AYUSHDHARA
ISSN: 2393-9583 (P)/ 2393-9591 (O)
An International Journal of Research in AYUSH and Allied Systems

Research Article

# A COMPARATIVE STUDY ON THE EFFICACY OF *PRAPOUNDARIKADI TAILA* AND *BHRINGARAJA TAILA NASYA* AND *SHIROABYANGA* ALONG WITH *DHATRITILADIYOGA* INTERNALLY IN *AKALA PALITHYA*

**Shruthi L.H[1]*, Suja K. Sreedhar[2]**

*[1]Assistant Professor, Sri Paripoorna Sanathana Ayurveda Medical College Hospital & Research Centre, Arjunabettahalli, Nelamangala Taluk, Bengaluru, Karnataka, India.

[2]Professor, Dept of PG Studies in Shalakya Tantra, Govt. Ayurvedic Medical College, Bengaluru, Karnataka, India.

**KEYWORDS:** *Akalapalithya*, Premature Greying, *Prapoundarikaditaila*, *Bhringarajataila*, *Dhatritiladiyoga.*

***Address for correspondence**
**Dr L.H Shruthi**
Assistant Professor, Sri Paripoorna Sanathana Ayurveda Medical College Hospital & Research Centre, Arjunabettahalli, Nelamangala Taluk, Bengaluru, Karnataka, India.
Mail ID: shruthilh@gmail.com
Mob: 9164464087

**ABSTRACT**

Skin and hair color have been at the center of attention of humans since ancient times. Premature greying is an important cause of low self-esteem, often interfering with socio-cultural adjustment. And it is a burning problem as large percent of population especially young men and women in present times are suffering. In Ayurveda premature graying of hair is called as *Akalapalitya*. The incidence of premature ageing along with *Akala Palitya* is on increase, particularly in tropical and developing countries. According to W.H.O in India, its incidence is high in the age group of 20-30 years. Hence premature graying has long attracted researchers and industry alike with scientific as well as commercial targets. Hair coloring involves the use of chemicals which can result in a range of adverse effects like allergic reaction. Yet, apart from various hair dyes of varying efficacy and duration, fully satisfactory solutions for the graying problem remain to be brought to market.

In this study, *Prapoundarikaditaila* and *Bhringarajataila* was taken for *Nasya* and *Shiroabhyanga* which has been mentioned in classics for *Urdhwajathrugata Rogas* and *Palithya*. Also *Dhatritiladiyoga* having *Rasayana* property helps in blackening of hair told by Acharya Yogarathnakara. In the present study 40 diagnosed *Akala Palithya* cases were divided into two groups of 20 each. Group A was treated by *Prapoundarikaditaila Prathimarsha Nasya* and *Shiroabyanga* along with *Dhatritiladiyoga* internally twice daily for 90 days. Group B was treated by *Bhringarajataila Prathimarsha Nasya* and *Shiroabyanga* along with *Dhatritiladiyoga* internally twice daily for 90 days. In the present study it was observed that Group A showed better results compared to that of Group B.

## INTRODUCTION

Skin and hair color have been at the center of attention of humans since ancient times. Greying of the hair (canities) has major psychosocial and socioeconomic implications, since it is often regarded as a sign of rapidly progressing old age, ill health, and bodily decline especially in today's world, where humans are confronted with increasing pressure to stay "forever young and vital". And it is a burning problem as large percent of population especially young men and women in present times are suffering from this malady.

Yet, apart from various hair dyes of varying efficacy and duration, fully satisfactory solutions for the graying problem remain to be brought to market.

Hence to overcome the lacunas in the modern therapeutics the present study has been taken up to prevent the further progression of greying of hair.

### Ayurvedic Views

*Palitya* disease has been explained in all Samhitas in different context. Sushrutha explains *Palithya* in *Kshudra Rogaadhikara*, Vagbata in *Shiro Kapaalagata Rogas* and Charaka under *Urdhwa jathrugata Rogas.*

### *Nidana*

*Krodha, Shoka* and *Shrama.*[1]

Addiction to the intake of *Lavana Rasa* during pregnancy.[5]

### *Samprapti*

The *Ushma* and *Pitta* of the body having recourse to the region of the head owing to overwork, fatigue, and excessive grief or anger, tend to make the hair prematurely grey, and such silvering of the hair(before the natural period of senile decay) is called *Palitha*. [1]

***Lakshana***

1. Hairs are split, ash colour, rough, dry and resembles water.- *Vaataja*
2. Burning sensation in the scalp and the hairs are yellowish. -*Pittaja*
3. The scalp is unctuous and hairs are growing thick and white. -*Kaphaja*
4. Presence of all the features should be noticed.- *Tridoshaja.*[2]

***Chikitsa***

***Nasya* and *Shiro Abhyanga*: *Prapoundarikadi Taila***

One *Kudava* of oil *(Moorchita Tila Taila)* and two *Kudavas* of the juice of *Amalaki* should be cooked by adding the paste of one *Karsha* of each of *Prapoundarika, Yashtimadhu, Pippali, Chandana* and *Utpala*. Use of this medicated oil as *Nasya* cures all the diseases of the head specifically *Palithya.*[3]

***Nasya* and *Shiro Abyanga*: *Bhringaraja Taila*-** Add one *Prastha* of *Bhringaraja Swarasa*, one *Prastha* of *Goksheera* and one *Pala* of *Yashtimadhu Kalka* to one *Kudava* of *Moorchitha Tila Taila* and boiled in *Mandagni* till *Taila Siddha Lakshanas* appear. Use of this medicated oil as *Nasya* cures *Palithya.*[6]

***Dhatri Tiladi Yoga*-** *Dhathri (Amalaki), Tila* and *Bhringaraja* are taken in equal quantity and *Churna* is prepared. It helps in blackening of hair, acuity of sense organs and prevents aging.[4]

The above mentioned drugs are having *Pittahara, Rasayana, Kesha Vardhana* and *Kesha Ranjana Gunas*. Hence these formulations are taken in my study.

**Modern Views**

**Definition**

Premature graying is defined as the onset of graying before the age of 20 in Caucasians and before the age of 30 in Africans and Asians or, alternatively, when 50 percent or more of scalp hair turns gray before the age of 50. [7]

**Aetiology**

Premature graying may be hereditary, seen with hyperthyroidism, skin diseases, malnutrition, pernicious anaemia, chemotherapy, following high fever such as malaria and systemic diseases. Also few general causes like faulty diet, mental worries, hormonal imbalance, nutritional deficiency, using electric dryers and concentrated hair dyes leads to premature graying of hairs.[8]

**Pathophysiology**

Premature graying occurs due to reduction of activity of melanocytes in the hair follicles(poor sustenance of melanocyte stem cells). Follicular melanogenesis is linked to follicular cycling with melanin synthesis occurring only in the anagen phase. This pigmentary unit recycling occurs effectively only upto first 40 hair cycles, which scale upto 40 years of age in an individual. With progressing age, reduced melanocyte activity occurs, which leads to graying of hair. Genes for melanocyte stem cell maintenance and differentiation are Pax3 and MITF (microphthalmia-transcription factor).[9]

Usually, beard hair is often the first to gray and scalp hair graying usually commences in the temporal areas, subsequently spreading towards the crown and occiput. Premature hair graying is characterized by brittle hair that breaks easily and sometimes can lead to hair fall as well.[10]

**Treatment**

The only course of action are either to enjoy the distinguished look or to dye the hair.[8]

**MATERIALS AND METHODS**

Totally 40 subjects were selected from the outpatient and inpatient departments of Sri Jayachamarajendra Institute of Indian Medicine, Bengaluru.

**Inclusion Criteria**

- Subjects with *Akalapalithya*
- Age group of 8 to 30 years

**Exclusion Criteria**

- Subjects suffering from skin diseases and any of the systemic diseases.
- Subjects with pernicious anaemia and any other autoimmune diseases.
- Subjects with hormonal diseases and hereditary disorders.
- Subjects with age above 30 years.

**Assessment Criteria**

Assessment was made based on subjective and objective parameters:

**Subjective Parameters**

- Colour of the hair *(Kesha varna)*
- Dry splitted hair *(Rookshasphutita)*
- Oilyness of hair *(Snigdha Sthoola)*
- Burning sensation of scalp *(Daaha)*

**Objective Parameters**

- Random hair count

**Grading of parameters**

Various features of *Akalapalita* have been considered and grading was given to analyse the results statistically as follows.

**Showing grade for the Subjective Parameters of Premature Greying of hairs**

**1. Colour of the hair *(Kesha Varna)***

| **Color of Hair** | **Grade** |
|---|---|
| *Krishna Varna* | 0 |
| Ash coloured hair *(Shyavavarna)* | 1 |
| Yellowish/Coppery red *(Peethaba)* | 2 |
| White hair *(Shweta)* | 3 |

**2. Dry Split hair*(Rooksha Sphutita)***

| **Dry Split hair *(Rooksha Sphutita)*** | **Grade** |
|---|---|
| Absent | 0 |
| Dryness Felt | 1 |
| Dryness felt with split hair | 2 |

**3.Oilyness of hair*(Snigdha Sthoola)***

| **Oiliness of hair *(Snigdha Sthoola)*** | **Grade** |
|---|---|
| Absent | 0 |
| Present | 1 |

**4. Burning Sensation of Scalp *(Daaha)***

| **Burning Sensation of Scalp *(Daaha)*** | **Grade** |
|---|---|
| Absent | 0 |
| Present | 1 |

Showing grade for the Objective Parameter of Premature Greying of hairs.

**Random Hair Count**

Two sites of scalp were chosen where more grey hairs are present. One sqcm was chosen from those sites and number of grey hairs was counted.

- Grade 0 (Normal)-No grey hairs
- Grade 1(Mild)-1-10grey hair in 1sqcm
- Grade 2 (Moderate)- More than 10 and less than 25 grey hairs in 1sqcm
- Grade 3 (severe)-More than 25grey hairs in 1sqcm.

**Assessment of Results:**

- Good Response- >75%
- Moderate Response-50-75%
- Mild Response-25-50%
- Poor Response-less than 25%

**RESULTS**

After the completion of study, results were as given below.

**Table 1: Effect of *Prapoundarikaditaila* on colour of hair in Group A**

| **Symptom** | **Measures** | | | | **%** | **S.D (+.)** | **S.E (+.)** | **t value** | **p value** |
|---|---|---|---|---|---|---|---|---|---|
| | **BT** | | | **BT-AT** | | | | | |
| Colour of hair | 2.55 | AT | 2.3 | 0.25 | 10 | 0.638 | 0.142 | 1.75 | <0.05 |
| | | FU | 2.3 | 0.25 | 10 | 0.638 | 0.142 | 1.75 | <0.05 |

**Table 2: Effect of *Bhringarajataila* on colour of hair in Group B**

| **Symptom** | **Measures** | | | | **%** | **S.D (+.)** | **S.E (+.)** | **T value** | **P value** |
|---|---|---|---|---|---|---|---|---|---|
| | **BT** | | | **BT-AT** | | | | | |
| Colour of hair | 2.3 | AT | 2.25 | 0.05 | 2 | 0.223 | 0.05 | 1 | >0.1 |
| | | FU | 2.25 | 0.05 | 2 | 0.223 | 0.05 | 1 | >0.1 |

**Table 3: Effect of *Prapoundarikaditaila* on Dry split hair in Group A**

| **Symptom** | **Measures** | | | | **%** | **S.D (+.)** | **S.E (+.)** | **T value** | **P value** |
|---|---|---|---|---|---|---|---|---|---|
| | **BT** | | | **BT-AT** | | | | | |
| **Dry split hair** | **1.05** | **AT** | **0.2** | **0.85** | **81** | **0.67** | **0.15** | **5.67** | **<0.01** |
| | | **FU** | **0.2** | **0.85** | **81** | **0.74** | **0.16** | **5.10** | **<0.01** |

**Table 4: Effect of *Bhringarajataila* on Dry split hair in Group B**

| **Symptom** | **Measures** | | | | **%** | **S.D (+.)** | **S.E (+.)** | **t value** | **p value** |
|---|---|---|---|---|---|---|---|---|---|
| | **BT** | | | BT-AT | | | | | |
| **Dry split hair** | 0.9 | AT | 0.45 | 0.45 | 50 | 0.604 | 0.135 | 3.327 | <0.01 |

**Table 5: Effect of *Prapoundarikaditaila* on oiliness of hair in Group A**

| **Symptom** | **Measures** | | | | **%** | **S.D (+.)** | **S.E (+.)** | **T value** | **P value** |
|---|---|---|---|---|---|---|---|---|---|
| | **BT** | | | BT-AT | | | | | |
| **oiliness of hair** | 0.15 | AT | 0.05 | 0.1 | 67 | 0.307 | 0.068 | 1.45 | <0.1 |
| | | FU | 0.05 | 0.1 | 67 | 0.307 | 0.068 | 1.45 | <0.1 |

**Table 6: Effect of *Bhringarajataila* on oiliness of hair in Group B**

| **Symptom** | **Measures** | | | | **%** | **S.D (+.)** | **S.E (+.)** | **T value** | **P value** |
|---|---|---|---|---|---|---|---|---|---|
| | **BT** | | | **BT-AT** | | | | | |
| **oilyness of hair** | 0.35 | AT | 0.1 | 0.25 | 71 | 0.444 | 0.099 | 2.51 | <0.05 |
| | | FU | 0.1 | 0.25 | 71 | 0.444 | 0.099 | 2.51 | <0.05 |

**Table 7: Effect of *Prapoundarikaditaila* on burning sensation of scalp in Group A**

| **Symptom** | **Measures** | | | | **%** | **S.D (+.)** | **S.E (+.)** | **T value** | **P value** |
|---|---|---|---|---|---|---|---|---|---|
| | **BT** | | | **BT-AT** | | | | | |
| Burning sensation of scalp | 0.4 | AT | 0.05 | 0.35 | 87 | 0.489 | 0.109 | 3.19 | <0.01 |
| | | FU | 0.05 | 0.35 | 87 | 0.489 | 0.109 | 3.19 | <0.01 |

**Table 8: Effect of *Bhringarajataila* on Burning sensation of hair in Group B**

| Symptom | Measures | | | | % | S.D (+.) | S.E (+.) | t value | p value |
|---|---|---|---|---|---|---|---|---|---|
| | BT | | | BT-AT | | | | | |
| Burning sensation of scalp | 0.25 | AT | 0.15 | 0.1 | 40 | 0.307 | 0.068 | 1.45 | <0.1 |
| | | FU | 0.05 | 0.2 | 80 | 0.410 | 0.091 | 2.17 | <0.05 |

**Table 9: Effect of *Prapoundarikaditaila* on Random hair count in Group A**

| Symptom | Measures | | | | % | S.D (+.) | S.E (+.) | t value | p value |
|---|---|---|---|---|---|---|---|---|---|
| | BT | | | BT-AT | | | | | |
| Random hair count | 1.95 | AT | 1.75 | 0.2 | 10 | 0.410 | 0.091 | 2.17 | <0.05 |
| | | FU | 1.7 | 0.25 | 13 | 0.444 | 0.099 | 2.51 | <0.05 |

**Table 10: Effect of *Bhringarajataila* on Random hair count in Group B**

| Symptom | Measures | | | | % | S.D (+.) | S.E (+.) | t value | p value |
|---|---|---|---|---|---|---|---|---|---|
| | BT | | | BT-AT | | | | | |
| Random hair count | 2.25 | AT | 1.8 | 0.45 | 20 | 0.510 | 0.114 | 3.942 | <0.01 |
| | | FU | 1.8 | 0.45 | 20 | 0.510 | 0.114 | 3.942 | <0.01 |

**Table 11: Overall effect of treatment of Group A**

| Overall Effect of Treatment | | |
|---|---|---|
| **Grading** | **Relief in Percentage** | **Relief in Subjects** |
| Poor Improvement | 0-25% | 9 |
| Mild Improvement | 26–50 % | 9 |
| Moderate Improvement | 51 – 75% | 2 |
| Good Improvement | 76 – 100 % | 0 |

**Table 12: Overall effect of treatment of Group B**

| Overall Effect of Treatment | | |
|---|---|---|
| **Grading** | **Relief in Percentage** | **Relief in Subjects** |
| Poor Improvement | 0-25% | 12 |
| Mild Improvement | 26–50 % | 8 |
| Moderate Improvement | 51 – 75% | 0 |
| Good Improvement | 76 – 100 % | 0 |

**Table 13: Comparative results of Group-A and Group-B**

| Characteristics | Group-A | | | Group-B | | |
|---|---|---|---|---|---|---|
| Clinical parameters | Mean score | | | Mean score | | Percentage of relief |
| | BT | FU | | BT | FU | |
| Colour of hair | 2.55 | 2.3 | 10 | 2.3 | 2.25 | 2 |
| Dry split hair | 1.05 | 0.2 | 81 | 0.9 | 0.45 | 50 |
| Oiliness of hair | 0.15 | 0.05 | 67 | 0.35 | 0.1 | 71 |
| Burning sensation of scalp | 0.4 | 0.05 | 87 | 0.25 | 0.05 | 80 |
| Random hair count | 1.95 | 1.7 | 13 | 2.25 | 1.8 | 20 |

Comparative analysis of the overall effect of the treatments in both the groups was done by statistically with paired t test. Group A overall result is 27.91% and Group B overall result is 21.87%.

**Table 14: Comparative Statistical analysis of the overall effect of the treatments**

| Parameters | Group | Mean | | % | SD | SE | T-Value | P-Value | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | BT | FU | | | | | | |
| Colour of hair | A | 2.55 | 2.3 | 10 | 0.638 | 0.142 | 0.23 | <0.1 | S |
| | B | 2.3 | 2.25 | 2 | 0.223 | 0.05 | | | |
| Dry split hair | A | 1.05 | 0.2 | 81 | 0.74 | 0.16 | 2.26 | <0. 05 | S |
| | B | 0.9 | 0.45 | 50 | 0.604 | 0.135 | | | |
| Oiliness of hair | A | 0.15 | 0.05 | 67 | 0.307 | 0.068 | 1.75 | <0.1 | S |
| | B | 0.35 | 0.1 | 71 | 0.444 | 0.099 | | | |
| Burning sensation of scalp | A | 0.4 | 0.05 | 87 | 0.489 | 0.109 | 1.48 | >0.1 | NS |
| | B | 0.25 | 0.05 | 80 | 0.410 | 0.091 | | | |
| Random hair count | A | 1.95 | 1.7 | 13 | 0.444 | 0.099 | 1.87 | <0.1 | S |
| | B | 2.25 | 1.8 | 20 | 0.510 | 0.114 | | | |

**Discussion on Results**

In Overall effect of treatment in *Akalapalithya,* in Group A out of 20 Subjects in this study 9 (45%) Subjects got poor improvement, 9 (45%) Subjects got mild improvement, 2 (10%) Subjects got moderate improvement.

In Overall effect of treatment in *Akalapalithya*, in Group B out of 20 Subjects in this study 12 (60%) Subjects got Poor improvement and 8 (40%) Subjects got mild improvement.

**Probable mode of action of *Prapoundarikaditaila***

The drugs which are used in the preparation of *Prapaundarikaditaila* are *Prapaundrika*, *Madhuyasthi*, *Rakta Chandana, Utpala, Pippali, Amalaki* and *Tila Taila.* Almost all of these *Dravya* have *Sheeta virya, Keshya* and *Pitta Shamaka* Property by which the effect of the *Prapaundrikadi Taila* on *Palitya* is considerable. *Prapaundrikadi Taila* has *Snigdha, Laghu, Shita and Sukshma* properties*. Snigdha Guna* composed of *Parthiva* and *Apya Mahabhuta.* Charaka said that *Kesha* is *Parthivabhava* predominant, so *Snigdha Guna* increases *Kesha* because of *Samanyavishesha Siddhanta. Sheeta Guna* would act on *Pitta Dosha,* which is a main causative factor of *Palitya.* The obstruction of *Srotas* is cleared by the *Sukshma Guna*, which affects the *Varna Utpatti.*

*Prapoundarika* contains tannins, saponins and nymphayol which helps in giving colur to the hair. *Raktachandana* contains pigment santalin (santalic acid) which acts as a dye giving colour to the hair. *Pippali* has piperine which has anti oxidative, anti apoptotic and restorative ability against cell damage. Also the antioxidants present in *Amalaki* helps in reducing canities.

**Probable mode of action of *Bhringarajataila***

According to reference in *Bhaishajya Ratnavali, Bhringarajataila Nasya* and *Shiroabyanga* is *Palityahara*. The ingredients of *Bhringarajataila are Bhringaraja, Yastimadhu* and *Goksheera.*

***Bhringaraja***- It is *Katu, Tiktarasatmaka, Katuvipaka, Ushnaveerya, Laghu, Rukshaguna* and *Kapha Vata hara*. It is *Keshya, Kesha ranjana, Twachya, Balya* and *Rasayana* in action.

***Yastimadhu***- It is *Madhurarasatmaka, Guru*, *Snigdha guna, Madura vipaka, Sheetavirya, Pitta Kapha Shamaka*. It is *Shukrala, Keshya, Swarya* and *Rasayana* in action.

***Goksheera***- It is *Madhurarasatmaka, Guru, Snigdha guna, Madhuravipaka, Vata, Pitta Shamaka, Sheeta virya, Jara* and *Samasta roga Shantikara.*

***Tilataila***- It is *Tikta, Kashaya Rasatmaka, Guru, ruksha, Sukshma* and *Vishadaguna, Ushnavirya, Madhuravipaka, Balya, Varyna* and *Keshya* in action.

The *Taila* prepared with *Bringaraja* has *Snigdha, Laghu, Shita* and *Sukshma* properties. *Snigdhaguna* is a *Parthiva* and *Apya*. Charaka said that *Kesha* is *Parthivabhava* predominant, so *Snigdhaguna* increase *Kesha* because of *Samanyavishesha Siddhanta Sheetaguna* would act on *Pitta dosha*, which is a main causative factor of *Palitya.* The obstruction of *Srotas* will clear by the *Sukshmaguna*, which affects the *Varnothpathi* and growth of new hair.

Glycyrrhizin present in *Yashtimadhu* acts as antioxidant. *Bhringaraja* contains Fe which checks nutritional deficiency. All the drugs in *Bhringarajataila* contains antioxidant property which helps in reducing free radicals thereby preventing canities.

**Discussion on Absorption through Nasal mucosa and mode of Action**

Modern science says any lipid soluble substance has greater chance for passive absorption directly through the olfactory cell of lining membrane. Later the drug may traverse through capillaries and veins as *Nasya* consists of *Tailadravya* action may be quick and beneficial. This concept was well understood by our ancient scholars. Hence they processed the drug in lipid media. Also *Mrudupaka* has been told for *Nasya* administration. It is important to design the chemical structure of the drug to withstand an enzymatic degradation without the loss of therapeutic potency may help in effective absorption. *Shringatakamarma* which includes *Srotas* where *Ghrana, Shrotra* and *Akshi Tarpana Siras* are get united. This is the area where medicine gets absorbed. The *Taila* is made lukewarm and instilled this brings about vasodilation facilitating drug absorption. The posture advised in *Nasya* is also significant because it allows the *Taila* to reach the olfactory area in the upper part of the nasal cavity and the olfactory neurons are stimulated.

It has been found that cilia of the olfactory cells contain relatively large quantities of lipoid materials and lipid soluble substances cause marked stimulation of an olfactory cell. The drug may be absorbed initially by passive process across the cell wall. Any lipid soluble substance has greater chance for passive absorption directly through the cell of lining membrane. Later the drug may traverse through capillaries and veins as *Nasya* consists of *Tailadravya* action may be quick and beneficial.

The patho-physiology of *Akala Palitya* when it is considered according to the contemporary medical science *Krodha, Shoka* and excessive *Shrama* which are stress factors mainly acting over Hypothalamus, responsible for the secretion of C.R.H (Cortisone releasing hormone) and ACTH (Adrenocorticotrophic hormone). This ACTH in turn releases cortisol, a glucocorticosteroid produced by the cortex of the Adrenal gland. This will increase body temperature by increasing body metabolic rate. This can be considered as increased *Shariroshma*. A reduced secretion of ACTH & CRF in turn causes MSH hormone reduction causing reduced pigmentation. The peripheral olfactory nerves are chemoreceptor in nature. It is known that these nerves are connected with limbic system of the brain including Hypothalamus. This limbic system & hypothalamus are having control over endocrine secretions. Moreover, hypothalamus is considered to be responsible for integrating the functions of the endocrine

system & the nervous system. It is known to have direct nervous connections with the anterior lobe of pituitary. *Prathimarsha Nasya* done in *Akala-palita* may be acting through this olfacto –hypothalamic- pituitary pathway.

**Probable mode of action of *Shiroabyanga:*** As told in our classics.

- A person who does *Shiroabhyanga* daily is never affected with head ache, hair fall or grey hairs.
- Helps the growth of hair on the scalp, which grows strong, long, soft, and black.
- Improves strength to all the sense and motor organs.
- It improves complexion of hair on the face. Facial massage with oil and application of cosmetics to the face improve the skin of the face, prevent wrinkles and skin diseases such as pimples and also strengthen the eyes and cheeks.
- Improves vision.
- It prevents headache and induces sleep.

*Shiroabhyanga* process is known for its *Keshya* effect. By this process the local blood supply of scalp is increased result in increased nutrient supply to the hair follicle. Rubbing during *Shiro-Abhyanga* promotes relaxation and aids in stress reduction. Reduced levels of stress hormones allow the body to function with increased efficiency and this, in turn enhances the ability of the hair follicles to grow hair properly so *Shiro - Abhayanga* has a good role in *Palitya.*

**Probable mode of action of *Dhatritiladiyoga***

Many *Rasayanayogas* are mentioned in classics *Dhatritiladiyoga* is one such yoga mentioned in *Yogarathnakara*. The ingredients of this *Rasayana* are *Amalaki*, *Krishna tila* and *Bhringarajachoorna.* From *Samprapthi* it is clear that because of *Jatharagnidusti* leads to *Amautpatti* at the same time increased *Sharirika Ushma Vikrita Kesha Varna Utpatti* take place. And Acharya Charaka has stated the disease in *Rasa Pradoshaja Vikara*. *Asthidhatwagnivikriti* can lead to *Vikrita Kesha Varna* has also been elicited in *Samprapthi.* Hence *Ama* forms an important *Samprapthi Ghataka* in *Akalapalita.*

- *Tikta Rasa* of *Bhringaraja, Amalaki* and *Krishna Tila* does *Ama Pachana* and ensures better microcirculation and nourish the body specifically hairs by eliminating the morbid *Doshas*.
- *Madhura Rasa* of *Krishna Tila*, *Amalaki* and *Sharkara* pacifies *Pitta Dosha* which is a major *Samprapthi Ghataka* in disease manifestation.
- *Kesha Shuklata Lakshana* clearly shows involvement of *Kapha Dosha.* Hence *Laghu* and *Rooksha Gunas* of *Bhringaraja* act towards *Kapha Shamana.*
- *Sheeta Virya* of *Amalaki* acts as *Pitta Shamaka.*
- *Madhura Vipaka* of *Amalaki* act as *Dhatu Vardhaka* and *Rasayana* in action.
- Mode of action can be analysed on the basis of *Panchamahabhutas* as quoted by Sushruta.

*भूतेभ्योहिपरंयस्मात्नास्तिचिन्ताचिकित्सिते॥*

- *Madhura Rasa* of *Dravyas* does *Prithvi, Ap Mahabhuta Vriddhi.*
- *Madhura Vipaka* also does *Prithvi, Ap Mahabhuta Vriddhi.*
- *Sheeta Virya* of drug also lead to *Prithvi* and *Ap Mahabhuta*.

The *Dravyas* act towards building up of the tissues. Hence *Rasayana* has positive effect on *Kesha poshana.* All the ingredients in the *Churna* contains anti-oxidant property. These anti-oxidants reduce electron transfer and ends in active production or healing process by oxidation. There by preventing gray hair/Canities. Canities is the result of a breakdown in normal pigment production in the melanocytes. Factors responsible for hair colour-Tyrosine, Tannins and Saponins, Protein, Quinones, Iron, Vit C, Copper, Zinc, Biotin and Vitamin B5.

*Amalaki* contains saponins, tannins, vitamin C, vitamin B5, Iron. Sesame seeds are an excellent source of copper, calcium, iron, zinc, Vitamin B1 and it also contains tyrosine. *Bhringaraja* contains Zn and Fe.

## CONCLUSION

- The study was aimed to evaluate the efficacy of *Prapoundarikaditaila* and *BhringarajaTaila Nasya* and *Shiroabyanga* along with *Dhatritiladiyoga* internally in the management of *Akalapalita.* The following conclusion is drawn after considering the clinical and conceptual study.
- Effect of treatment on *Akalapalithya* was not satisfactory in both the groups.
- Diet, regimen, environmental and psychological factors have a significant role in *Akalapalita*.
- The study has shown initiation of improvement almost at end of the therapy. This necessitates further extension of the therapy.
- Overall assessment of the results showed that, the subjects of Group A treated with *Prapoundarikadi Taila Pratimarsha Nasya* and *Shiroabyanga* with *Dhatritiladi yoga* internally responded well compared to the subjects of Group B treated with *Bhringaraja Taila Pratimarsha Nasya* and *Shiroabyaga* with *Dhatritiladi yoga* internally.

## REFERENCES


1. Sushrutha. Sushrutha Samhita – Translated by Kaviraj Kunjalal Bhishagratna, edited by Laxmidhar Dwivedi. Edition 2nd Vol. -2. Varanasi; Chaukhambha Sanskrit series; 2002. P. 788.
2. Vagbhata. Astanga Hrdayam – Translated by Prof K.R. Srikanta Murthy, Edition 3rd.Varanasi; Krishnadas Academy;2000 AD. p. 586.
3. Agnivesa's Charaka, Drudabala, Chakrapanidatta. Charaka Samhita by Dr. Ramkaransharma & Vaidya Bhagawan Dash.Vol-4. Varanasi; Chowkamba Sanskrit Series;p.221.
4. Yoga Ratnakara. Vidyotini, Hindi tikasahitha, Vaidya Srilakshmi Pathi Shastry, Edited by Brishag Ratna Brahmashankara Shastry. Varanasi; Chowkamba Prakashana;2010. p. 504.
5. Agnivesha's Charaka Samhitha. Text with English translation and critical exposition based on Chakrapanidatta's Ayurveda Dipika by Dr.Ram

Karan Sharma and Vaidya Bhagwan Dash.Vol-2. Varanasi; Chaukhamba Sanskrit series; 2005. P. 597.
6. Govinddasa. Bhaisajya Ratnavali- edited by Bhisagratna Shri. Brahmashankar Mishra. 18th revised edition. Varanasi; chaukambha Prakashana; 2007.p. 1308.
7. McDonough PH, Schwartz RA. Premature hair graying. Newark (USA). Dermatology and Pediatrics, New Jersey Medical School; 2012 April. p. 161-5.
8. Braun Falco's Dermatology. Birgdorf Plewig Wolff Landthaler editors. 3rd edition. Springer;2010.vol 2.P. 1712.
9. Wadhwa SL, UdayKhopkar, KC Nischal. Hair and scalp disorders. IADVL Textbook of Dermatology. 3rdedn. RG Valia AR Valia editors. India; BHALANI; 2008. p. 929-948.
10. Arthur Anitha B, Raghunatha S. Textbook of Dermatology in general medicine. 3rdedn.USA; Mc Grow publishers; 1987. p.627-629.

**Cite this article as:**
Shruthi L.H, Suja K. Sreedhar. A Comparative Study on the Efficacy of Prapoundarikadi Taila and Bhringaraja Taila Nasya and Shiroabyanga along with Dhatritiladiyoga Internally in Akala Palithya. AYUSHDHARA, 2016;4(1):1003-1009.
***Source of support: Nil, Conflict of interest: None Declared***