapter 2, Verse 17
6. Praveen BS. Angamardhana: A Treatise on Massage Techniques of Ancient India. Ancient Science of Life. 2017; 36(3): 170-171. doi: 10.4103/asl.ASL_162_16.
7. Sushruta. Sushruta Samhita with Nibandha Samgraha commentary of Dalhanacharya. Edited by Acharya JT. Varanasi: Chaukhambha Orientalia; 2017. Chikitsa Sthana, Chapter 24, Verse 30
8. Lawler, S. P., & Cameron, L. D. (2006). A randomized, controlled trial of massage therapy as a treatment for migraine. *Annals of Behavioral Medicine*, 32(1), 50-59.
9. Field, T., Hernandez-Reif, M., Diego, M., Schanberg, S., & Kuhn, C. (2005). Cortisol decreases and serotonin and dopamine increase following massage therapy. *International Journal of Neuroscience*, 115(10), 1397-1413.
10. Koyama, T., Kobayashi, K., Hama, T., Murakami, K., & Ogawa, R. (2016). Standardized scalp massage results in increased hair thickness by inducing stretching forces to dermal papilla cells in the subcutaneous tissue. *Eplasty*, 16, e8.

11. Field T. Massage therapy research review. Complement Ther Clin Pract. 2016; 24: 19-31. doi: 10.1016/j.ctcp.2016.04.005.
12. Sushrut. Sushrut Samhita. Shastri K, Chaturvedi G, editors. With 'Vidyotini' Hindi commentary. Reprint ed. Varanasi (India): Chaukhambha Bharati Academy; 20XX. Sutra Sthana, Chapter 21, Verse 10
13. Vagbhata. Astanga Hrdayam. Tripathi RD, editor. With 'Nirmala' Hindi commentary. Reprint ed. Varanasi (India): Chaukhambha Sanskrit Pratishthan; 2017. Sutrashtana, Chapter 2, Verse 8
14. Caraka. Caraka Samhita. Shastri K, Chaturvedi G, editors. With 'Vidyotini' Hindi commentary. Reprint ed. Varanasi (India): Chaukhambha Bharati Academy; 20XX. Sutra Sthana, Chapter 5, Verse 81-82
15. Sushrut. Sushrut Samhita. Shastri K, Chaturvedi G, editors. With 'Vidyotini' Hindi commentary. Reprint ed. Varanasi (India): Chaukhambha Bharati Academy; 20XX. Sharir Sthana, Chapter 6, Verse 27
16. Bano Y, Kumar S, Agrawal N, Rathia S, Chandravanshi L, Sahu D. Mode of action of Shiroabhyanga: A review. Int J Ayu Pharm Chem. 2025; 22(3): 188. Available from: <https://oaji.net/pdf.html?n=2023/1791-1762522267.pdf>
17. Caraka. Caraka Samhita. Shastri K, Chaturvedi G, editors. With 'Vidyotini' Hindi commentary. Reprint ed. Varanasi (India): Chaukhambha Bharati Academy; 20XX. Viman Sthana, Chapter 5, Verse 13
18. Patzelt A, Lademann J. Drug delivery to hair follicles. Expert Opin Drug Deliv. 2013; 10(6): 787-797. doi: 10.1517/17425247.2013.771321.

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