



Review Article

ELIXIR ACTION OF AYURVEDA IN KHALITYASanchit Jain^{1*}, Sharma Anita²¹P.G.scholar, ²Associate Professor & H.O.D., Dept. of Agadtantra, National Institute of Ayurved, Jaipur, Rajasthan.**KEYWORDS:** *Khalitya*, Alopecia, *Nasya*.**ABSTRACT**

Hair plays an important role in making body externally beautiful. Healthy and good looking long hair makes a person mentally enthusiastic and healthy. But in modern era due to extremely busy schedule, pollution and unhealthy diet, hair fall i.e. "*Khalitya*" is increasing day by day, and the main victims who are facing this problem are youngsters. Susceptibility of hair fall is more in males than in females. In *Ayurvedic* approach, falling of hair is coined out as in term of '*Khalitya*'. The medical term of baldness is alopecia; any type of hair loss is called alopecia. The aim of this article is to elaborate & explore the aetiology, pathophysiology & overall *Ayurvedic* treatment of *Khalitya* i.e., *Nasya*, *Virechana*, Leech therapy, *Rasayana*, *Abhyang*, different type of *Lepa* & *Yoga*. For *Khalitya*, *Nasya* is one of the best choices of management for its prime role in maintaining hair growth & preventing *Khalitya*. As per *Ayurveda*, '*Khalitya*' (hairs fall) is a sign of ageing process and *Rasayana* therapy is paramount for ageing disorder. Massage (*Abhyang*) greatly improves the blood circulation, thus increasing the health of the hair & also scalp. *Yoga* like *Sarvangasan* increase blood flow toward brain. So we hope to get excellent result of *Ayurveda* in *Khalitya*.

Address for correspondence*Dr. Sanchit Jain**

P.G. Scholar,

P.G department of Agada Tantra,

National Institute of Ayurveda,

Amer Road, Jaipur, 302002,

Email: jainsanchit213@gmail.com

Phone: 07023158303

INTRODUCTION

According to survey up to 40% of men & 25% of women in India are victims of hair fall.¹ It is a universal problem, having affected both sexes of all races. For thousands of years, men and women of all countries and races have shared the tragedy of premature hair loss. Due to the hair fall, man does not look beautiful. The man is a social person and due to this problem he feels inferiority complex. In *Ayurvedic* science, increased falling of hair is termed as '*Khalitya*'. Different types of oils (chemical oils), shampoos, soaps and pharmaceutical propaganda for promoting hair growth actually make the condition worse. The present known modalities of treatment don't have any satisfactory answer to this problem. The main aim of this review article is to explore the elixir role of *Ayurveda* in *Khalitya*.

Aims and objectives

1. To re-evaluate the *Khalitya* in various classical *Ayurvedic* and modern literatures.
2. To evaluate and elaborate the aetiology, Pathophysiology of *Khalitya*.
3. To elaborate and discuss the *Ayurvedic* management of *Khalitya*.

MATERIALS AND METHODS

The article is based on review of *Ayurvedic* texts and research papers. Materials related to *Khalitya* and Alopecia has been collected. *Ayurvedic* texts mainly used in this study are *Brihatrisiyi*, *Laghutrisiyi* and other *Ayurvedic* books. We have also referred modern texts, journals and search various websites to collect information on the relevant topics.

Conceptual Study**Ayurvedic Disease review**

Acharya Sushruta, *Acharya Chakradatta*, *Sharangdhara*, *Bhavmishra* and *Bangasen* have mentioned *Khalitya* in *Kshudraroga*. In *Charak Samhita*, the disease *Khalitya* also has been included in *Urdhvajatrugat roga*.² *Acharya Vagbhata* has also described *Khalitya* in *Shirogata rogas* under the caption of *Urdhavajatrugata rogas* and these are further subdivided into nine *Kapala roga*.³

As per *Acharya Sushruta*, *Virudha Pitta* along with *Vata* reaches *Romakoopa* and causes hair fall and thereafter *Shleshma* along with *Shonita* obstructs the *Romakoopa* which leads to the stoppage of regeneration of hair and this condition is known as *Indralupta*, *Khalitya* or *Ruhya*.⁴ According to *Acharya Vagbhata*, there is a gradual loss of hair.⁵ *Acharya Charaka* describes that *Tejas* combining with *Vatadi doshas* reaches the *Shira kapala* and causes hair fall by *Dahana* of *Romakoopa* (hair follicles).⁶

Nidana (Causative Factors)

Nidana can be divided in two aspects.

1. *Vishesh Nidana*
2. *Samanya Nidana*

1. Vishesh Nidana

In *Ayurvedic* Literature there is no any clear cut reference regarding the causative factors of *Khalitya* except *Acharya Charaka* and *Vagbhata* who has mentioned the major factors as follows- *Pitta prakarti*⁷, *Ksharaatisevan*⁸, *Lavanrasa atisevan*, *Ushar bhomi*,

*Viruddha aharasevan*⁹, ignorance of *Pratishyaya*¹⁰, take of *Lavan* during pregnancy would be result in congenital hair loss (*Khalitya*)¹¹, combing hair excessively during the ovulatory period of the mother leads to hair fall in the child.¹²

2. Samanya Nidana

General etiological factors of *Shiroroga* can be considered as a etiological factors of *Khalitya*, which are stated as follows¹³ :

- *Vegavidharana* (Suppression of the natural urges)
- *Abhyanga Dwesha* (Grudge against massage)
- *Asatmya Gandha* (Inhalation of unwholesome odours)
- *Ama* (Undigested or semi-digested material)
- *Raja* (Dust)
- *Dhooma* (Smoke)
- *Atapa* (Heat)
- *Hima* (Cold)
- *Avashyaya* (Exposure to frost at night)
- *Prajagarana* (Waking at night)
- *Divaswapna* (Day sleep)
- *Sheetambu Sevana* (The use of very cold water)
- *Desha Kala Viparyaya* (Abnormal climate and season)
- *Atimathuna* (Excessive sex act)
- *Prakvata* (Facing head winds)
- *Manah tapa* (Mental affliction)
- *Madya* (Intoxication)
- *Rodana* (Excessive weeping)
- *Uchibhashya* (Talking too loud)

Purvarupa

Occasional loss of some hairs may be considered as a *Purvarupa* of *Khalitya*.

Rupa

Rupa (sign & symptoms) of *Khalitya* is concerned very little explanation is found in Ayurveda classics. Thus the cardinal symptoms of *Khalitya* is gradual loss of hair. *Ashtang Samgrahakara* has classified *Khalitya* in four types & its symptoms which are as follow:¹⁴

1. Vataja Khalitya- In this type, *Keshbhoomi* appears as *Agnidagdha*. *Harita* said *Ruksha pandura* scalp.

2. Pittaja Khalitya- The scalp is surrounded by the *Siras* (veins). Sweat may be found all over scalp. *Harita* said red and burnt scalp.

3. Kaphaja Khalitya- The colour of the scalp is more or less same as the colour of skin but here it is *Ghana* and *Snigdha* in appearance. *Harita* said *Snigdha* scalp.

4. Tridoshaja Khalitya- In this type of *Khalitya*, characteristic of all the three *Doshas* are observed. The scalp looks like with the burnt and it bears nail like appearance.

Acharya Harita has denoted this disease by the name *Keshaghna* and mentioned one additional type of *Khalitya* that is *Raktaj khalitya*. *Pus (Sapaka)* is the symptom of *Raktaj khalitya*¹⁵.

Samprapti

Nidan sevana- Ushna, Tikshna, Ruksha, Atilavanasevana, Ksharaatisevana + Divaswapana, Prajagarana, Atapasevana, Ushar Bhomi + Manah tapa → Vata Prakapa, Pitta Prakopa, Kapha Prakopa → Rasarakta Dushti & Asthidhatwagni Dusti → Keshha Patana & Siramukha Avarodha → Khalitya.

Samprapthi Ghataka

1. *Dosha: Pitta- Pachaka, Bhrajaka, Vata- Saman, Vyan, Kapha- Tarpaka*
2. *Dushya: Dhatu- Rasa, Rakta, Asthi, Mala- Sweda, kesh*
3. *Srotasa: Rasavaha, Raktavaha, Asthivaha, Swedavaha, Manovaha,*
4. *Srotodusti: Sanga*
5. *Agni : Jatharagni, Rasagni, Raktagni, Asthyagni*
6. *Rogamarga: Bahya*
7. *Udbhava: Amashaya*
8. *Adhithana: Keshabhoomi*

Modern Description of Alopecia

Word 'alopecia' is originated from Greek word *Alepekia* which means a disease in which hair falls out.

Alopecia means loss of hair in area where ordinarily hair would be found. Generally loss of terminal hair on the scalp is called alopecia. It comes with a variety of patterns with a variety of causes.

Classification of Alopecia

Alopecia can be classified into two major groups.¹⁶

I. Scarring Alopecia II. Non-scarring Alopecia

I. Scarring alopecia - There are associated fibrosis, inflammation and loss of hair follicles. A smooth scalp with a decreased number of follicular openings is usually observed clinically.

II. Non-scarring alopecia - In non-scarring alopecia, the hair shafts are gone, but the hair follicles are preserved. Due to preserved hair follicles the non scarring alopecia is reversible in nature.

Causes of Alopecia can be classified as under ¹⁶

1. Non-scarring Alopecia

A. Primary Cutaneous Disorders

1. Androgenetic Alopecia
2. Alopecia Areata
3. Telogen Effluvium
4. Tinea capitis
5. Traumatic Alopecia

B. Drugs

1. Cytotoxic agents
2. Anti coagulants
3. 3. Anti thyroid drugs
4. Danazol
5. Oral Contraceptives
6. Retinoids : aciterin

C. Systemic Diseases

1. Hypothyroidism
2. Hyperthyroidism
3. Hypopituitarism
4. Systemic Lupus
5. Erythematosis
6. Secondary Syphilis

7. Deficiencies of Protein,
8. Iron, Biotin & Zincs

2. Scarring Alopecia

A. Primary Cutaneous Disorders

1. Cutaneous Lupus
2. Lichen planus
3. Central Centrifugal Cicatricial
4. Folliculitis Decalvans
5. Linear Scleroderma

B. Systemic Diseases

1. Sarcoidosis
2. Systemic lupus
3. erythematosus
4. Cutaneous Metastases

Androgenetic Alopecia

It is also called as common baldness, patterned baldness, male patterned baldness (MPB) or female pattern baldness¹⁸.

Etiology & Pathogenesis¹⁹

Basic pathology is miniaturization of hair follicles.

Genetic

The exact mode of inheritance is not known, but gene association studies have identified association of AGA with polymorphism of androgen receptor gene X chromosome.

Hormonal

Males- Alopecia is distinctly androgen dependent. So does not develop in males castrated at puberty.

Females- Though thought to develop in genetically strongly predisposed in presence of elevated androgens, most women diagnosed to have AGA do not have elevated circulating levels of androgens.

Clinical Features

It is the most common type of hair loss seen in both sexes. It is gradually onset (Anytime after Puberty), diffuse, symmetric and slowly progressive loss of terminal hair from the scalp showing different patterns in males and females.

In Males- The recession of frontal hairline and hair-loss at vertex are two main features in men²⁰.

In Females- Hair loss in women may be diffuse often initially manifesting as widening of the central parting²¹.

Alopecia Areata

Small, circular bald patches on scalp are termed as Alopecia Areata. Alopecia areata is a chronic inflammatory autoimmune disease involving the hair follicles in genetically predisposed individuals²².

- **Alopecia totalis** – total loss of scalp hair.
- **Alopecia universalis** – total loss of all body hair

Etiopathogenesis²²

Exact etiology is unknown. It is thought to be influenced by following factors.

Immunological factors

- Associated with other autoimmune disease like myxedema, vitiligo, thyroid disease and pernicious anaemia.
- Responds to corticosteroids.

Certain Environmental factors: Blamed as triggering agents, e.g. infection, trauma, drugs, stress etc.

Genetic factors: Family history is positive in 10-20 % of patients.

Pathology²²

Characteristically, there is a lymphatic infiltrate (mainly T- cells) in the peribulbar region of anagen hair follicles. Hair follicles are not destroyed because disease spares the stem cells.

Clinical Features²³

- Alopecia Areata typically presents as a discoid patch of alopecia, which shows no scaling, papules, inflammation or atrophy.
- Presence of exclamation mark hair at the periphery of the lesion is pathognomonic.
- Nails – Pitting and thinning of nail plate.

Telogen Effluvium

Acute telogen effluvium is most common cause of diffuse hair loss in women followed by FPHL and chronic telogen effluvium.

The term “telogen effluvium” refers to excessive loss of club (telogen) hair in response to same known or unknown etiological factor²⁴.

Etiology²⁵

- Infections - Typhoid, Malaria, Dengue, Chikungunya
- Childbirth - Especially prolonged and difficult
- Surgical trauma - minor / major surgery
- Haemorrhage - Surgical, traumatic
- Emotional stress - Examinations, marital discord.

Pathogenesis

- Hair follicles pass through three phases (anagen, catagen & telogen).²⁵
- Several triggers can precipitate telogen effluvium.²⁵
- Stress causes more of the asynchronous growth cycles of individual hairs to become synchronous, therefore, larger numbers of growing (anagen) hairs simultaneously enter the dying (telogen) phase.²⁶

Clinical Features

- Patient complaints of sudden, diffuse and excessive loss of scalp hair.²⁷
- Varying degree of diffuse hair loss, occurring 2-3 months after precipitating stimulus.²⁸
- Severe cases associated with anaemia and beau's lines of the nails.²⁸
- Hair pull test is strongly positive.²⁹

Ayurvedic Management

Chikitsa Siddhant

Acharya charaka describes that the patient of *Khalitya* should be treated by *Nasya*, *Tailabhyanga* on head & face and *Pralepa* on the head along with *Shodhan chikitsa*.³⁰

The *Samprapti vighatana* of *Khalitya* can be adopted in the following steps:

1. *Nidan Parivarjana*
2. *Shodhana*

3. *Samshamana*

4. *Yoga*

1. *Nidan Parivarjana*

Acharya Susruta states that *Nidan Parivarjana* is the principle of the treatment³¹. *Nidan parivarjana* in *Khalitya* includes avoidance of all causes mentioned under *Nidans* for *Shiro-roga* in particular.

2. *Shodhana*

It comes under the pre-procedure i.e. before going to main treatment, according to *Shashtras* purification must be done.³²

I. *Nasya*

Administration of medicines through the nose is known as *Nasya*. All the *Acharyas* have mentioned *Nasya karma* for the *Urdhvajatrugat vyadhi*. It is said to the nose 'The gate way of *Mashtiska*'. The medicine given through the nose pervades everywhere in the head and alleviates the head disease. *Nasya* creates *Snehana*, which gives nutrition to hair root thus, prevents *Khalitya*.³³

Acharya Sushruta has also mentioned about *Pradhamana nasya* in the management of *Khalitya*. There are following *Nasya* in *Khalitya*.³⁴

1. *Yastimadhukadhya tailam nasya*³⁵
2. *Chandanadhya tailam nasya*³⁶
3. *Prapoundrarikadhya tailam nasya*³⁷
4. *Markavadhya tailam nasya*³⁸
5. *Vidarigandhadi tailam nasya*³⁹
6. *Jambuadhya tailam nasya*⁴⁰
7. *Anu tailam nasya*⁴¹

II. *Leech Therapy*

Some Ayurvedic physicians use leech therapy at the bald spots before using the local medications⁴². *Astanga Samgrahkara* has quoted that application of different types of *Pralepas* should be perform after doing *Prachhana* or *Shuchi karma*.⁴³

III. *Virechana karma*

As *Samprapti* of *Khalitya* is *Pitta pradhan*, *Virechana karma* is the most suitable *Shodhan* for the disease which elevates by *Pitta*. This process is also useful for elimination of *Vata* along with *Kapha dosha*.

Virechana karma by *Abhyadi Modaka* can be useful in *Khalitya*. *Abhyadi Modaka* is indicated in *Palitya* (greying of hair), it can also be used for *Khalitya* (hair fall) as the *Samprapti* (pathogenesis) of *Khalitya* & *Palitya* is same.⁴⁴

3. *Samshamana*

The *Samshamana chikitsa* of *Khalitya* involves *Rasayana*, *Abhyanga* and *Lepa*.

(A) *Rasayana prayoga*

Acharya sushruta advises *Rasayana* in *Khalitya chikitsa*⁴⁵. According to modern science, the specific cause of alopecia is autoimmune disease and *Rasayana* drugs acts as immunomodulators in *Khalitya*.

As premature hair fall is a sign of early aging process and *Rasayana* is best for reversing aging process means anti ageing therapy.

There are following *Rasayana* which can be given in *Khalitya*:

1. *Amalaki Rasayana*⁴⁶
2. *Shwadanshtradi Rasayan*⁴⁷

(B) *Abhyanga*

Medicated oils are used for local application. There are following oils advised for *Abhyanga* in *Khalitya*

1. *Bhringaraja tailam*⁴⁸
2. *Chitrakadya tailam*⁴⁹
3. *Irimedadi tailam*⁵⁰
4. *Nilikadi tailam*⁵¹
5. *karanjadi tailam*⁵²
6. *Adityapakguduchi tailam*⁵³
7. *Malatyadi tailam*⁵⁴
8. *Snuhidugdhadi tailam*⁵⁵
9. *Chandanadya tailam*
10. *Jatyadi tailam*⁵⁶
11. *Bhallatakadi tailam*⁵⁷
12. *Shringatakadi tailam*⁵⁸
13. *Jambuadi tailam*⁵⁹

(C) *Lepa*

1. *Gunja lepa*⁶⁰
2. *Hastidanta masi lepa*⁶¹
3. *Kutannatadi lepa*⁶²
4. *Amalakiyadi lepa*⁶³
5. *Bhallatakadi lepa*⁶⁴
6. *Madhukadi lepa*⁶⁵
7. *Tilpushpadi lepa*⁶⁶
8. *Kasisadi lepa with kapith swarasa*⁶⁷
9. *Haridradi lepa with navneeta*⁶⁸
10. *Jatipushpadi lepa*⁶⁹
11. *Keshvardhak lepa with madhu & ghrit*⁷⁰
12. *Arjunadi Lepa*⁷¹
13. *Langali mula lepa with mahish dugdh*⁷²
14. *Agnimanthadi lepa*⁷³
15. *Datura lepa*⁷⁴

4. *Yoga*

*Sarvangasan*⁷⁵

Sarvangasan affects C.V.S, C.N.S & Thyroid Gland. *Sarvangasan* increase blood flow in brain, which nourishes the brain and hair. Due to this it prevents hair falling and promote growth of news hairs.

DISCUSSION

Faulty dietary habits, lifestyle and stressful living, inappropriate nutrition or exasperating factors leads to depletion of function of hair root. In *Shodhna chikitsa*, *Nasya* is the first choice of treatment in *Khalitya* which have *Doshagna* property, pacify the *Doshas* which cause the *Khalitya*. *Nasya* clears the obstruction of the hair roots by its *Sookshma srotogaami* property leading to the *Roma koopa vishodhana*. The leech therapy, *Prachhana* and *Shuchi karma* also clears the obstruction of the hair roots. The *Virechana karma* is a specific process for elimination of *Pitta Dosh* which is *Pradhan dosha* of *Khalitya*. This process is also useful for elimination of *Vata* along with *Kapha Dosh*. In *Samshamana chikitsa*, first *Rasayana* is best for reversing aging process means anti-ageing therapy and as antioxidant because premature hairs fall is a sign of early

aging process. According to modern science, it is a autoimmune disease and *Rasayana* therapy acts as immunomodulators in *Khalitya*. Several types of oils and *Lepa* for *Abhyang* (Massage) greatly improve the blood circulation, thus increasing the nutrition of the hair roots & scalp. At last *Sarvangasan* of yoga also increase flow of blood in brain and prevent hair fall.

CONCLUSION

Ayurvedic drugs and therapy possesses *Keshya*, *Balya*, and anti-ageing properties, so they will show an excellent result on *Khalitya*. The *Ayurvedic* management of *Khalitya* has a strong possibility to breakdown the pathogenesis of this disease and become a ray of light in the darkness.

REFERENCES

1. Rajani Thankan, Vasant Patil, Prasanna Aithal. Clinical Study On Effect Of Different Procedures Of Nasya With Bhringaraja Taila In Khalitya, Journal Of Ayurveda And Holistic Medicine, April, 2014, Volume 2, Issue 4.
2. Kashinatha shastri and Dr. Gorakha-natha chaturvedi ed. Charaka samhita-II Chikitsasthan, 26/133, chaukhambha Bharati Academy, Varanasi, reprint-2012, p;744.
3. Kaviraja Atrideva Gupta, Astanga Hridaya-Uttartantra, 23/24-25, Chaukhamba publication, Varanasi, reprint-2012, p;728.
4. Ambikadatta Shastri, Sushruta Samhita, Nidana sthan, 13/32-33, Chaukhamba Sanskrit Sansthan, Varanasi, reprint-2012, p;368.
5. Kaviraja Atrideva Gupta, Astanga Hridaya-Uttartantra, 23/26, Chaukhamba publication, Varanasi, reprint-2012, p;728.
6. Kashinatha shastri and Dr. Gorakha-natha chaturvedi ed. Charaka samhita-II Chikitsasthan, 26/132, chaukhambha Bharati Academy, Varanasi, reprint-2012, p;744.
7. Kashinatha shastri and Dr. Gorakha-natha chaturvedi ed. Charaka samhita-I Vimana sthan, 8/97, chaukhambha Bharati Academy, Varanasi, reprint-2012, p;773.
8. Kashinatha shastri and Dr. Gorakha-natha chaturvedi ed. Charaka samhita-I Vimana sthan, 1/17, chaukhambha Bharati Academy, Varanasi, reprint-2012, p;678.
9. Kashinatha shastri and Dr. Gorakha-natha chaturvedi ed. Charaka samhita-I Vimana sthan, 1/18, chaukhambha Bharati Academy, Varanasi, reprint-2012, p;678.
10. Kashinatha shastri and Dr. Gorakha-natha chaturvedi ed. Charaka samhita-II Chikitsasthan, 26/107-109, chaukhambha Bharati Academy, Varanasi, reprint-2012, p;737.
11. Kaviraja Atrideva Gupta, Astanga Samgraha-I, Sharir sthana, 2/61, Chaukhamba Krishnadas Academy, Varanasi, reprint-2005, p;280-281.
12. Ambikadatta Shastri, SushrutaSamhita, Sharir sthan, 2/26, Chaukhamba Sanskrit Sansthan, Varanasi, reprint-2012, p;17.
13. Kaviraja Atrideva Gupta, Astanga Samgraha- II, Uttartantra 27/2, Chaukhamba Krishnadas Academy, Varanasi, reprint-2011, p;287.
14. Kaviraja Atrideva Gupta, Astanga Samgraha- II, Uttartantra 27/20, Chaukhamba Krishnadas Academy, Varanasi, reprint-2011, p;288.
15. Pandit Harihar Parsad Tirpathi, Harita Samhita, Tiritiya sthanam, 43/1-2, Chaukhamba Krishnadas Academy, Varanasi, reprint-2009, p;432.
16. Harrison's Principle of Internal Medicine, Volume 1, Mc Graw Hill Publication, New York 18th Edition 2008, p;407.
17. Khanna Neena, Illustrated Synopsis of Dermatology and Sexually Transmitted Diseases, Elsevier Publication, 4th Edition, 2013, p;212.
18. Bansal Ramesh, Essentials in Dermatology, Venereology & Leprology, Jaypee brothers Medical Publishers, First Edition, 2015, p;240.
19. Khanna Neena, Illustrated Synopsis of Dermatology and Sexually Transmitted Diseases, Elsevier Publication, 4th Edition, 2013, p;133.
20. Bansal Ramesh, Essentials in Dermatology, Venereology & Leprology, Jaypee brothers Medical Publishers, First Edition, 2015, p;241.
21. Khanna Neena, Illustrated Synopsis of Dermatology and Sexually Transmitted Diseases, Elsevier Publication, 4th Edition, 2013, p;133.
22. Bansal Ramesh, Essentials in Dermatology, Venereology & Leprology, Jaypee brothers Medical Publishers, First Edition, 2015, p;244.
23. Khanna Neena, Illustrated Synopsis of Dermatology and Sexually Transmitted Diseases, Elsevier Publication, 4th Edition, 2013, p;130.
24. Bansal Ramesh, Essentials in Dermatology, Venereology & Leprology, Jaypee brothers Medical Publishers, First Edition, 2015, p;243.
25. Khanna Neena, Illustrated Synopsis of Dermatology and Sexually Transmitted Diseases, Elsevier Publication, 4th Edition, 2013, p;135.
26. Harrison's Principle of Internal Medicine, Volume 1, Mc Graw Hill Publication, New York 18th Edition 2008, p;408.
27. Bansal Ramesh, Essentials in Dermatology, Venereology & Leprology, Jaypee brothers Medical Publishers, First Edition, 2015, p;243.
28. Khanna Neena, Illustrated Synopsis of Dermatology and Sexually Transmitted Diseases, Elsevier Publication, 4th Edition, 2013, p;135.
29. Bansal Ramesh, Essentials in Dermatology, Venereology & Leprology, Jaypee brothers Medical Publishers, First Edition, 2015, p;243.
30. Kashinatha shastri and Dr. Gorakha-natha chaturvedi ed. Charaka samhita-II Chikitsasthan, 26/262, chaukhambha Bharati Academy, Varanasi, reprint-2012, p;761.
31. Ambikadatta Shastri, SushrutaSamhita, Uttartantra, 1/25, Chaukhamba Sanskrit Sansthan, Varanasi, reprint-2013, p;14.
32. Dr. Rohit Kumar Khatik, "A Clinical Study Of Efficacy Of Snuhayadi Tailam On Khalitya" P.G. Dept. Of Agad

- Tantra & Vyavahara Ayurveda, National Institute Of Ayurveda, Jaipur, 2016, p;28.
33. Dr. Rohit Kumar Khatik, "A Clinical Study Of Efficacy Of Snuhayadi Tailam on Khalitya" P.G. Dept. of Agad Tantra & Vyavahara Ayurveda, National Institute Of Ayurveda, Jaipur, 2016, p;28.
34. Ambikadatta Shastri, SushrutaSamhita, Uttartantra, 54/36-37, Chaukhamba Sanskrit Sansthan, Varanasi, reprint-2012, p;513.
35. Dr.Indradeva Tripathi, Chakradutta Hindi Translation, Kshudraroga Chikitsa, 55/111, Chaukhamba Sanskrita Bhavan, Varanasi, reprint-2014, p;321.
36. Dr.Indradeva Tripathi, Chakradutta Hindi Translation, Kshudraroga Chikitsa, 55/108-110, Chaukhamba Sanskrita Bhavan, Varanasi, reprint-2014, p;321.
37. Dr.Premvati Tewari, Vrndamadhava or Siddha Yoga, Kshudraroga-adhikara, 57/106-107, Chaukhamba Visvabharati, Varanasi, reprint-2007, p;530.
38. Dr. Premvati Tewari, Vrndamadhava or Siddha Yoga, Kshudraroga-adhikara, 57/117-122, Chaukhamba Visvabharati, Varanasi, reprint-2007, p;532.
39. Kashinatha shastri and Dr. Gorakha-natha chaturvedi ed. Charaka samhita-II Chikitsasthan, 26/263, chaukhamba Bharati Academy, Varanasi, reprint-2012, p;761.
40. Kaviraja Atrideva Gupt, Astanga Samgraha- II, Uttartantra 28/41, Chaukhamba Krishnadas Academy, Varanasi, reprint-2011, p;292
41. Kaviraja Atrideva Gupt, Astanga Samgraha- II, Uttartantra 28/42-43, Chaukhamba Krishnadas Academy, Varanasi, reprint-2011, p;292.
42. Dr. Gaurang Joshi, Baldness (Alopecia) and Alopacia Areata and its Ayurvedic Management, Aug10, 2015, <http://www.boloji.com/index.cfm?md=Content&sd=Articles&ArticleID=1099>
43. Kaviraja Atrideva Gupt, Astanga Samgraha- II, Uttartantra 28/35, Chaukhamba Krishnadas Academy, Varanasi, reprint-2011, p;292.
44. International Journal of Ayurvedic Medicine, 2014, Conceptual Study of Virechana Karma by Abhayadi Modak in Khalitya, Kanungo Swati, Kadus Priyadarshani Arvind, Vedpathak Surendra Martand, <http://ijam. co. in>
45. Ambikadatta Shastri, SushrutaSamhita, Chikitsa sthan, 20/25-26, Chaukhamba Sanskrit Sansthan, Varanasi, reprint-2012, p;117
46. Kashinatha shastri and Dr. Gorakha-natha chaturvedi ed. Charaka samhita-II Chikitsasthan, 1/2/75, chaukhamba Bharati Academy, Varanasi, reprint-2012, p;18
47. Dr.Brahmanand Tripathi, Astanga Hridaya, Uttartantra, 39/159, Chaukhamba Sanskrit Pratishthan, Varanasi, reprint-2011, p;1202
48. Dr.Premvati Tewari, Vrndamadhava or Siddha Yoga, Kshudraroga-adhikara, 57/104, Chaukhamba Visvabharati, Varanasi, reprint-2007, p;530.
49. Dr.Premvati Tewari, Vrndamadhava or Siddha Yoga, Kshudraroga-adhikara, 57/103, Chaukhamba Visvabharati, Varanasi, reprint-2007, p;530.
50. Dr.Brahmanand Tripathi, Sharangadhara Samhita, Madhyam Khand 9/163-167, Chaukhamba Surbharati Publication, Varanasi, reprint-2010, p;242.
51. Dr.Brahmanand Tripathi, Sharangadhara Samhita, Madhyam Khand 9/157-160, Chaukhamba Surbharati Publication, Varanasi, reprint-2010, p;241.
52. Dr.Brahmanand Tripathi, Sharangadhara Samhita, Madhyam Khand 9/156, Chaukhamba Surbharati Publication, Varanasi, reprint-2010, p;240.
53. Dr.Indradeva Tripathi, Chakradutta Hindi Translation, Kshudraroga Chikitsa, 55/107, Chaukhamba Sanskrita Bhavan, Varanasi, reprint-2014, p;321.
54. Dr.Indradeva Tripathi, Chakradutta Hindi Translation, Kshudraroga Chikitsa, 55/94, Chaukhamba Sanskrita Bhavan, Varanasi, reprint-2014, p;319.
55. Dr.Indradeva Tripathi, Chakradutta Hindi Translation, Kshudraroga Chikitsa, 55/104-106, Chaukhamba Sanskrita Bhavan, Varanasi, reprint-2014, p;321.
56. Dr. Indradeva Tripathi & Dr. Daya Shankar Tripathi, Yogaratnakara, Kshudraroga Nidanam Chikitsa Prakarnam, Krishnadas Academy, Varanasi, reprint-1998, verse-101, p;700.
57. Prof.Siddhi Nandan Mishra, Rasaratna Samuchchayah, Shiroroga Chikitsa, 24/85-86, Chaukhamba Orientalia, Varanasi, reprint-2011, p;573.
58. Prof.Siddhi Nandan Mishra, Rasaratna Samuchchayah, Shiroroga Chikitsa, 24/84, Chaukhamba Orientalia, Varanasi, reprint-2011, p;572.
59. Kaviraja Atrideva Gupt, Astanga Samgraha- II, Uttartantra 28/41, Chaukhamba Krishnadas Academy, Varanasi, reprint-2011, p;292.
60. Prof.Siddhi Nandan Mishra, Rasaratna Samuchchayah, Shiroroga Chikitsa, 24/87, Chaukhamba Orientalia, Varanasi, reprint-2011, p; 573.
61. Dr.Indradeva Tripathi, Chakradutta, Hindi Translation, Kshudraroga Chikitsa, 55/98, Chaukhamba Sanskrita Bhavan, Varanasi, reprint-2014, p;320.
62. Dr.Indradeva Tripathi, Chakradutta, Hindi Translation, Kshudraroga Chikitsa, 55/96, Chaukhamba Sanskrita Bhavan, Varanasi, reprint-2014, p;320.
63. Dr.Indradeva Tripathi, Chakradutta, Hindi Translation, Kshudraroga Chikitsa, 55/95, Chaukhamba Sanskrita Bhavan, Varanasi, reprint-2014, p;319.
64. Dr.Indradeva Tripathi, Chakradutta, Hindi Translation, Kshudraroga Chikitsa, 55/99, Chaukhamba Sanskrita Bhavan, Varanasi, reprint-2014, p;320.

65. Dr.Indradeva Tripathi, Chakradutta, Hindi Translation, Kshudraroga Chikitsa, 55/103, Chaukhambha Sanskrita Bhavan, Varanasi, reprint-2014, p;320.
66. Dr.Premvati Tewari, Vrndamadhava or Siddha Yoga, Kshudraroga-adhikara, 57/116, Chaukhambha Visvabharati, Varanasi, reprint-2007, p;531.
67. Dr. Premvati Tewari, Vrndamadhava or Siddha Yoga,Kshudraroga-adhikara, 57/130, Chaukhambha Visvabharati, Varanasi, reprint-2007, p;533.
68. Prof.Siddhi Nandan Mishra, Rasaratna Samuchchayah, Shiroroga Chikitsha, 24/82, Chaukhambha Orientalia, Varanasi, reprint-2011, p;572.
69. Prof.Siddhi Nandan Mishra, Rasaratna Samuchchayah, Shiroroga Chikitsha, 24/83, Chaukhambha Orientalia, Varanasi, reprint-2011, p;572.
70. Dr.Brahmanand Tripathi, Sharangadhara Samhita, Uttar Khand 11/22, Chaukhambha Surbharati Publication, Varanasi, reprint-2010, p;394.
71. Pandit Harihar Parsad Tirpathi, Harita Samhita, Tritiya sthanam, 43/7, Chaukhamba Krishnadas Academy, Varanasi, reprint-2009, p;432.
72. Kaviraja Atrideva Gupt, Astanga Samgraha- II, Uttartantra 28/35, Chaukhamba Krishnadas Academy, Varanasi, reprint-2011, p;292.
73. Kaviraja Atrideva Gupt, Astanga Samgraha- II, Uttartantra 28/40, Chaukhamba Krishnadas Academy, Varanasi, reprint-2011, p;292.
74. Dr. Brahmanand Tripathi, Astanga Hridaya, Uttartantra, 24/30, Chaukhamba Sanskrit Pratishthan, Varanasi, reprint-2011, p;1060.
75. Dr. Pawan Sharma, A Comparative Study Of Keshyakalpayoga & Sarvangasan In The Management of Alopecia, International Research Journal, July 2010, Vol I, Issue 10.

Cite this article as:

Sanchit Jain, Sharma Anita. Elixir Action of Ayurveda In Khalitya. AYUSHDHARA, 2016;3(2):639-645.

Source of support: Nil, Conflict of interest: None Declared

