

Review On Contribution Of Ayurvedic Classics On Cosmetic Diseases w.s.r. to Khalitya

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Abstract

Diseases of the hair and scalp represent common dermatological conditions that are often neglected in daily clinical practice. Hair loss is a problem of great significance to both men and women. Among the younger generation, common hair disorders include hair fall (*khalitya*), premature graying of hair (*palitya*), alopecia areata (*indralupta*), and dandruff (*darunka*). These conditions are believed to be affected by an imbalance of Vata, Pitta, and Kapha doshas. Since ages, herbs and natural products are being used to treat hair loss or other hair-related problems. This article reviews and describes the definition and etiopathogenesis, clinical features, pathology, and the treatment aspect of *khalitya*.

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Keywords: Ayurveda, Abhyanga, Khalitya, Kshudraroga, Alopecia

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Introduction

Hair loss can range from mild hair thinning to total baldness. Hair loss can affect the scalp or entire body. Ayurveda has described hair diseases in three words:

- 1. Indralupta: Refers to alopecia areata, alopecia totalis, and alopecia universalis.
- 2. Khalitya: Means loss of hair.
- 3. Palitya: Means premature hair graying.

The word "khalitya" is the medical term for hair loss in Ayurveda. Hair fall has been described in almost all the Ayurvedic literatures as khalitya. It has been included in Shiroroga by Acharya Charaka and Ashtanga Hridayakara. Sushrut Samhita, Ashtanga Samgraha, and Yoga Ratnakara have included khalitya diseases under kshudraroga.

Hair fall is one of the most common problems which one experiences in everyday life. However, some amount of hair loss is considered normal. Hair health depends on biological, environmental, and lifestyle factors. Multiple factors contribute to hair loss, including genetics, hormones, environmental exposure, medications, and nutrition. Hormonal imbalances, especially androgens, affect hair health (androgenetic alopecia). Nutritional deficiencies (iron, zinc, vitamins) and psychological stress impact growth (telogen effluvium). External factors like UV radiation, pollution, and harsh treatments worsen damage, leading to dryness and breakage. Heat styling and harsh hair care weaken strands.

The traditional Ayurvedic herbs are revered for their profound healing properties. A holistic approach, like Ayurveda, addresses internal and external factors with dietary changes, stress management, and gentle products. Ayurveda is considered as one of the very best alternative systems for treating hair loss.

In Western medicine, hair loss is known as alopecia. It can occur gradually or suddenly and present itself in many different forms. Treatment of hair loss requires a multimodal approach, and the use of Ayurvedic line of management provides added benefits. Vitamins and trace minerals are vital to the hair follicle cycle and maintain homeostasis as enzyme cofactors, hormones, antioxidants, and immunomodulators. Botanical products regulate inflammation, minimize oxidative stress, and control hormone levels (i.e., dihydrotestosterone). Beyond supplementation, mind and body practices, including purification procedures and massage, help to reduce physiologic and emotional stress, which contributes to hair loss.

Aims and Objectives

- $1. \ \mbox{To}\ \mbox{understand}\ \mbox{the concept of Khalitya.}$
- 2. To understand the etiopathogenesis of Khalitya.
- 3. To know the common Ayurvedic line of treatment in the management of Khalitya.

Materials and Methods

- Type of Study: This is a conceptual study.
- **Source of Data**: For this study, textual material is used from the classical texts and internet from which various references are collected.

Etymology

In Ashtanga Hridaya, Acharya Vagbhata has mentioned:



"(A.H. U.23/26)"

Khalitya suggests gradual hair loss.

In Shabdakalpadrum and Vachaspatyam, khalitya has been mentioned as:

• "KHALATI - SKHALAYANTI KESH ASMAT" and "KHALASANKHALANE"

(S. K. IInd Vol. Page - 278) (Vach. IIIrd Vol Page - 2476)

Definition

According to Charaka:

"The Thermal element (tejas), combined with the vata and other humors, reaches up the scalp and produces alopecia (*Khalitya*)."

(Ca. Chi.26/132)

Sushruta Samhita states:

"Pitta along with Vata by involving the roots of hair (*Romakoopa*) causes fall of hairs, and thereafter Kapha along with Rakta obstructs the channel of *Romakoopa* leading to the stoppage of the regeneration of the hair; this condition is known as *Indralupta*, *Khalitya*, or *Ruhya*."

(Su. Ni. 13)

Vagbhata specifies:

"Gradual falling of hair should be called *khalitya*. This gradual falling of hair slowly leads to baldness."

(A.H.U. 23/26)

Synonyms

- 1. Charaka: Khalitya, Khalati
- 2. Sushruta: Khalitya, Indralupta, Ruhya
- 3. Ashtanga Hridaya: Khalitya, Chacha
- 4. Ashtanga Sangraha: Khalitya, Rujha
- 5. Madhav: Khalitya, Indralupta
- 6. Bhoja: Indralupta, Ruhya
- 7. Harita: Keshaghna

Varieties of Khalitya

Table 1: Varieties of Khalitya

Reference

Types

Ashtanga Hridaya Vataja, Pittaja, Kaphaja, Sannipataja



Reference

Types

Ashtanga Sangraha Vataja, Pittaja, Kaphaja, Sannipataja

Harita Vataja, Pittaja, Kaphaja, Raktaja, Sannipataja

Nidana (Etiology)

In Ayurvedic literature, there is no clear-cut reference regarding the causative factors of *Khalitya*. Following are the causes of *shiroroga* (head diseases). To make a complete study of causes and pathogenesis of *khalitya*, it is necessary to study the causes of *shiroroga*.

Table 2: General Etiological Factors of Shiro Roga

No.	General Etiological Factors	Cha. Sa.	A.H./A.S.	Y.R.	Harita
1	Vegavarodha (Suppression of natural urges)	+	+	+	+
2	Divasvapa (Day sleep)	+	+		+
3	Ratrijagarana (Awakening during night)	+	+		-
4	Madya (Alcohol)	+	+		-
5	Uccha Bhashana (Speaking aloud)	+	+	\bigcirc	+
6	Avashyaya (Exposure to eastern wind)	+	+		-
7	Purva Vata (Exposure to eastern wind)	+	\mathbf{C}		-
8	Atimaithuna (Excess sexual indulgence)	+	+		-
9	Asatmya Gandha (Undesirable smell)	+	+		-
10	Aghata (Injury)	+	-		-
11	Raja (Exposure to dust)	+	-	-	-
12	Hima (Exposure to snowfall)	+	-		-
13	Dhuma (Exposure to smoke)	+	+	+	-
14	Atapa (Exposure to sun & heat)	+	+	+	-
15	Guru Ahara (Heavy food)	+	-	-	-
16	Amla Ahara (Sour food)	+		-	-
17	Harita Dravya Sevana (Rhizomes)	+	-	-	-
18	Ati Shita Ambu Sevana (Excess cold water)	+	+	+	-
19	Shiro Abhighata (Head injury)	+	-		-
20	Dushta Ama (Vitiated ama)	+	+	+	-
21	Rodana (Grief)	+	+	+	-
22	Ashru Vega Nigraha (Suppression of tears)	+	+	+	-
23	Meghagama (Advent of cloud)	+	-	-	-
24	Manastapa (Mental stress)	+	-	-	-
25	Desha Viparyaya (Regimen contrary to locality)	+		-	-
26	Kala Viparyaya (Regimen contrary to season)	+		-	-
27	Utsveda (Excessive sweating)	-	+	-	+

No	General Etiological Factors	Cha. Sa. A.H./A.S. Y.R. Harita				
28	Krimi (Worms)	-	+	+	+	
29	Upadhana Dvesha (Avoidance of pillow)	-	-	+	+	
30	Abhyanga Dvesha (Aversion to massage)	-	+	+	+	
31	Pratatekshana (Constant seeing)	-	+	+	-	
32	Utsedha (Swelling)	-	-	+	-	

Other Causes of Khalitya

- Skin Disease (*Kusta*) and Khalitya: Skin diseases arising due to vitiated Pitta lead to loss of hair in that particular area. Burning sensation is also caused along with hair fall in that area. When it is over the scalp, it will cause *khalitya* due to skin disease.
- Excessive Consumption of Salt: Leads to *khalitya* and *palitya* early. Even a person who is used to eating too much salt suffers from these entities.
- Excessive Consumption of Kshara: Leads to *khalitya* and *palitya*.
- Not Following Rules After Taking Nasya: Getting angry, laughing, talking too much, sneezing, overexertion after taking *nasya* leads to *khalitya* and *palitya*.
- Signs of Dushta Pratishaya: According to Charakacharya, hair fall occurs, and the hair of the head becomes like that of a monkey.
- Combing Hair Excessively During Ovulatory Period of Mother: As per Acharya Sushruta, this leads to hair fall in the child.
- Vitiation of Pitta Due to Improper Diet During Pregnancy: Leads to hair fall in the child, as mentioned by Acharya Vagbhata.
- Excessive Consumption of Lavana Rasa During Pregnancy : Causes *khalitya* early in the child.
- Characteristics of Prakruti in Relation to Hair: In *pittaja prakruti*, hair fall (*khalitya*) starts at an early age; individuals become bald early.
- Kshaya of Asthi Dhatu: Causes hair fall.

Purvarupa (Prodromal Symptoms)

Purvarupa are the premonitory symptoms of the disease observed before its complete manifestation. According to ancient treatises, most diseases have specific *purvarupa*; however, in some disorders, there is an absence of *purvarupa*. *Khalitya* is one of those which has no premonitory signs and symptoms.

But the appearance of symptoms in a very mild form, like occasional loss of some hair, may be considered as a *purvarupa* of *khalitya*.

Rupa (Symptoms)

Regarding the *rupa* (symptoms) of *khalitya*, limited explanations are found in Ayurvedic classics:

- Acharya Charaka: When the *teja* along with *vatadi doshas* reaches the *kesh bhoomi* (scalp), it causes the fall of hairs. (*Ca. Chi. 26/32*)
- Acharya Sushruta: The *pitta* which has gone into the *romakoopa* gets mixed with *vata*, causing hair fall. Thereafter, the *kapha* along with the *rakta* causes obstruction in the *romakoopa*, preventing the further growth of new hair.





(Su. Ni. 13)

• Acharya Vagbhata: When gradual hair fall occurs, it may be known as khalitya.

Thus, the pratyatma linga (specific symptom) of khalitya may be taken as the gradual loss of hair.

Astanga Samgrahakara describes this disease with four varieties—*vataja*, *pittaja*, *kaphaja*, and *sannipataja khalitya*. The dominance of a particular *dosha* denotes the type of disease, and the symptoms occur accordingly.

Table 3: Signs & Symptoms According to Classification of Khalitya

No	. Varieties	Appearance of Keshbhoomi	Colour of Keshbhoomi	Pravruti
1	Vataja	<i>Agnidagdha</i> (Burnt appearance)	Shyava (Blackish) & Aruna (Reddish)	
2	Pittaja	Surrounded by siras (veins)	<i>Peeta</i> (Yellowish), <i>Neela</i> (Bluish), <i>Harita</i> (Greenish)	All over the scalp
3	Kaphaja	<i>Ghana</i> & <i>Snigdha</i> (Thick & Oily)	Similar to skin color or may become whitish mixed	

(A.S.U. 27) (A.H.U. 23)

Table 4: Symptoms According to Acharya Harita

- Vataja: Ruksha (Dry), Pandura (Pale) scalp
- Pittaja: Redness and burning of the scalp
- Kaphaja: Snigdha (Oily) scalp
- Raktaja: Pus (Sapaka)
- Sannipataja: All the characteristics of the three doshas

Samprapti (Pathogenesis)

1. Acharya Charaka's Description:

- \circ Teja (Pitta) with the help of the vatadi humors causes the fall of hairs.
 - (Ca. Chi.26)
- **Chakrapani's Commentary**: *Teja* has two dimensions—*dehoshma* (body temperature or *pachaka pitta*) and *pitta* situated in the scalp. Thus, *teja* along with *vata* (i.e., *dehoshma pitta* and *vata*) together cause *khalitya*.

2. Acharya Sushruta's View:

- Involvement of all three doshas—vata, pitta, and kapha along with rakta in the occurrence of khalitya.
- Deranged *vata* and *pitta* go to the hair follicle and cause hair fall. Vitiated *kapha* combines with *rakta dhatu* to shut down the follicle, thus preventing hair growth. This is called *indralupta*.
- 3. Acharya Vagbhata's Addition:
 - Follows the same pathogenic approach as Sushruta but adds that the falling of hair in *khalitya* is gradual, differentiating it from *indralupta*.

Dosha Involved

• Pitta Dosha: Especially bhrajaka pitta (localized in the scalp) and pachaka pitta (in form of dehoshma).



- Vata Dosha: Mainly samana vayu (responsible for pachakagni) and vyana vayu (resides all over the body).
- Kapha Dosha: Specifically *tarpaka*, which dwells in the head (localized vitiation).

Dushyas (Affected Tissues)

- Rasa and Rakta: Circulate in the body, providing nutrition. When vitiated, they contribute to *khalitya*.
- Asthi Dhatu: May be involved as anomalies occur due to its vitiation.
- Sweda and Kesha: Considered malas (waste products) of meda and asthi dhatu respectively.

Sadhyasadhyata (Prognosis)

Ayurveda classics describe various stages of a disease pertaining to its prognosis. Acharya Charaka emphasizes the importance of knowing curable and incurable types of diseases before commencing treatment.

- Astanga Sangrahakara's Classification:
 - Four types: Vataja, Pittaja, Kaphaja, and Sannipataja.
 - Sannipataja (Tridoshaja): Considered Asadhya (incurable).
- Signs of Incurability:
 - 1. The color of the scalp is like nails.
 - 2. Appearance of hair and scalp resembles burnt skin, without hair, with severe burning sensation.

Upashaya Anupashaya (Therapeutic Approaches)

Acharya Charaka:

- First administer Vamana (emesis) and Virechana (purgation).
- Then Nasya treatment, followed by oil massage for hair and scalp.
- Mentions Vidarigandha taila (Desmodium gangeticum) and Tiladi yoga for local application.
- Acharya Vagbhata:
 - After *shodhana* (purification) of *doshas*, treatments shown in *Indralupta* and *Palitya* should be done in *Khalitya*. (A.H. U. 28/38)
- Astanga Samgrahkara:
 - Application of various *pralepas* (pastes) following *shodhana karma* or after *prachchhana* (bloodletting).
- (A.S. U. 28)
 Therapeutic Indications:
 - Treatments for premature greying (Palitya) can be applied in Khalitya.

(A.S. U.28/43)

Common Line of Treatment

- 1. Abhyanga: Oil massage.
- 2. Lepa: External application of medicinal paste.
- 3. **Shodhana**: Purification therapies.
- 4. Nasya: Nasal administration of medication.
- 5. Rasayana: Rejuvenation therapy.
- 6. Keshya Dravya: Hair-promoting substances.



Examples of Treatments

1. Scraping and Application:

- Affected part scraped with *karkash* (Mallotus philippinensis) leaves.
- Apply medicinal *lepa* (paste) or oil preparation.

2. Lepas (Pastes):

- Gunja (Abrus precatorius) seed powder.
- Hasti-Dantamashi lepa.
- Bhalatakadi (Semicarpus anacardium) lepa.
- Madhukadi lepa: Contains yasthimadhu (Glycyrrhiza glabra), lotus, manuka (dry grapes), oil, ghee, and milk.

3. Oil Preparations:

 Malati (Myristica fragrans), Karavira (Nerium indicum), Chitraka (Plumbago zeylanica), and Karanja (Pongamia pinnata) for abhyanga.

4. Other Applications:

- Juice (*swarasa*) of *Patola* (Trichosanthes dioica) leaves applied for 3 days.
- Snuhidugdha taila (Euphorbia neriifolia) for application.
- Paste of Chameli (Jasminum officinale), Karanja, and Varuna for abhyanga.

5. Bloodletting:

• Considered the best therapy in *Khalitya* to remove impure blood.

6. Rasayana Medicines:

- Administered as rejuvenation therapy.
- Examples: Amalaki rasayana, Narasimha rasayana, Shwadanshtradi rasayana.

Keshya Dravyas (Hair-Promoting Substances)

As mentioned in Samhitas, Keshya Dravyas are beneficial for hair. Bhavaprakash lists 16 such drugs:

- Vibhitaka Terminalia bellirica
- Yastimadhu Glycyrrhiza glabra
- Bakuchi Psoralea corylifolia
- Bhallataka Semecarpus anacardium
- Gambhari Gmelina arborea
- Sinduvara Vitex negundo
- Japa Hibiscus rosa-sinensis
- Bijaka Pterocarpus marsupium
- Gunja Abrus precatorius
- Nili Indigofera tinctoria
- Bhringraja Eclipta alba
- Sairaiyaka Barleria prionitis
- Kasish Ferrous sulphate
- Tila Sesamum indicum
- Kadali Banana (Musa acuminata)
- Avi Dugdha Sheep milk

Research on Extracts from Herbal Drugs with Hair Growth Potential

Table 5: Research on Herbal Extracts



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Extract	Botanical Name	Family	Medicinal Part	Observation	Effect	Mechanism of Action	Ref.
Petroleum ether or ethanol extract	Cuscuta reflexa	Convolvulaceae	Stem	ln vivo, ln vitro	Promote hair growth; Upregulate testosterone level	Inhibit 5α- reductase activity	[22]
Methanol extract	Eclipta alba	Compositae	Whole plant	In vivo	Promote hair growth	Upregulate FGF-7 and Shh expression; downregulate BMP4 to induce anagen phase	[23]
Petroleum ether extract	Eclipta alba	Compositae	Aerial part	In vivo	Promote proliferation of HaCaT cells	Downregulate TGF- β1 expression	[24]
Essential oil	Zizyphus jujuba	Rhamnaceae	Seed	In vivo	Promote hair growth	Not investigated	[25]
Ethanol extract	Phyllanthus emblica	Euphorbiaceae	Fruit	In vivo	Promote hair growth	Inhibit 5α- reductase activity	[26]
Fruit extract	Terminalia bellirica	Combretaceae	Fruit	In vivo/In vitro	Reduce oxidative stress; increase angiogenesis	Inhibit SRD5A2 activity; stimulate MAPK pathway	[27]
Petroleum ether extract	Hibiscus rosa-sinensis	Malvaceae	Flower, leaves	In vivo	Promote hair growth	-	[28]
Petroleum ether and ethanolic extracts	Semicarpus anacardium	Anacardiaceae	Seed	In vivo	Hair lengthening	Increase blood flow to scalp	[29]
Petroleum ether and ethanolic extracts	Trigonella foenum- graecum	Fabaceae	Seed	In vivo	Hair lengthening	Increase blood flow to scalp	[29]
Petroleum ether extract	Indigofera tinctoria	Fabaceae	Flower, leaves	In vivo	Hair growth potential	5α-reductase inhibition by β- sitosterol	[30]
Petroleum ether and ethanolic extracts	Abrus precatorius	Fabaceae	Seed	In vivo	Anti-androgenic alopecia activity	Inhibition of 5α- reductase activity by extracts and finasteride	[31]



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Extract	Botanical Name	Family	Medicinal Part	Observation	Effect	Mechanism of Action	Ref.
Exosome isolation	Allium sativum	Alliaceae	Cloves	In vitro	Induce anagen phase	Via Wnt-1, β- catenin, VEGF, PDGF, TGF-β1 signaling pathways	[32]
Petroleum ether extract	Glycyrrhiza glabra	Fabaceae	Root	In vivo	Promote hair growth	Not investigated	[33]
Titrated extract	Centella asiatica	Apiaceae	Whole plant	In vitro	Promote proliferation of human DPCs	Inhibit STAT signaling pathway	[34]

Pathyapathya (Do's and Don'ts)

Pathya Ahara (Recommended Diet)

Include the following in the diet:

- Grains: Wheat (Gehu), Barley (Yava), Rice (Shali Chaval), Green Gram (Mudga)
- **Vegetables**: *Jivanti, Kasmard*, Pointed Gourd (*Patol*), Tomato, Bottle Gourd (*Lauki*), Leafy vegetables (*Patrashaka*), Carrots, Cucumber, Cauliflower, Cabbage
- Oils: Sesame oil (Tila Taila), Coconut oil for external and internal use
- Fruits: Indian Gooseberry (Amalaki), Pomegranate (Dadim), Citrus (Matulanga), Mango (Amra Phala), Coconut (Narikela), Grapes (Draksha)
- Others: Milk, Sugar, Honey

Pathya Vihara (Recommended Lifestyle)

- Shiro Raksha: Protect the head
- Nasya: Nasal administration of medicated oils
- Ushnisha Dharana: Wearing head coverings
- Shirasana, Sarvangasana: Yogic postures (headstand, shoulder stand)
- Chhatra Dharana: Using an umbrella
- Pada Raksha: Wearing footwear
- Shiro Abhyanga: Head massage
- Maintain Hair Hygiene

Apathya Ahara (Foods to Avoid)

- Excessive intake of Salt (Lavana), Sour (Amla), and Alkaline (Kshara) foods
- Oily, starchy, and fat-rich foods
- Breads, cakes, chocolates, bakery items
- Pickles, curd, tea
- Black gram preparations (Masha Ahara), incompatible foods (Viruddha Ahara)
- Reheated food, fermented foods, papad



Apathya Vihara (Habits to Avoid)

- Excessive Sun Exposure (Atapa Sevana)
- Daytime Sleeping (Divasvapna)
- Anger (Krodha)
- Suppression of Natural Urges (Vega Varodha)
- Fear (Bhaya)
- Excessive Sexual Activity (Ati Maithuna)
- Late Nights (Ratrijagarana)
- Smoking, tobacco, alcohol
- Excessive use of shampoos, hair dyes, creams, lotions
- Exposure to windy, dusty, polluted environments

Conclusion

Khalitya is a common but very challenging disease affecting the global population and can have a profound effect on physical and emotional states. In Ayurveda, various external and internal treatments are described for *khalitya*. This article has presented extracts and constituents from various plants in the treatment of hair loss. Many Ayurvedic texts have discussed the importance of drugs for enhancing hair growth, known as *keshya* drugs. Although many natural drugs have been discovered, it is still necessary to search for novel hair promotion agents with more effectiveness and less toxicity. Incorporating lifestyle adjustments and dietary modifications following Ayurvedic principles can significantly contribute to overall hair health. By adopting these Ayurvedic practices, individuals can nurture and enhance the beauty of their hair.

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