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Conceptual Review of Bibhitaki Taila Nasya and Shiroabhyanga in the Management of Khalitya

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ABSTRACT: Introduction: Ayurveda represents a profound and holistic medical system that elaborately describes both systemic disorders and localized conditions. Hair fall is one such commonly encountered disorder, affecting approximately 1.7% of the global population and posing a considerable therapeutic challenge in clinical practice. In Ayurvedic classics, hair fall is described as Khalitya Roga and is categorized under Kshudra Roga as well as Shiroroga, indicating its localized manifestation in the scalp region. The condition demonstrates a progressive nature, particularly among individuals adopting sedentary lifestyles, experiencing chronic psychological stress and following irregular dietary and daily regimens. Such factors lead to Dosha imbalance—predominantly involving Pitta and Vata—along with impairment of Rakta and Kesha Dhatu, culminating in hair fall. Ayurveda advocates both preventive and therapeutic measures for the management of Khalitya, among which Nasya and Shiroabhyanga hold significant importance. These procedures directly target the Urdhvajatrugata region, facilitating Dosha pacification, nourishment of hair follicles and restoration of scalp health. Medicated oil therapies, particularly Bibhitaki Taila, administered through Nasya and Shiroabhyanga are described to exert Keshya, Raktashodhaka and Kapha-Pittahara effects, thereby offering a rational and localized therapeutic approach in the management of hair fall. Aim and Objective – This study was aimed to review the literature regarding Nasya and Shiroabhyanga in khalitya by means of Ayurveda and Yoga. Materials and Methods – Different classical Ayurvedic literature, modern literature and articles from journals as well as PUBMED, MEDLINE database was reviewed and analyse for the study. Result and Discussion – Bibhitaki Taila Nasya and Shiroabhyanga is useful in Khalitya.

KEYWORDS: Khalitya, Nasya, Shiroabhyanga, Ayurveda.

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INTRODUCTION:

Hair fall is emerging as a significant dermatological and cosmetic concern worldwide, exerting a profound impact on self-esteem and quality of life across all age groups. Epidemiological evidence suggests that alopecia affects nearly 1–2% of the global population, and androgenetic alopecia specifically is observed in almost 50% of men and women by the age of 50 years, underscoring its growing prevalence and significant clinical importance.[1][2].

In Ayurvedic literature, hair fall is described as *Khalitya Roga. Acharya Charaka* & *Acharya Vagbhata* mentioned it under *Shiroroga* and *Sushrut Samhita, Ashtang-samgraha, Yoga Ratnakar* and *Madhav Nidana* had included under *kshudra roga*, reflecting its localized manifestation in the scalp region. Contemporary lifestyle factors such as sedentary habits, psychological stress, irregular dietary patterns and disturbed daily routines further aggravate *Dosha Vaishamya*, thereby accelerating the progression of hair fall. From a modern perspective, the management of hair fall primarily includes topical minoxidil, oral finasteride, nutritional supplements and surgical interventions such as hair transplantation. Although these treatments may offer temporary symptomatic relief, their long-term use is often associated with limitations including recurrence after discontinuation, variable efficacy, high cost and potential adverse effects such as scalp irritation, sexual dysfunction and hormonal imbalance [3][4]. These limitations highlight the need for safer, holistic and sustainable therapeutic approaches. Ayurveda advocates localized therapeutic procedures for disorders of the head and scalp, among which *Nasya* [5] and *Shiroabhyanga* [6] are indicated in *Khalitya*. *Nasya* facilitates direct drug delivery to the cranial region through the nasal route, aiding in *Dosha Shamana* and nourishment of scalp tissues while *Shiroabhyanga* improves local circulation, strengthen hair roots and enhances *Kesha Dhatu Poshana*.

Bibhitaki [7] described in classical texts as *Keshya*, *Raktashodhaka*, *Kapha-Pittahara* and *Rasayana* is widely indicated in disorders involving hair and scalp health. When *Bibhitaki* is processed in *til taila,* it becomes highly effective in *Khalitya*. Hence, the present review aims to critically evaluate the role of *Bibhitaki Taila Nasya* and *Shiroabhyanga* in the management of *Khalitya* based on classical Ayurvedic literature and contemporary scientific evidence.

Concept of *Khalitya* in Ayurveda

Nirukti (Etymology)

Both *Shabdakalpadruma* and *Vachaspatyam* [8] describe using the expression "*Khalati Skhalyanti Kesha Asmat*," which denotes the loosening and subsequent falling of hair. Thus, *Khalitya* literally refers to the condition characterized by hair fall.

Defination of *Khalitya*

Acharya Charaka

The destruction of hair at the level of the *Romakupa* occurs when *Tejas* in association with vitiated *Vata* and other *Dosha* ascends to the *Shira Kapala*, resulting in hair fall [9].

Acharya Vagbhata

Gradual loss of hair is called as *khalitya*.

Nidana (Etiological factors)

Acharya Charaka [10][11]

Table no. 1

Aharaja Hetu	***Viharaja Hetu***
Ati Amla Ahara, Atisheetambu Sevana, Dusta-Ama Bhojana, Guru Ahara,	*Atapa Ati Sevana, Ati Maithuna, Diwaswapna, Sheeta Sevana, Asatmya Gandha Sevana, Pragvata Sevana, Ratrijagarana, Rodana,*

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Harita Shaka Atisevana, Hina Ahara, Lavana Ati Sevana	*Vegadharana, Manastapa, Shiro Abhigata, Desh kala Viparyaya, Meghagama*

Acharya Vagbhata [12]

Table no. 2

Aharaja hetu	***Viharaja hetu***
Atimadyapana, Atisheetambu Sevana, Dusta-Ama Bhojana, Krimi	*Ati Swapna, Ati Bhashya, Bashpa nigraha, Rodana, Vegadharana, Abhyanga, Dwesha, Mruja Dwesha.*

Samprapti

Hair fall ensues when aggravated *Pitta* in association with *Vata* reaches the *Romakupa* and causes damage to the hair roots. Subsequently, *Shleshma* combined with *Shonita* obstructs the hair follicles, thereby inhibiting the regeneration of new hair. This sequential process of follicular destruction followed by obstruction is described in Ayurvedic texts as *Indralupta*, *Khalitya*, or *Ruhya*. [13].

Types of *Khalitya*

Table no. 3

Type of *Khalitya*	***Vagbhata*** [14]	***Harita*** [15]
Vataja Khalitya	*Agnidagdha, shyava, aruna*	*Ruksha and Pandura Keshaboomi*
Pittaja Khalitya	*Peeta, Neela* and *Harita*, surrounded by *siras*	*Raktabha* and *Agnidagdha Saman Keshaboomi*
Kaphaja Khalitya	Whitish, *ghanata*, *snigdhata*	*Snigdha keshaboomi*
Raktaja Khalitya	--	*Puyayukta keshaboomi*
Sannipataja khalitya	*Tridosha lakshanayukta*, scalp look like burnt and nail like appearance	*Tridosha Lakshanayukta Keshaboomi*

Sadhyasadhyatva

Acharya Vagbhata and *Harita* said that *tridoshaja* type of *khalitya* is *asadhya* to treat.

Modern Perspective of Hair Fall

Defination

Alopecia refers to the loss or absence of hair in regions where hair normally grows. It may occur in a localized or widespread manner and can be either temporary or permanent in nature. The condition can affect individuals of any age and gender [86].

Hair growth cycle [16]

Hair growth is a dynamic and highly regulated biological process that occurs in a cyclical manner and is essential for the maintenance of normal hair density and scalp health. Each hair follicle undergoes repetitive cycles consisting of three principal phases: anagen, catagen and telogen, with an additional shedding phase known as exogen described by some authors.

Anagen phase

This stage corresponds to the active phase of hair growth, typically lasting about 2–6 years, during which intense mitotic activity of hair matrix cells promote the formation, elongation and pigmentation of the hair shaft. The characteristics of this phase largely influence the length and density of hair.

Catagen phase

The catagen phase is a brief transitional period of about 2–3 weeks, characterized by cessation of growth and regression of the hair

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follicle through programmed cellular involution.

Telogen phase

The telogen phase is the resting stage, lasting around 2–3 months, during which the hair remains anchored as a club hair before being shed and replaced by new anagen hair.

Disturbances in this cycle - particularly premature termination of anagen or prolonged telogen—result in excessive hair shedding and reduced hair density. Any imbalance in the duration or regulation of these phases—particularly premature termination of anagen or prolonged telogen—results in excessive hair shedding and reduced hair density, forming the pathological basis of various alopecic conditions.

Types of alopecia [17]

Two types – Nonscarring alopecia
Scarring alopecia

Nonscarring alopecia

Nonscarring alopecias are characterized by preservation of the hair follicles, rendering the condition potentially reversible with the possibility of hair regrowth. Common forms of nonscarring alopecia include androgenic alopecia, alopecia areata, telogen effluvium, anagen effluvium, traction alopecia and related variants.

Androgenetic Alopecia

This condition is characterized by a gradual and progressive pattern of hair loss and constitutes the most common form of alopecia affecting men, women and adolescents. In males, hair loss typically follows a characteristic distribution involving the vertex, bitemporal regions and mid-frontal scalp. Conversely, in females, the condition predominantly presents as diffuse thinning over the central scalp with relative sparing of the frontal hairline and minimal anterior hairline recession. [18]

Alopecia Areata

Alopecia areata is a long-standing, immune-driven condition characterized by the abrupt development of localized, patchy hair loss on the scalp. It affects individuals of both sexes and may present at any stage of life, ranging from early childhood through adolescence to adulthood.

Telogen Effluvium

Telogen effluvium is a non-inflammatory form of alopecia that can be either acute or chronic, typically involving diffuse hair loss across the scalp in both males and females of all age groups including children, adolescents and adults.

Scarring alopecia

Scarring alopecias involve permanent destruction of hair follicles, leading to irreversible hair loss. These conditions are broadly classified into primary and secondary types. Primary cicatricial alopecias are further subcategorized according to the predominant inflammatory cell type, including lymphocytic, neutrophilic or mixed forms. [19]

Drug review

Table no. 4

Properties	***Bibhitaki*** [7]	***Til taila*** [20]
Family	*Combrataceae*	*Pedalaceae*
Latin name	*belerica Terminalia*	*Sesamum indicum*
Rasa	*Terminalia belerica*	*Madhura*
Virya	*Ushna*	*Ushna*
Vipaka	*Madhura*	*Madhura*
Guna	*Laghu, Ruksha*	*Guru, Snigdha*
Chemical Composition	Tanin, chebulic acid, corilagin.	Sesamolin, Sesamin,

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		Pinoresinol, Lariciresinol.
Doshaghnata	*Tridoshaghna*	*Vata-kaphaghna*
Upyuktanga	*Phala*	*Seed, Oil, Root*

Method of preparation

4 part *tila taila* was taken

⇩

Bibhitaki Kwatha was prepared by adding 16 parts of water to one part of *Bibhitaki* coarse powder, heating the mixture until it was reduced to 1/4th of its volume and then filtering it.

⇩

Bibhitaki kalka was prepared by adding required amount of water in 1 part of *Bibhitaki churna*

⇩

Tila Taila + *Bibhitaki Kwath* + *Bibhitaki Kalka* was mixed in container

⇩

Heated on low flame until *Sneha-siddhi Lakshnas* was achieved

⇩

Filtered and stored in air tight bottle.

Mechanism of *nasya* in *Khalitya*

Bibhitaki Taila employed for *Nasya karma* contains *Bibhitaki*, which is endowed with *Kashaya rasa, Ushna virya, Madhura vipaka, Hima sparsha* and possesses *Laghu* and *Ruksha gunas*. It is traditionally acclaimed for its *Keshya, Asthi-poshaka* and *Rasayana* properties [21]. Owing to its *Ushna virya* and *Madhura vipaka*, the formulation effectively pacifies *Vata dosha*. The combined influence of *Kashaya rasa* and *Madhura vipaka* contributes to the alleviation of *Pitta dosha* while the presence of *Laghu* and *Ruksha gunas*, together with *Kashaya rasa* and *Ushna virya*, renders it beneficial in mitigating *Kapha dosha*. Furthermore, due to its *Rasayana* attribute, *Bibhitaki Taila* promotes qualitative enhancement of all Dhatus, thereby supporting improved hair health [21]. Additionally, the *Sukshma, Guru, Tikshna* and *Snigdha* characteristics of the oil facilitate deeper tissue penetration, aiding in the removal of *Srotovarodha* and ensuring adequate nourishment of the hair follicles, which in turn encourages the regeneration of new hair [22]. Owing to its multidimensional therapeutic actions, *Bibhitaki Taila* facilitates the normalization of vitiated Doshas and thus aids in breaking the *Samprapti* of *Khalitya*.

Mechanism of *Shiroabhyanga* in *Khalitya*

As elucidated by *Acharya Dalhana*, when *Abhyanga* is performed for a duration of 300 and 400 *Matra*, the administered *Sneha* attains the level of the *Romakupa* and *Tvak* respectively [23]. *Acharya Charaka* further describes *Abhyanga* as nourishing and protective for the *Tvak*, as *Vata Dosha*—being the *Adhisthana* of *Sparshanendriya*—predominantly resides in the skin. Hence, *Sneha Abhyanga* supports the normal *gati* of *Vata* and sustains the integrity of *Tvak*.

Shiroabhyanga performed with *Bibhitaki Taila*, owing to its *Madhura Rasa*, *Sheetala Guṇa* and *Pitta–Vatashamaka* properties, along with the *Keshya karma* of *Bibhitaki*, contributes to the *Samprapti-vighatana* of *Khalitya* [21]. The *Snigdha, Guru, Mridu* and *Sukshma Guna* of the *Taila* facilitate *Vatashamana*, provide *Poshana* to the *Sirastvacha* and confer *Bala* to the *Kesha mula*, while enabling deeper *Sneha-pravesha* into the *Romakupa* [22].

Moreover, by virtue of its *Manda* and *Sara Gunas*, the *Taila* remains in sustained contact

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with the scalp and assists in the *Anulomana* and *Prasadana* of vitiated *Doshas*. Since *Abhyanga* is classically extolled as the foremost measure for *Vatashamana*, *Shiroabhyanga* with *Bibhitaki Taila* is rationally applicable in the management of *Khalitya*.

DISCUSSION:

Hair loss is a complex condition with multifactorial pathogenesis involving genetic predisposition, hormonal imbalances, oxidative stress, inflammation, and disrupted hair-follicle cycling. From a modern viewpoint, hair loss conditions such as androgenetic alopecia, telogen effluvium and other follicular disorders are characterized by follicular miniaturization, premature transition of hair follicles from the anagen to telogen phase and a pro-inflammatory microenvironment around the follicles. These processes involve cellular stress pathways and impaired nutrient delivery to hair follicle cells, making oxidative stress and inflammation key targets for effective intervention. [24]

Ayurveda conceptualizes *Khalitya* as a manifestation of *Tridosha* imbalance, with *Pitta* and *Vata* vitiation, resulting in impaired nourishment of the hair follicles and subsequent hair shedding. Classical texts also emphasize the influence of metabolic disturbances (*Agni* and *Ama*) and imbalanced *Dhatu* nutrition in scalp and follicular health. External treatments like *Nasya* and *Shiroabhyanga* are traditionally indicated for disorders of the head and scalp because they act on both systemic and localized aspects of head region pathology and are believed to restore *Dosha* equilibrium and tissue nourishment. [25]

Shiroabhyanga represents a classical strategy to strengthen the scalp and hair roots. Modern dermatological research suggests that massage and topical oil application improve local scalp circulation, enhance nutrient delivery to follicles and facilitate a healthier follicular microenvironment, which may indirectly support hair retention and quality. Oils with antioxidant content can additionally contribute to scalp protection and barrier function. [26]

Nasya therapy, involving the application of herbal medicated oils through the nasal mucosa, is supported by modern nasal drug delivery research showing that intranasal administration allows rapid systemic absorption due to the high vascularity and permeability of the nasal mucosa, bypasses first-pass metabolism and can influence neurovascular and autonomic regulatory pathways. These properties may indirectly impact scalp physiology, stress responses and systemic inflammation—factors implicated in hair loss pathophysiology. [27]

Bibhitaki contains bioactive phytochemicals (e.g., gallic acid, ellagic acid) demonstrated antioxidant and anti-inflammatory activity, which are conceptually aligned with mechanisms that protect against follicular oxidative damage and perifollicular inflammation. Recent preclinical research shows that *Terminalia belerica* extracts can modulate the perifollicular microenvironment, enhancing hair regrowth in androgenetic alopecia models by reducing oxidative stress markers and promoting vascular stimuli such as VEGF that support follicle transition into the anagen phase. [28]

Tila Taila - the base for *Bibhitaki Taila*—contains fatty acids, lignans (such as sesamin) and antioxidants that have been shown in laboratory studies to enhance hair follicle nourishment and provide anti-inflammatory and antioxidant effects when penetrating the skin. Its enhanced penetration capability supports the concept of improved follicular support and moisture retention, aligning with traditional claims of promoting hair strength and reducing dryness. [26]

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Integrating these perspectives, the combined application of *Bibhitaki Taila Shiroabhyanga* and *Nasya* may offer a rational, multimodal approach - addressing local scalp nourishment, improved microcirculation, neurovascular balance, antioxidant protection and *Dosha* modulation. While classical Ayurvedic texts provide theoretical justification for these procedures in *Khalitya*, the modern scientific framework suggests plausible biological mechanisms through improved follicular environment and systemic regulation. There is a need for controlled clinical trials using objective outcomes such as hair density, hair shaft thickness, scalp inflammatory markers and follicular cycling assessments to empirically validate the integrative effects of these therapies in adult hair loss.

CONCLUSION:

Khalitya arises from complex disturbances affecting hair follicle function, scalp environment and tissue nourishment, which *Ayurveda* interprets as *Vata–Pitta* predominance at the level of the *Romakupa*. This review proposes application of *Bibhitaki Taila* through *Nasya* and *Shiroabhyanga*, grounded in the *Keshya* attributes of *Bibhitaki*, the carrier efficiency of *Tila Taila* and the classical relevance of these procedures in disorders of the head. Contemporary insights into oxidative stress modulation, inflammatory control and enhancement of scalp circulation lend scientific plausibility to this integrative approach.

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