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**Review Article** 

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# A COMPARATIVE STUDY ON EFFECT ON PANCHBHAUTIKA TAILA AND YASHTIMADHUKA TAILA NASYA IN KHALITYA (ALOPECIA AREATA)

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#### **ABSTRACT**

Ayurveda is the everlasting supreme Science of medicine because it deals with all aspects of human life since time is immorial. In this competitive and fast going 21st Century, people have been presented with many kind of disorders like lifestyle disorders, environment disorders, sexual disorders etc. Alopecia Areata (Hair fall)is a dermatological & a symptom of life style disorder that has been recognized for more than 2000 years ago. Susceptibility of hair fall is more in males than in females. It is mostly seen in age group of 18-40 years. According to survey upto 40% of men & 25% of women in India are victims of hair fall. It is a slow progressive disorder. Alopecia Areata is characterized by circumscribed non scarring loss of hair in

single or multiple patches over scalp or body hair. Apart from, metabolic & hereditary causes, Alopecia have been observed as a major side effect of anti-cancerous, immunosuppressant and many other drug treatment. In Ayurveda literature, loss of hair is termed as "Khalitya" under the broad heading of Shirorog (By Acharya Charak & Acharya Vagbhatta) and under Kshudraroga (By Acharya Sushruta). For this "Nasya Karma" is the management. According to Ayurveda, Nasya karma is the Shodhan and Shaman karma for the Urdhavjatrugata rogas. In present study "Panchbhautika Taila" & "Yastimadhuka Taila" as mentioned in Ayurvedic Samhita having keshya properties has been selected.

#### INTRODUCTION

In Ayurveda, four types of Ayu are mentioned among which Sukhayu is important. Sukhayu deals with life having qualities like Bal, Virya, Parakrama, Soundarya. Concept of Soundarya is gaining more attention globally & hair plays an important role in it. Healthy, long & vibrant hair add charm to personality. Therefore to keep hair in healthy state is a duty of human beings because just like face hair is also a mirror of healthy state of body. Hair is among the valuable part derived from ectoderm of skin & is a protective appendage on the physique. Alopecia Areata is an autoimmune condition that attacks the hair follicles causing non scarring hair loss. Alopecia Areata is one of the condition found in maximum population which is just because of irregular daily routines, sedentary lifestyle, stress induced hectic schedules along with faulty dietary habits. It is universal and common problem having affected both sexes of all races. Male is more susceptible than females in this case. It is usually due to presence of an excessive quality of androgenic hormones testosterone. In Ayurvedic literature, loss of hair is termed as Khalitya under the broad heading Shirorog (By Acharya Charak & Acharya Vagbhatta) and under Kshudraroga (By Acharya Sushruta). Kesh is mala of Asthi dhatu & sthana is generally physiological but becomes pathophysiological due to vitiation of doshas. Ayurveda is safe and & cost effective alternative medicine to healthy hairs & cure hair problems. For these, Nasya karma is the choice of management & when is done me medicated oil having hair growth properties is more efficacious. Among Ayurveda, Nasya karma is considered best therapeutic measures for the *Urdhavjatrugata roga*. It affects *tridosha* as well as whole body.

#### **Modern Review**

Alopecia Areata also known as spot baldness. It is a common auto immune skin disease in which hair follicles are damaged by a misguided immune system, causing sudden loss of hair especially of the scalp or face in circumscribed patches with little or no inflammation.

# **Incidence**

The general population has an approximately 2% of risk to develop Alopecia Areata. The worldwide incidence of Alopecia Areata varies from 2.1%, 0.7%, 3.8% in USA, India and Singapore.

#### **Causes**

According to modern science, the exact cause of Alopecia Areata is unknown. But most common believe that in today's World the main cause that is found is Stress, hormonal imbalance, systemic illness, drugs, local skin disorders, post-acute illness, nutritional deficiencies etc.

# **Pathophysiology**

The exact pathophysiology of alopecia areata remains unknown. The most widely accepted hypothesis is that T-cell mediated autoimmune condition that is most likely to occur in predisposed individual.

#### **Clinical Features**

- Small, round(or oval) patches of hairs loss on the scalp, beared area of the face or other areas of body.
- Patchy hairs and coined shaped patches.
- Burning & itching before hair fall on that region.
- It can affect finger nails & toe nails.
- Nails become rough and lose their shin.

# Addiditional Clinical Sign's

- Exclamation mark hairs: This occurs when few short hairs that get narrower at their bottom and grow in or around the edges of bald spots.
- Cadaver hairs: This is where hairs break before reaching the skin surface.
- White hair: This may grow in areas affected by hair loss.

### **Assessment Criteria**

The assessment will be done subjective and objective parameters.

# 1. Subjective Parameters

### **❖** Hair Fall (Table–1)

	Hair fall	Score
1	Severe (hair fall on simple stretching)	3
2	Moderate (Hair fall on washing)	2
3	Mild (Hair fall on combing)	1
4	Absent	0

# **❖** *Darunaka* (Dandruff) (Table–2).

	DARUNAKA(DANDRUFF)		
1	Severe (permanently seen)	3	

2	Moderate (seen after two to three days after head wash)	2
3	Mild (occasionally seen)	1
4	Absent	0

# \* Keshbhoomi Kandu (Table-3).

	KESHBHOOMI KANDU	SCORE
1	Severe (coming more than 5 episodes in a day)	3
2	Moderate (coming 3-4episodes in a day)	2
3	Mild (coming 1-2episodes in a day)	1
4	Absent	0

# \* Rukshata (Table-4)

	Rukshata	Score
1	Rough hair surface	3
2	Slight rough hair surface	2
3	Smooth rough hair surface	1
4	Smooth hair surface	0

# \* Kesh Kathinya (Table-5).

	Kesh Kathinya	Score
1	Severe	3
2	Moderate	2
3	Mild	1
4	Absent	0

# \* Keshbhoomi Daha (Table-6)

	Keshbhoomi daha	Score
1	Severe	3
2	Moderate	2
3	Mild	1
4	Absent	0

# \* Keshbhoomi Sweda (Table-7)

	Keshbhoomi Sweda	Score
1	Severe	3
2	Moderate	2
3	Mild	1
4	Absent	0

# 2. Objective Parameters

- Scalp photography for visual aid.
- Area of scalp involved.
- No. of patches

# **Differential Diagnosis**

- Androgenic Alopecia
- Brocq Pseudopelade
- Telogen Efflivium
- Tinea Capitis
- Trichotillomania

#### **Investigations**

- Hemoglobin (Hb)
- Thyroid Profile
- Calcium
- CRP
- Iron level
- Follicle stimulating and Luteinzing hormone (in females)
- Free and total testosterone

#### **Treatment**

- Minoxidil for local application.
- Anthralin for local application (for 20-60 minutes).
- Photochemotherapy.

# **Ayurvedic Review**

Khalitya is a vyadhi in which Keshpatan starts due to vitiation of dosha. Acharya Charak explained "Kesh" a mala of ashti dhatu and said that excess use of kshar and lavana rasa aggravates khalitya (lomakshaya). According to Acharya Charak Khalitya is a vyadhi with Vata-Pitta dominancy. He stated Samprapti that it occurs when kupita pitta along with dushita vatadi dosha move to the keshbhoomi and dushita the hair follicles. (तेजोऽिंगाहै: सह केशभूमि दगधवाऽशु कुर्यात् खदाति जरस्या च.चि.-26/132). Whereas Acharya Sushruta opines that Romkupgata or keshbhoomigata vitiated pitta along with vitiated vata leads to dislodgement of the hair from the hair root, further in the samprapti, vitiated sleshma along with rakta will cover the hair root area and creates avrodha to the hair root and due to avrodha the hair root gets deprived of nutrients results in no further hair growth. The author of Ashtanga Hridaya and Madhav Nidana describe the samprapti of khalitya in similar words of Acharya Sushruta.

रोमकूपानुगं पितं वातेन सह मूर्च्छितम्।प्रच्यावयति रोमाणि ततः श्लेष्मा सशोणित। रुणद्धि रोमकूपांस्तु ततोऽन्येषामसम्भवः।तदिन्द्रतुप्तं खालित्यं रुज्येति च सशोणितः॥ (सू.नि.-16/32-33)

In *Khalitya*, the vitiation of *pitta* and *vatta doshas* occurs due to the over indulgence in this respective aggravating factors. *Vyan vayu* and *Bhrajaka pitta* gets aggravated or gets *dushti* which cause hairloss. Due to *ushna*, *tikshana* properties of *pitta* and *ruksha*, *khara* properties of *vatta*. *Snigdha* and *pichhil* properties of *kapha dosha* gets dried within the *srotas* of scalp and cause malnourishment of hairs.

#### Nirukti

In Ashtang Hridya, Acharya Vagbhatta has mentioned (A.H.U.23/26). It suggests gradual hairloss. In Shabadkalpadrum & Vachaspatyam have mentioned Khalitya as Khalti Skhalayanti Kesh Asmat As Khala Sankhalane.

### **Synonyms**

- Charak Khalitya, Khalati
- Sushruta Khalitya, Indralupta, Ruhya
- Ashtang Hridya Khalrti, Chacha
- Ashtang Sangraha Khalrti, Rujha
- Madhav Khalitya, Indralupta
- Bhoja Indralupta, Ruhya
- Harita Keshghana

#### **Nidana**

In *Ayurvedic* Literature there is no any clear cut reference regarding the causative factors of *khalitya* except *Acharya Charak*, who has mentioned the major factors as follows.

- Lavanrasaatisevan (Ca.Su 26/43,Ca.Vi.1/18,A.H.Su.10/12).
- Ksharaatisevan (Ca.Vi.1/17).
- Ushar Bhoomi (Ca.Vi.1/18).
- Virudha Aharsevana (Ca.Vi.1/18).

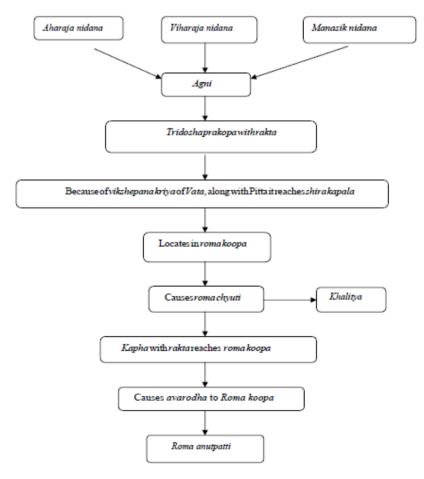
Etilogical factors of *Shiroroga* can be considered as etilogical factors of *khalitya*, which are as follows.

Vegvidharana, Diwaswapana, Asatmyagandh, Sheetamboosevan, Ama, Deshkala, Viparyaya, Atimaithuna, Dhooma, Rodana, Atapa, Uchhbhashya, Hima Avashyaya, Prajagrana, Manahatapa.

# Samprapti

Acharya Sushruta opines regarding samprapati of Khalitya- that Romkupgata or keshbhoomigata vitiated pitta along with vitiated vata leads to dislodgement of the hair from the hair root, further, vitiated sleshma along with shonita will cover the hair root area and creates avrodha to the hair root and due to avrodha the hair root gets deprived of nutrients results in no further hair growth.

रोमकूपानुगं पितं वातेन सह मूर्च्छितम्।प्रच्यावयित रोमाणि ततः श्लेष्मा सशोणित। रुणद्धि रोमकूपांस्तु ततोऽन्येषामसम्भवः।तदिन्द्रलुप्तं खालित्यं रूज्येति च सशोणितः॥ (सू.नि.-१३/३२-३३)



Flow Chart 1: Showing Samprapati of Khalitya.

Samprapti Ghataka

**Dosha** - Shareerik dosha - All the 3 doshas along with rakta

Sthanika dosha - Bhrajaka pitta pradhanya

**Dushya** - Dhatu involved are rasa and asthi.

Agni - the pathogenesis occurs due to Jataragni dusti, Rasadhatwagni

dusti and Asthidhatwagni induced by tridosha prakopa with rakta dushti.

Ama - Jataragni and dhatwagni mandya janya

**Srotas** - *Srotas* should be understood by studying *srotomula*.

Romakupa is affected by rasavaha and astivaha srotas.

Srotodusti parka - Sanga at various levels of samprapti

**Udbhava sthana** - Aamashya - pakvashaya

Sanchara Sthana - all over the body through rasayanis

Vyadhi adhistana - shirakapalagata, romakupa

Vyakti stana - shirogata kesha

**Roga marga** - bahya roga marga (Twak and Roma kupa)

#### Lakshana

Ashtanga Samgrahakara has classified Khalitya into four types.

Vataja, Pittaja, Kaphaja and Sannipataja Khalitya. Though Khalitya is a Tridoshaja Vyadhi, its types depends upon the dominancy of individual Dosha.

- 1) Vataja Khalitya: Keshbhoomi appears as if it is Agnidagdha and it becomes Shyava and Aruna.
- 2) *Pittaja Khalitya*: The colour of scalp appears as *Peeta*, *Neela* and *Harita*. The scalp is surrounded by the *Siras* (veins). Sweat may be found all over scalp.
- 3) *Kaphaja Khalitya*: The colour of the scalp is more or less same as that of colour of skin. It is *Ghana* and *Snigdha* in appearance and the colour tends towards whitish tinge.
- **4)** *Tridoshaja Khalitya*: In this type of *Khalitya*, characteristic of all the three *Doshas* are observed. The scalp looks like burnt and it bears nail like appearance.

#### Chikitsa

#### Shodhana

Nasya is the first line of treatment for *Urdhavjatrugata roga*.

Acharya's has mentioned Nasya as the primarily treatment. Other than that Shiroabhyanga, Shikrobasti, Virechna, Raktamokshana can also be done.

#### Shamana

Taila's advised for abhyanga in khalitya

- i. Malathyadi Taila
- ii. Jathyadi Taila
- iii. Snuhidugdhadi Taila
- iv. Bhringaraja Taila
- v. Gunja Taila
- vi. Bhruhat Bhringaraja Taila

# Lepas advised for khalitya

- i. Kaseesa, manashila and tutta lepa after pracchana
- ii. Musta and devadarulepa
- iii. Gunja mula and gunja phala lepa
- iv. Langali mula lepa with karaveera rasa
- v. Kshudra vartaka (kantakari) swarasa with madhu.
- vi. Daturapatra swarasa with bhallataka rasa
- vii. Gokshura with madhu, ghruta and tila pushpa
- viii. Hastidanta masi lepa
- ix. Maricha with kaseesa, Manashila and Tutta lepa
- x. kutannata and devadaru lepa.
- xi. Gunja Kalka lepa after avagadha pracchanna

(Su.chi.20/24-27)

xii. Acharya charaka has advised 6 churna pradehas

(*Ca.su.3/3-7*)

(A.Hru.ut.24/28-32)

- xiii. Kapotapanka mula or langali mula lepa to be repeatedly applied along with mahisha dugdha after deep pracchanna. The lepa is to be covered with erandapatra and left overnight.
- xiv. Bhrungaraja patra or sahachara patra applied with Mahisha navaneeta.
- xv. Vartaka phala siddha taila with Madhu and anjana as a lepa.

#### Pathya Apatyha

**Showing Pathya for Shiro Roga (Khalitya)** 

Ahara		Upachara		Aushadhi	
1	Shastika Shali	1	Swedana	1	Purana ghruta
2	Ksheera	2	Nasya	2	Patola
3	Amra	3	Dhumapana	3	Shigru
4	Amalaki	4	Virechana	4	Draksha
5	Dadima	5	Lepa	5	Vastuka
6	Matulunga	6	Seka	6	Karavellaka
7	Taila	7	Langhana	7	Haritaki
8	Takra	8	Shirobasti	8	Kusta
9	Kanjika	9	Raktamokshana	9	Bhrungaraja
10	Narikela	10	Agni karma	10	Kumari
11	Yusha	11	Upanaha	11	Musta
					Ushira
				13	Chandana

# **Showing Apathya for Shiro Roga (Khalitya)**

Aharaja			Viharaja		
1	Lavana rasa ati sevana	1	Kshavathu nigraha		
2	Kshara atisevana	2	Bhashpa nigraha		
3.	Katu and Amla rasa	3	Jrumba nigraha		
4	Virudha anna	4	Nidra nigraha		
5	Ati sevana of Jala	5	Vit Nigraha		
		6	Divaswapna		
		7	Vibadda jala majjana		
		8	Jala seka on the shira kapala		
		9	Ratri jagarana		

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