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TILADI TAILA NASYA KARMA IN KHALITYA – AN AYURVEDA REVIEW

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ABSTRACT

Hair is the most attractive and prominent feature in defining the personality of an individual. Rigorous changes in lifestyle which comprises unbalanced, faulty dietary pattern, lacking time for relaxation, suppression of natural urges and keeping away from nature. These largely cause diseases like hair fall, hypertension and diabetes etc. Among them Hair fall is the very ubiquitous condition.

The condition of Hairfall may be considered as *Khalitya* in Ayurvedic concepts. Where *Khalitya* is one among the *Shirorogas*/ *Kshudraroga*. *Pitta* present at the root of the hairs, getting increased in association with *Vata*, makes falling of hair. Then *Kapha* and *rakta* together block the follicles of the hair not allowing fresh ones to grow. Depending on its characteristic features it can be correlated with hairfall. For thousands of years, men and women of all countries and races have shared the tragedy of premature hair loss.

Nasya is the main line of management in *Shirorogas*. *Nasa* is considered as the gate way for *Shiras*. Along with many other benefits, it prevents hair fall and also accelerates the growth of hair. *Nasya* nourishes the *Srotas* present above the clavicle including the hair follicles, which strengthen the hair and reduce falling.

Sneha Kalpana is a procedure where the active principles present in the drugs are extracted into the *Sneha* (*Ghrita* or *Taila*) during the pharmaceutical process. Especially *Taila Kalpana* has its own importance in the treatment of *Khalitya*. *Tiladitaila* is one such formulation, which mainly consists of *Kalka* of *Yastimadhu* and *Krishna Tila*, *Mahisaksheera* as *Drava Dravya* and *Tilataila* as base.

Therefore, this study is proposed to evaluate the efficacy of "*Tiladi Nasya*" in *Khalitya* w.s.r to Hair fall and critical analysis of its ingredients and *Rasa Panchaka* in treating the condition.

Keywords : Hair fall, *Khalitya*, *Nasya*,*Tiladitaila*, *Sneha Kalpana*

INTRODUCTION

Ayurveda is the most ancient and holistic medical sciences of the world. It perceives and pronounces the basic and applied aspects of life process, health, disease and its management in terms of its own principles and approaches.

As it is rightly quoted – "Invest in your hair, it's the crown you never take off". To appear reasonably dignified, beautiful or handsome is the dream of every human being. It is in this regard the status of hair plays a very important role.

Hair plays an important role in making body externally beautiful, good looking long hair makes a person mentally enthusiastic and healthy. Skin and hairs are those external indicators which shows the equilibrium in internal environment of body. So, hair has great aesthetic value and it is the crowning glory of any person.

A human body without hair would be perceived just as a tree without leaves. So, everyone has an desire that his/her hair should be long, black and thick. As the hair is a beauty for women as well as men also, hair plays a substantial role in personality

Healthy, beautiful and attractive hairs increase the charm of the personality. Locks of hair envisage in itself an element vital for beauty. On the contrary withering hairs may totally turn the picture bizarre and unacceptable, especially when it starts at younger age. Today everyone is very cautious about their appearance. The certain amount of hair fall is normal as the old one is replaced by new hair growth. If there is excessive hair loss then it needs a treatment.

According to the survey up to 50%of men & 25% of women in India are victims of hair fall. For thousands of years, men and women of all countries and races have shared the tragedy of premature hair loss[1]. Hence there is a need to explore an effective line of management for *Khalitya*.

Classical texts of *Ayurveda* describe daily regimen for the maintenance of healthy hair which includes procedures like *Nasya*, *Moordhni Taila*, *Snana* etc. mentioned in *Rtucharya* and *Dinacharya*. These have taken a back seat in the 21 century because of changes in lifestyle and the constant race for materialistic comfort has deprived man of crucial time to maintain one's own health. This negligence on part of human kind is contributory towards poor hair health. Varied factors like faulty hair care, hormonal imbalance, pollution etc. further accentuate the degenerative changes seen in the hair. The present study is an attempt to counter the faulty degenerative changes through a better understanding of *Nidana*, *Samprapti* and *Samprapti Vighatana*, since most other measures employed today are not yielding satisfactory results.

Khalitya is one among the *Shirorogas*/ *Kshudra roga* characterized by gradual falling of hairs which is reversible. *Pitta* present at the root of the hair, getting increased in association with *Vata*, makes hairfall. Then *Kapha* and *Rakta* together block the follicles of the hair not allowing fresh ones to grow[2]. According to *Acharya Charaka*, the *Teja Dhatu* of the body in association with *Vayu* and other *Dosha*, scorches up the hair-root(scalp) giving rising to *khalitya*[3]. Depending on its characteristic features it can be correlated with hairfall.

In Ayurveda *Nasya* is the most important therapy as it is used for the treatment of *Urdhvajatrugata roga*. *Nasahi Shirasoh dwaaram*[4]. *Nasya* is the main line of management in *Shirorogas*. *Nasa* is considered as the gate way for *shiras*. Along with many other benefits, it prevents hairfall and also accelerates the growth of hair. *Nasya* nourishes the *shrotas* present above the clavicle including the hair follicles, which strengthen the hair and reduce falling[5].

Sneha Kalpana[6]is a procedure where the active principles present in the drugs are extracted into the *Sneha* (*ghee* or *taila*) during the pharmaceutical process. Especially *Taila Kalpana* has its own importance in the treatment of *Khalitya*. *Tiladi taila* is one such formulation, which mainly consists of *Kalka* of *Yastimadhu* and *Krishna tila*, *Mahisaksheera* as *Dravadravya* and *Tila taila* as base[7].

Increased hair fall in *Ayurveda* is termed as *Khalitya* and classified under *Shiro roga*. Nasya is the accepted line of treatment for *Khalitya* and when the *Taila* is used in appropriate medicated manner the results can be gratifying. For the present study *Tiladi Taila* described in *Sahasrayogam* in the management of *Khalitya* has been selected.

Therefore, this study is intended to evaluate the efficacy of "TILADI TAILA NASYA" in *Khalitya*.

OBJECTIVES OF THE STUDY

→ To evaluate the effect of **NASYA AS A TREATMENT MODALITY IN KHALITHYA.**

→ To evaluate the effect of **TILADI TAILA NASYA IN KHALITHYA**.

KESHA SHARIRAM

Etymology:

The word *Kesha* has been derived from the root "*Shi*" with "*Ach*" prefix

Vachaspatyam[8], *ShabdartanaMahodadhi* and *Nalanda Vishal Shabda Sagar* say "*Ke Shirasi Shete Shi".*

Definition:

1) *Kesha* is the entity which lies overhead / scalp region.

2) That which covers the head is called *Kesha*.

Parts of *Kesha*

1. *Keshaagra* – Hair ends
2. *Kesha Bhumi* / *Kesha Bhu* – Scalp
3. *Roma kupa* / *Kupaka* / *Loma kupa* – Follicle

The *Romakupa* / *Romachidra* is embedded in *Twacha* of *Shirakapala* this is the *Keshautpattisthana*

Origin of hair-

Ayurveda mentioned that human body is made up of main seven *dhatus* (body elements) viz. *Rasa, Rakta, Mansa, Meda, Asthi, Majja* and *sukra.* During this process of production of *dhatus* when metabolism of *asthi dhatu* occur by its own *agni & majja dhatu* emerges from *sara* part and at the same time hair of scalp & body and nails form as *mala*[9]. According to *acharya Sharngadhar*, Scalp and body hair are the *updhatu* of *Majja dhatu*. [10]

Among the all the *garbhaj bhava* (factors for development of foetus), hair is *pitraj bhava* means structure, colour and quantity of progeny are dependent on paternal side. [11] Hair made up of mainly *parthiva mahabhoota* (earth element). Hair formation starts during sixth month of

intrauterine life. [12]

According to modern science, hair growth cycle has three essential phases: Anagen, Categen and Telogen. The anagen segment is a progress phase which most commonly lasts 3-5 years. One a healthy scalp, there are roughly 100000 hair & 90% of the follicles are consistently in the anagen segment of hair development. Categen stage follows this phases, when the follicles begins to end up dormant which lasts for 2-3 week. The telogen stage is a dormant stage or resting interval that lasts 3-4 months. When this stage ends, hair falls out. That hair follicle then returns to the anagen stage & a new hair begins to develop. In this way, hair growth cycle continues. 50-60 hairs are lost per day in normal hair growth cycle. [13]

***Khalitya and Indralupta*:** Gradual falling of hair is known as *Khalitya*. When *pitta* combines with *vata* or *kapha dosha* to destroy the hair, it is called *khalitya*. [14] According to *Acharya Charaka*, The *tejas dhatu* (heat of body) of the body in association with *vayu* and other *dosha*, scorches up the hair-root (scalp) giving instantaneous rise to alopecia (*khalitya*) in man. One more term used in texts for hair fall is *Indralupta*. *Ruchya* and *chach* are two of its synonyms. [15] According to *Acharya kartika*, falling of hair from all over the body is called *ruhya*.

Causes of *Khalitya Roga*-

Due to *ushna guna* of *pitta dosha* individual of *pitta prakriti* starts hair fall and greying of hair earlier than individuals of other *dosha prakriti*. [16]

➢ Causative factor of *shiroroga* are too much exposure to smoke, sunlight, mist, indulge in water sports; excessive sleep or avoiding sleep, sweating, eastern breeze or direct breeze, control of tears, weeping too much, drinking water & wine in large quantity, presence of warms in side body, suppression of urges, avoiding the use of pillow, bath and oil anointing, always looking downwards, unaccustomed, unhealthy, vitiated or raw smell, too much speaking etc; by indulgence in these and similar causes the *dosha* get aggravated and produces diseases in head. This can produce *khalitya* because of same place of manifestation. **[11]**

➢ Excessive consumption of salt and *kshara* leads to *khalitya*. [17] Improper diet or excess salt in diet consumption by pregnant lady causes *khalitya* early in her child due vitiation of *pitta dosha*. [18] Getting angry, talking & laughing too much, sneezing and over exertion after taking *nasya* leads to *khalitya* and *palitya*. Here, hair fall occurs because of not following agenda after *Nasya* procedure.

➢ Hair fall can be caused by decrease in *asthi dhatu* or vitiation of *asthi dhatu*. As hairs are formed by waste product of *asthi dhatu* and hair dependent upon it for nutrition. [19]

➢ Excessive combing during *ritukal* leads to hair fall in child. [20]

➢ Causes according to modern science - Nutritional disorder, Local skin disorder, Endocrinal diseases, Post - acute illness, Stress, Drugs, Cosmetics and Genetic tendencies.

***KESH POSHAN* (NUTRITION OF HAIR)**

According to *Acharya Charaka*, from the ingested food forms an assimilable nutrition fluid (*Ahara rasa*), which further divided into two parts, namely essential fluid (*Sara bhaga*) and the excretory matter (*kitta*). The waste product is responsible for the production and nutrition of so many things like sweat, urine, hair, nails etc. and among them are the hair follicles the hair of the head and beard, hairs of the body.[21] According to *acharya Sushruta*, *Kesha* get nutrition from the end part of the *dhamanis* which are attached to the *romakoopa.[22]*

***SAMPRAPTI* OF HAIR FALL (*KHALITYA*)**

Nidan sevana- Ushna, Tikshna, Ruksha, Atilavanasevana, Ksharaatisevana + Divaswapana, Prajagarana, Atapasevana, Ushar bhomi + Manahtapa → Vata prakopa, Pitta prakopa,

Kapha prakopa → Rasarakta dushti & Asthidhatwagni dusti → Kesha patana & Siramukha avarodha → Khalitya.

NASYAKARMA

Definition of *Nasya*

In *Ayurveda*, the word *Nasya* specifically indicates the root of administration of the drugs. According to *Acharya Sushruta*[23], administration of medicine or medicated oils through the nose is known as *Nasya. Arunadatta* and *Bhavaprakasha*[24] opines that all drugs that are administered through the nasal passage are called *Nasya*.

Synonyms :

-*Nastaha Pracchardana*

-*Shirovirechana*

-*Murdhavirechana*

-*Navana*

All the acharyas have mentioned nasya karma for the *urdhvajatrugata 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*. *Acharya Sushruta* has also mentioned about *pradhamana nasya* in the management of *khalitya*. There are following *nasya* in *khalitya*.

1. *Yastimadhukadhya tailam nasya.*
2. *Chandanadhya tailam nasya.*
3. *Prapoundrarikadhya tailam nasya.*
4. *Markavadhya tailam nasya.*
5. *Vidarigandhadi tailam nasya.*
6. *Jambuadhya tailam nasya.*
7. *Anu tailam nasya.*

Table No. 12. Showing classification of Nasya according to various *Acharya*

No	**Name of *Acharya***	**No**	**Reference**	**Classification**
1	*Charaka*	3	Ch.Si. 9/89-92	In relation to mode of action - *Rechana, Tarpana, Shamana*
		5	Ch.Si. 9/89-92	In relation to the method of administration – *Navana, Avapidana, Dhmapana, Dhuma, Pratimarsha*
		7	Ch.Vi. 8/151	In relation to parts of drugs utilized – *Phala, Patra, Mula, Kanda, Pushpa, Niryasa, Twaka*

2	*Sushruta*	5	Su.Chi.40/21	*Shirovirechana, Pradhamana, Avapida, Nasya, Pratimarsha*
3	*Vagbhata*	3	As.H.Su.20/2	*Virechana, Brimhana, Shamana*
4	*Kashyapa*	2	Ka.Si. 2 & 4	*Brimhana, Karshana*
5	*Sharangadhara*	2	Sha.Utt.8/2,11,24	*Rechana, Snehana*
6	*Bhoja*	2	DalhanaSu. Chi. 40/31	*Prayogika, Snaihika*
7	*Videha*	2		*Sangya Prabodhaka, Stambhana*,

Navana Nasya

Navana Nasya is generally the *Sneha Nasya* and is known as "*Nasya*" in general. It is the most widely used type of *Nasya*.

Method: The medicated oil or *ghee* is administered in form of drops into the nostrils.

Instrument: According to *Acharya Charaka*[25] *Pranadi* (pippet or dropper) is used for administration of *Sneha* into nostrils.

Classification: It is classified into two types.

a. *Snehana Nasya*

b. *Shodhana Nasya*

***Snehana Nasya*:** It provides strength to all *Dhatus* and is used as *Dhatu Poshaka* i.e.nourishing the *Dhatu*.

The dosage schedule for *Sneha Nasya* is as below[26]

i) *Hina Matra* - 8 *Bindu* in each nostril

ii) *Madhyama Matra* - 16 *Bindu* in each nostril (*Shukti Pramana*)

iii) *Uttama Matra* - 32 *Bindu* in each nostril (*Panishukti Pramana)*

According to *Bhoja*, *Matra* of:

Prayogika Sneha Nasya- 8 *Bindu*

Snaihika Nasya- 16 *Bindu*

Depending on *Doshabala* quantity can be doubled or tripled.

Shodhana Nasya

Shiro Virechana type stated by *Acharya Sushruta*, is included under *Shodhana* type of *Navana Nasya* which eliminates the morbid *Doshas*.

Drugs: In this type of *Nasya*, *Shiro Virechana Dravyas* like *Pippali*, *Shigru* etc. are selected for preparing oils.

Dose: It can be given in following doses according to *Acharya Sushruta*[27]

(i) *Uttama* - *8 Bindu*

(ii) *Madhyama*- *6 Bindu*

(iii) *Hina* - *4 Bindu*

Suitable time for giving *Nasya*

According to *Acharya Charaka*, generally *Nasya* should be given in *Pravruta*, *Sharada* and *Vasanta Rutu*.

a) Time schedule according to different seasons as mentioned below[28]:

Rutu	***Nasya* to be given at**
•*Greeshma Rutu*	- Morning
•*SheetaRutu*	- Noon
•*Varsha Rutu*	- When day is clear, without clouds

According to *Acharya Sushruta*, in normal conditions *Nasya* should be given on empty stomach.

b) Time schedule according to *DoshajaVikara* as mentioned below

DoshajaVikara	***Nasya* to be given at**
• *VatajaVikara*	Evening
• *PittajaVikara*	Noon
• *KaphajaVikara*	Morning

In *Vataja Shiroroga, Hikka, Apatanaka, Manyastambha and Svarabhramsha, Nasya* can be given daily in morning and evening. *Acharya Sharangadhara* also agrees with *Acharya Sushruta* for time of administration of *Nasya* in different seasons. He further adds that, if the patient is suffering from *Lalasrava*, *Supti*, *Pralapa*, *Putimukha*, *Ardita*, *Karnanadi*, *Trishna*, *Shiroroga* and such conditions having excessive vitiated *Doshas*[29], *Nasya* can be administered at night time.

Table No. 15. Course of *Nasya Karma*

No.	Name of *Acharya*	Days
1	*Sushruta*	1,2,7,21
2	*Bhoja*	9
3	*Vagbhata*	3,5,7,8

INTRODUCTION:

1. *Tila Taila*[30]

It is the oil expressed from the seeds of *Tila*. This oil is said to be the best for medicinal use. It is used both externally and internally. In *Ayurveda* classics if specific Taila is not mentioned in a particular context, the word *Taila* applies to *TilaTaila*, because it is considered the best among the *Taila*.

Botanical name : Sesamum indicum Linn

Family **:** Pedaliaceae

Vernacular names

English : Sesamum, Gingelly oil

Hindi : TilaTaila

Gana Vargikarana (Classical Categorization)

Charaka - Swedopaga Varga, Purishavirajaniya Varga

Bh.Pr.Ni – Dhanya Varga

Properties

Rasa *:Tikta and Kashaya Anurasa*

Guna *: Guru, Ruksa, Suksma,Visada,Snigdha, Tikshna, Vyavayi,*

Virya *: Ushna*

Vipaka *: Katu*

Karma : *Vataghna,Sarvarogahara ,Keshya, Stanyavardhaka, Vranahara, Dantya, Grahi, Dipana, Alpamutra kara, Artavajanana*.

Doshakarma *: Vatashamaka*

Therapeutic Indications (Rogaghnata) – *Vatavyadhi, Shula, Amavata, Keshavikara, Dantavikara, Agnimandya, Stanyakshya, Artavavikara, Atisara and Vrana.*

Parts used – Seed

Bh.Pr.Ni – 3 Types :

•*Shweta Tila*

•*Krishna Tila*

•*RaktaTila*

COMPOSITION- Neutral lipids, Glycolipids, Phosphor lipids, Riboflavin, Ascorbic acid, Nicotine acid, Pantothenic acid, Folic acid, Biotin, Pyridoxine, Thiamine, Arginine, Cystine, Tyrosine, Valine, Vitamin A, Alpha – Beta Tocopherol. Sugars present are Glucose, Sucrose, Galactose, Planteose, raffinose Fatty acids – Myristic, Palmitic, Stearic, Arachidic, Hexadecenoic, Oleic, Linoleic and Lignoceric.

***MoorchitaTilaTaila*:**[31]

Taila Moorchana requires 9 drugs; a brief review of which is given in the table below:

Table No 19. Properties of the drugs of *MoorchitaTilaTaila*

Dravya	***Rasa***	***Guna***	***Veerya***	***Vipaka***	***Doshaghna***	***Rogaghna***
Manjistha	*Kashaya,Tikta*	*Guru*	*Ushna*	*Katu*	*Kapha Pitta Shamaka*	*Twak, Rakta Vikara*
Haridra	*Tikta,Katu*	*Ruksha, Laghu*	*Ushna*	*Katu*	*Kapha Vata Shamaka*	*Kandu*
Lodra	*Kashaya*	*Laghu, Ruksa*	*Sheeta*	*Katu*	*Kapha Pitta Shamaka*	*Raktasrava, Kustha*
Mustaka	*Tikta, Katu*	*Laghu, Ruksha*	*Sheeta*	*Katu*	*Kapha Pitta Shamaka*	*Jwara, Amatisara*
Nalika		*Laghu*	*Sheeta*		*Tridoshagna*	*Netra Vikara,Mutra Kruccha*
Amalaki	*Amla Pradhana*	*Ruksha, Laghu*	*Sheeta*	*Madura*	*Tridoshagna*	*Prameha, Kalitya*
Haritaki	*Kashaya Pradhana*	*Laghu, Ruksha*	*Ushna*	*Madhura*	*Tridoshaghna*	*Jwara, Kasa*
Vibitaki	*Kashaya*	*Ruksa, Laghu*	*Ushna*	*Madhura*	*Tridoshaghna*	*Kasa, Swasa*

Kethaki	*Tikta, Katu*	*Laghu, Snigdha*	*Ushna*	*Katu*	*Kapha Pitta Shamaka*	*Jwara, Amavata*
Hrivera	*Tikta, Kashaya*	*Ruksha, Laghu*	*Sheeta*	*Madhura*	*Tridosha Shamaka*	*Jwara, Raktha Pitta*
TilaTaila	*Madhura*	*Tiksna, Usna*	*Ushna*	*Madhura*	*Tridoshaghna*	*Vata Vyadhi,* as a base for different medicated oil preparation

Method of preparation[32]**:**

Ingredients of *MoorchitaTilaTaila* are – *Manjishta* 1/16 part, *Triphala* 1/64 part, *Haridra* 1/64 part, *Lodhra* 1/64 part, *Kethaki* 1/64 part, *Hrivera* 1/64 part, *Mustha* 1/64 parts, *Nalika* 1/64 part, *TilaTaila* 1 part, Water 4 parts. *TilaTaila* is put in an iron pan and heated over *Mandagni* till the bubbles and sound gets subsided. Following it the pan is removed from heat and allowed to cool down to atmospheric temperature. Above mentioned drugs are made into fine powder and *Kalka* is prepared out of it. This *Kalka* and mentioned quantity of water is added to *TilaTaila* and heated till *Taila Siddha Lakshana's* are attained. This process removes smell of the oil. After that vessel was taken out from the fire and the *Taila* thus prepared was filtered through a cloth and was collected in a clean air tight container.

2.***KRISHNA TILA***[33]***:*** *Tila* seeds have oil in it and the oil or *Tila* if applied over the body provides unctuousness.

Botanical name : Sesamum indicum Linn

Family : Pedaliaceae

Kula **:***Tilakula*

Synonyms : *Tila*, *Snehaphala*

Properties

Rasa *: Pradhana rasa – Madhura ; Anurasa – Kashaya, Tikta, Katu*

Guna *: Guru, Vishada, Vyavayi, Vikasi, Snigdha, Sukshma, Himasparshi*

Virya *: Ushna*

Vipaka *: Madhura/ Katu*

Doshaghnata *:Kapha Pitta hara*

Karma :*Balya, Sthanya, Shukrala, Keshaya*

Action: Seeds – important source of Protein, rich in Thiamine, Niacin, lactagogue, diuretic, Laxative, Emollient. Powdered seeds given in Dysmenorrhea and Amenorrhea. Paste is applied over Burns, Scalds, Piles.

Leaves used in affections of kidney and bladder. Bland mucilage is used in Infantile Diarrhea, Dysentery, Catarrh, Bladder troubles, acute Cystitis and Strangury.

Parts used – *Beeja, Patra, Taila, Moola*

Chemical composition: Neutral lipids, Glycolipids, Phosphor lipids, Riboflavin, Ascorbic acid, Nicotine acid, Pantothenic acid, Folic acid, Biotin, Pyridoxine, Thiamine, Arginine, Cystine, Tyrosine, Valine, Vitamin A, Alpha – Beta Tocopherol.

Sugars present are Glucose, Sucrose, Galactose, Planteose, raffinose

Fatty acids – Myristic, Palmitic, Stearic, Arachidic, Hexadecenoic, Oleic, Linoleic and Lignoceric.

3. Yastimadhu[34]

Yashtimadu, a terrestrial creeper, the stems and roots are sweet in taste. Useful in impotency.

Botanical name : Glycyrrhiza glabra Linn

Glycyrrhiza – Glykas: means sweet; rhiza: means root, **glabra** – Smooth and hairless

Family: Fabaceae, Papilionaceae

Kula: *Aparajitadi* kula

GanaVargikarana (*Classical categorization*)

Charaka – *Jivaniya Varga*, *Sandhaniya Varga, Varnya Varga, Kanthyavarga, Kandughna Varga, Chardhinigraha Varga, Snehopaga Varga, Vamanopaga Varga, Asthapanopaga Varga, Mutravirajaniya Varga, Shonitapsthapana Varga, Angamardaprashamana Varga*

Synonyms: *Madhuli, Yashtika, Atirasa, Yashti, Maduralatha, Maduravalli, Yashtimadhu, Madhuka. Klitakaanad, Klitanakam* are aquatic varieties.

Vernacular names

English : Liquorice root

Hindi : Mulethi

Unani : Asl-us-soos, Mulethi, Rubb-us-soos (extract)

Siddha : Atimadhuram

Properties

Rasa : Madhura

Guna : Guru, Snigdha

Virya : Sheeta

Vipaka : Madhura

Doshaghnata*:Vata Pitta Shamaka*

Karma:

Yashtimadhu*: Balya, Chakshushya, Varnya, Shukrala, Keshya, Swarya, Kanthya, Vranahara, Sothahara, Vishaghna, Trushnahara, Ruchya, Kasahara, Swasahara, Shirashula hara*

Klitanaka*:Trushnahara, Ruchya, Balya, Vrushya, Vranahara, Chakshushya, Raktapittahara*

Pharmacological activities: Anti-viral, spasmolytic, anti-inflammatory, anti-microbial, Demulcent, Expectorant, Mild-laxative, Anti-Stress, Anti-Ulcer, Liver protective, Estrogenic, Anti-Diabetic

Parts used - Root

Bheda – According to *Charaka* there are two varieties

a) *Yashtimadhu*

b) *Klitanaka*

Therapeutic Uses (*Rogaghnata*):

Yashtimadhu: *Khalitya, palitya, Klaibya, Dourbalya, Shwasa, Kasa, Swarabheda, Vishavikara, Aruchi, Trushna, Daha, Vaivarnya and Shirashula*.

Klitanaka: *Trushna, Aruchi, Dourbalya, Klaibya, Raktapitta, Netravikara*.

YOGAS:

Yashtimadhuvadi Taila – Khalitya, Kesharoga

Yashtyadi Kashaya – Raktatisara, Raktapradara

Yashtivasadi Kashaya – Kamala

MadhukadiGhrita – Kshatashina, Raktagulma

Chemical composition – Root contains Glycyrrhizin, a yellow amorphous powder, asparagine, prenylated biaurone, licoagrone, liqcomarin, glyzaglabin, quercetin, kaempferol, liquiritigenin, liquorice, glycyrrhizin, sulphuric and malic acids. Calcium and Magnesium salts. Bark contains small quantity of Tannin.

4.MAHISHA DUGDHA[35]

Buffaloes – or Bubalus bubalis – are mammals, that means their mammary glands produce milk to feed their offspring's. In some countries, they are milked for commercial purpose.

India and Pakistan produce about 80% of all buffalo milk worldwide, followed by China, Egypt and Nepal.

Buffalo milk has a high protein and fat content, which nourishes all the depleted humors of the body.

Composition: Daily vitamin consists of 40% phosphorus, 32% calcium, 19% magnesium, 14% Vitamin A compared with 29%, 21%, 6% and 12% in cow,s milk respectively.

Benefits :

•Improve bone health

•Provide antioxidant property

•Improve heart health

Ayurvedic Properties :

Rasa: *Madhura*

Guna: *Guru, Atisnigdha, Ati Abhishyandi,*

Virya: *Sheeta*

Vipaka: *Madhura*

Karma: *Vahni Nashanam,* Cures *Anidra, Balakara, Pushtikara, Viryavardhaka,* Cures *Pitta Vikaras, Daha (*Burning sensation*), Rakta Vikara (*Blood diseases*), Kaph kara, Tandrakara, Shramanashaka, Sanjivana Swarupa, Strotorodhaka, Sthulakara,* Cures *Kshudha*

Table no.20. *Rasa Panchaka* of *Tiladi Taila*

Drugs used	Botanical Name	Pharmacological properties				Therapeutic properties		
		Rasa	*Guna*	*Virya*	*Vipaka*	*V*	*P*	*K*
Krishna Tila	Sesamum indicum	*Pradhana - madhura Anurasa - Kashaya, Tikta*	*Guru, Vikasi, Vishada, Sukshma, Himasparshi*	*Ushna*	*Madhura, Katu*		↓	↓
Murchita Tila Taila	-	-	-	-	-	-	-	-
Yashtimadhu	Glycyrrhiza glabra	*Madhura*	*Guru, Snigdha*	*Sheeta*	*Madhura*	↓	↓	
Buffalo Milk	Bubalus bubalis	*Madhura*	*Guru,Atisnigdha, Abhishyandi,*	*Sheeta*	*Madhura*	↓	↓	

DISCUSSION

Tiladitaila is a unique preparation mentioned in *Sahasrayogam- Taila prakarana* for *Kesa Patana* comprising the Snehapaka of *Tila Taila* with the *kalka* of *Yastimadhu* roots and seeds of *Krisna tila* along with *Mahisha ksheera*.

According to Ayurvedic classics, *Yastimadhu* and *Krisna tila* are having *Kesya* property. The *Mahisha ksheera* has capacity to induce natural sleep.

DISCUSSION ON KHALITYA

Ayurveda emphasizes on the role of *Pitta* and *Vata* in the production of *Khalitya*. This disease may occur either independently or as a symptom of vitiated *Asthidhatu*. According to *Acharyas*, *Pitta* along with *Vata* enters into the *Romakoopa* (hair roots) and produces *Khalitya* whereas the augmented *Kapha* along with *Rakta* blocks the *Romakoopa* thus preventing the production of new hair. The etiological factors like *Atilavanasevana*, *Viruddhahara*,

Atiatapasevana Atiksharasevana, etc. are responsible for producing *Khalitya*. In the *Samprapti*; *Srotorodha* due to *Pitta*, *Vata* and *Kapha Prakopa* are important factors. Gradual hair loss is a paramount symptom of *Khalitya*. On the basis of patterns, *Khalitya* should be differentiated from other diseases like *Indralupta, Ruhya* etc.

Due to etiological factors, the *Pitta* gets intensified in its *Ushna* and *Tikshna Gunas* whereas *the Ruksha, Khara* and *Chala* properties of *Vata* are increased. The increase of *Ushna* and *Tikshna Gunas* of *Pitta* will deplete the *Snehamsha* of *Pitta* which in turn burns the *Keshbhoomi* and cause prematurely falling of hair, whereas the increased *Ruksha* and *Khara* properties of *Vata* along with vitiation of *Pitta* giving rise to a more frequent and comparatively prolonged *Shira Samkocha* and along with the augmented *Chalaguna* creates the gradual falling of hairs from the scalp.

Due to the increase in *Ushna*, *Tikshna* and *Ruksha*, *Khara* properties of *Pitta* and *Vata Dosha* respectively, the *Sneha* and *Picchilatva* of the *Kapha Dosha* dries up within the pores of the skin of the scalp thus hindering the further growth of new hairs causing *Khalitya*.

Hair fall that occurs due to an underlying weakness of hair follicles to androgenic disbalance. It is the most common cause of hair fall and will affect up to 70% of men and 40% of women at some point in their lifetime. Men typically present with hairline recession at the temples and vertex balding while women normally diffusely thin over the top of their scalps, causing increase in girth of their mid-section. Both genetic and environmental factors play a vital role, and many etiologies remain unknown. There is no standard method to assess this pattern and chronicity of hairfall. Hence, diverse methods can be combined.

Khalitya should be treated by *Nasya*, *Shiroabhyanga* on head and *Pralepa* on the head along with *Shodhana Chikitsa*. According to *Charaka*, nose is the gateway of head. The drug which is instilled through the nose reaches the brain and eradicates only the morbid *Dosha* responsible for producing the disease. *Nasya* is the most significant therapy to treat *Khalitya*. So, Nasya is opted for the clinical study.

Probable Mode of action of *Tiladi Taila Nasya*:

The ingredients of this recipe are *Krishna Tila, Yastimadu* and *Moorchita Tila Taila*. These drugs are having *Madhura, Katu, Tikta*, and *Kashaya Rasa*. *Ushna* and *Sheeta Virya*. *Guru, Laghu*, *Snigdha, Ruksha* and *Tikshna Guna*, whereas *Katu* and *Madhura Vipaka*. *Tridosha-Shamaka* and *Kapha-Pittashamaka* property. The drugs are also having the other properties like *Keshya,Rasayana* and *Keshavardhana*. These constituents were prepared by the *Taila Paka Vidhi* according to their individual properties emerged into each other and emerges some new properties like *"Sanskaro Hi Gunantaradhanam*".

The *Laghu* and *Snigdha* properties would act on the vitiation of the *Kapha* and *Vata Dosha* respectively whereas *Sheeta Virya* and *Madhura Vipaka* would act on *Pitta Dosha*. *Ushna Virya* would act on the vitiation of *Kapha* and *Tikta Rasa, Sheeta Virya* and *Madhura Vipaka* would act on *Pitta Dosha.* The *Ushna Virya* and *Snigdhatva* would aid in liquefying the dried *Kapha* in the pores of the scalp locally clearing up the obstruction.

DISCUSSION ON MODE OF ACTION OF *NASYA*:

Nose is the gateway of head. Hence it may be said that the *Nasya* may reach the *Shiras*. The *Tiladi Taila*, which having *Tridosha-Shamaka* effect that is administered through nostrils reaches the *Shrungataka Marma* which is a *Sira Marma* formed by the union of *Shiras* supplying to *Nasa, Karna, Netra and Jihwa*. After reaching *Shrungataka*, spreads in the *Murdha*. Out of four *Tiryak Dhamani*, each *Dhamani* divides into hundred and thousand times and become innumerable. These *Dhamani* form a network and have their openings in the *Romakoopa* and reaching *Romakoopa* leads to reduction of hair fall.

Importance of the *Purva Karma* in *Nasya Karma* is to facilitate for drug absorption through nasal neurons and paranasal sinuses. One specific anatomical structure named *Munja* which is like a type of *Ishika* (painters brush). This evolves the theory of selective eradication of targets(impurities) i.e. when judiciously applied, the *Nasya* absorbs only impurities, and evacuates them through nasal passages. The *Snehana Nasya* is targeted to promote growth and rejuvenate the degenerating factors to regenerate healthy tissue. *Tiladi Taila*, which is administered through nose enters into *Shiras* and morbid *Doshas* draws out as the *Ishika* is taken out after removing the fibrous coating of *Munja* adhered to it. The *Munja* can be compared to olfactory bulb and *Ishika* for the numerous neurons.

Scientific explanation for mode of action of *Nasya*

Effect on drug absorption and transportation:

- Keeping the head in lowered position and retention of medicine in naso pharynx, helps in facilitating enough time for local drug absorption.
- Any liquid soluble substance has greater possibility for passive absorption directly through the cells of lining membrane.
- On the other hand, massage and local fomentation also boosts the drug absorption.

The later course of drug transport can happen in two ways-

- By general systemic circulation.
- Direct pooling into the intracranial region.

The second way is more effective. This direct transportation can be expected again in two paths,

- By vascular path
- Lymphatic path

Vascular path

- Vascular path transportation is possible through the pooling of nasal venial blood to the facial vein, which certainly occurs. Just at the opposite entrance, the inferior ophthalmic veins also pool into the facial vein. Both facial and ophthalmic veins have no venial valves in between. So that, blood may drain on either side, this means the blood from facial vein can enter cavernous venous sinus of the brain in reverse direction. Thus, such pooling of blood from nasal veins to venous sinuses of the brain, is more expected in the head lowered position due to gravity.
- Pooling of blood from para nasal sinuses also possible.

Lymphatic path

Drug transportation by lymphatic path, can reach directly into the CSF. When aggravation of *Dosha* takes place in head due to exasperating effect of administered drug resulting in increase of the blood circulation of brain. So accumulated vitiated *Dosha* are expelled out from small blood vessels and eventually these vitiated *Dosha* are ejected out as nasal discharge, tear and salivation.

CONCLUSION

✓ The comprehensive description of *Khalitya* is not found in Vedic literatures, though some scattered references can be outlined indirectly from *Bruhattrayis*. The clear cut descriptions can be found only in later *Samhitas* and commentaries. *Acharya Vagbhata* was the first to differentiate *Indralupta* and *Khalitya.*

✓ *Khalitya* is commonly seen in the age group of 18-40 years, more in males than females. People living in sedentary ways of life, stress induced hectic and unhealthy schedules along with indiscriminate dietary habits result in malnutrition, Anemia, Hypocalcemia & low Amino acid level causes many problems which directly reflect in loss of hair.

✓ In etiopathological study *Lavana, Katu* and *Kshara Pradhana Dravya*, *Ruksha Dravya, Raja* and *Atapa Sevana, Prajagrana, Divaswapna* and *Krodha* are responsible for development of *samprapti* of *Khalitya*.

✓ *Tiladi Taila Nasya* is safe and effective treatment in *Khalitya* mentioned in *Sahasrayogam* specially indicated in *Keshapatana*.

✓ *Nasya* of *Tiladi Taila* is effective in liquefying the dried *Kapha* in the pores of the scalp locally carrying up the obstruction offered to the growth of new hair and it removes the local infection and help in checking the hair fall and thus helps in cessation of the future process of *Khalitya*.

✓ This work is given in with the hope that the observations and results expand the scope for further studies as this study was conducted with an aim to achieve the conclusions in a limited period, Single drug and in a small sample.

✓ Tiladi taila was subjected to standardisation methods of taila to check its shelf life, rate of decomposition and stability. Acid value of Tiladi taila is 3.2, Iodine value is 101.84, Moisture content W/W value is 1.03, Saponification value is 192.42. We can conclude that *Tiladi Taila* is stable and efficacious remedy in treating *Kesha patina*[36].

REFERENCES

1.Hairloss From Wikipedia, the free encyclopedia https://en.wikipedia.org/wiki/Hair_loss .

2.Gupta.Atrideva.Kaviraj; Vagbhata's Astanga Samgraha; Chaukhambha Krishnadas Academy, Varanasi:volume 2,Uttarastana;chapter no 28:sloka no19,20. Edition 2002. Page no 288.

3.Shukla vidyadhar,Tripati dutt ravi; Charaka Samhita of agnivesha; Chaukhambha Orientalia Varanasi;volume-2; Chikitsastana;26th Chapter, Shloka no.132, reprint edition 2017.Page no 647.

4.Shukla vidyadhar,Tripati dutt ravi; Charaka Samhita of agnivesha; Chaukhambha Orientalia Varanasi;volume-2; Siddhistana;9th Chapter, Shloka no.88, reprint edition 2017.Page no 958.

5.Thankan Rajani , Patil vasant , Aithan prasanna. Clinical study on effect of different procedures of nasya with Bhringaraja Taila in khalitya, Journal of Ayurveda and holistic medicine, April, 2014, Vol.2 , Issue 4.

6.Bhaisajya Kalpana Vijnanam by Dr.K.Rama Chandra Reddy – Sneha Kalpana Adhyaya Page no. 332 & 335; Choukambha Sanskrit Pratistana, Delhi.

7.Sahasrayogam by Dr. Ram Nivas Sharma & Dr. Surendra Sharma – Taila Prakarana Page no. 101- Choukambha Sanskrit Pratistana, Delhi.

8.Vachaspatyam; Chaukhambha Sanskrit Series office Varanasi; volume-3; reprint edition 2002.

9.Agnivesha, Charaka Samhita English translation, vol. IV, Chikitsasthan, grihanidoshachikitsa adhyaya (15; 19). Varanasi: Chaukhambha Sanskrit Series office; 2009. p.15.

10.Sharngadhara, Sharngadhara Samhita, Prof. K. R. Srikanta Murthy, Prathamakhand, kalaadikakhyana adhyay(5:15).Varanasi: Chaukhambha orientalia; 2001. p.21.

11.Agnivesha, Charaka Samhita, English translation, vol. II, Dr. Ram Karan Sharma and Vaidya Bhagwan Dash, Sharirasthan khuddikagarbhavakrantisharira adhyaya (3;7). Varanasi: Chaukhambha Sanskrit Series office; 1985. p.371.

12.Vagbhat, Astangasamgraha,Sasilekha Sanskrit commentary by Indu, Prof. Jyotir Mitra,

Sharirasthan, garbhavakranti adhyaya (2;23). Varanasi: Chaukhambha Krishnadas

Academy; 2008. p.278.

13.Gerard Tortora and Bryan Derrickson: Principles of Anatomy and Physiology, John

Wiley and sons, Hoboken, Volume 2 Page no - 155-157

14.Vagbhat, Astanga Hridaya, English translation, vol. III, Prof. K. R. Srikantha Murthy,Uttara sthana, shiroroga vigyaniya adhyaya (23;24,25). Varanasi: Chowkhambha Sanskrit Series Office; 1997. p. 222

15.Vagbhat, Astanga Hridaya, English translation, vol. III, Prof. K. R. Srikantha Murthy,Uttara sthana, shiroroga vigyaniya adhyaya (23;25,26). Varanasi: Chowkhambha Sanskrit Series Office; 1997. p. 222

16.Agnivesha, Charaka Samhita, English translation, vol. II, Dr. Ram Karan Sharma and Vaidya Bhagwan Dash, Vimansthan, Rogabhishagjiteeya adhyaya (8;97). Varanasi: Chaukhambha Sanskrit Series office; 1985. p. 264

17.Agnivesha, Charaka Samhita, English translation, vol. II, Dr. Ram Karan Sharma and Vaidya Bhagwan Dash, Vimansthan, Rasviman adhyaya (1;17-18). Varanasi: Chaukhambha Sanskrit Series office; 1985. p. 121.

18.Agnivesha, Charaka Samhita, English translation, vol. II, Dr. Ram Karan Sharma and Vaidya Bhagwan Dash, Sharirasthan, Jatisutriya adhyaya (8;21). Varanasi: Chaukhambha Sanskrit Series office; 1985. p. 475.

19.Agnivesha, Charaka Samhita, English translation, vol. I, Dr. Ram Karan Sharma and Vaidya Bhagwan Dash, Sutrasthan, Kiyantahshirashiya adhyaya (17;67). Varanasi: Chowkhambha Sanskrit Series office; 2006. p. 324.

20.Sushruta, Sushruta Samhita, Hindi commentary, part I, Kaviraja Ambikadutta Shastri, Sharirasthan, Shukrashonitashuddhisharira adhyaya (2;26). Varanasi: Chaukhambha Sanskrit Sansthan; 2014. p. 17.

21.Charak Samhita with Vidhyotini Hindi commentary by Kashinath Shatri and Gorakhnath chaturvedi, Chaukhmbha Bharati Academy, Varanasi. Sutra sthana 28/4, 2007. Page no. 568-569.

22.Sushruta Samhita with Ayurvedtatva sandipika Hindi commentary by Kaviraj Ambika Dutt Shastri, Chaukhambha Bharti Academy, Varanasi. Sharir sthana 9/9, 2010. Page no. 94.

23.Sharma.P.V; Sushruta Samhita; Chaukhambha Vishwabharti Varanasi; Chikitsasthana; 40th chapter; Shloka no.21-29. Edition 2005. Page no 672.

24.Misra et al; Bhavaprakash Nighantu yukta; Chaukhambha Sanskrit Bhavan Varanasi; Dinacharyadi prakaran; 5th chapter; Shloka no.48. Edition 2007. Page no 112.

25.Shukla vidyadhar,Tripati dutt ravi; Charaka Samhita of agnivesha; Chaukhambha Orientalia Varanasi;volume-1; Sutrasthana;5th Chapter, Shloka no.68, reprint edition 2015.Page no 96.

26.Sharma.P.V; Sushruta Samhita; Chaukhambha Vishwabharti Varanasi; Chikitsasthana; 40th chapter; Shloka no.28. Edition 2005. Page no 674.

27.Sharma.P.V; Sushruta Samhita; Chaukhambha Vishwabharti Varanasi; Chikitsasthana; 40th chapter; Shloka no.36. Edition 2005. Page no 676.

28.Sharma.P.V; Sushruta Samhita; Chaukhambha Vishwabharti Varanasi; Chikitsasthana; 40th chapter; Shloka no.24. Edition 2005. Page no 677.

29.Murthy.Shrikantha; Sharangadhar Samhita; Chaukhambha Orientalia Varanasi; Uttarakhanda; 8th chapter; Shloka no.3. Edition 2001. Page no 222.

30.Tila taila review article from WJPMR – Dr pravin issn 2455-3301

31.Misra.Siddhinandan; Bhaishjya Ratnavali; Chaukhambha Subharti Prakashan Varanasi; Jwaradhikara; 5th chapter; Shloka no.1268. Edition 2021. Page no 206.

32.Bhaisajya Kalpana Vijnanam by Dr.K.Rama Chandra Reddy – Sneha Kalpana Adhyaya Page no. 332 & 335; Choukambha Sanskrit Pratistana, Delhi.

33.Bhavaprakash Nighantu (Indian materiamedica) by Shri Bhavamisra (c. 1500 – 1600 A.D), commentary by PadmashriProf. K.C. Chunekar –Dhanya Varga, Verse no. –63- 64; Page no.638-639; Choukambha Bharat Academy, Varanasi.

34.BhavaprakashNighantu (Indian materiamedica) by Shri Bhavamisra (c. 1500 – 1600 AD commentary by PadmashriProf. K.C. Chunekar – HaritakyadiVarga, Verse no. – 146; Page no. 62; Choukambha Bharat Academy, Varanasi.

35.Acharya Chakrapani, Dravyaguna, Ksheera Varga, Shloka No-6, Kalyan Mumbai, Laxmi Venkateshwara Mudranalaya, 1982, PP No- 49

36. M. Durga Bhavani et. al Analytical study on Tiladi Taila – a good remedy for hairfall, World Journal of Pharmaceutical Research, April 2017, Vol.6 , Issue 4, ISSN 2277–7105