



MODIFIED METHOD OF PRACHANNA KARMA(BLOOD LETTING THERAPY) IN EFFECTIVE MANAGEMENT OF KHALITYA(HAIRFALL) - A SINGLE CASE STUDY

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ABSTRACT

Khalitya or Hairfall is explained under the heading of *Kshudra roga or Shiroroga*. In current scenario it is affecting both teenagers and adults irrespective of their gender. Main reason for that could be changed ways of sedentary lifestyle, stress, Dietary habits. Hair loss can be prevented by modifying lifestyle, *Prachhana karma* and Ayurvedic medications. In this single case study with Ayurveda Medicines, Modified method of *Prachhana Karma* was done. Whole procedure was done with the help of derma roller. It is skin needling device, features a cylindrical body attached to a long handle. The cylinder of the derma roller is covered in many little needles that individually prick the surface and creates micro-injuries. *Shodhana karma, Prachhana karma, Application of lepa* and Ayurvedic medication are beneficial in case of Hair fall. A Male Patient of 37 year old presented with complains of loss of hair over frontline, parietal region, thinning of hair and white hair since 1-2 years. *Prachhana karma* with Derma roller, *Shirolepa* and certain Ayurvedic medications. Treatment results were found to be very effective in this case. Thus Ayurveda may play a major role in managing cases of *Khalitya* by using treatment principles of Ayurveda and its formulations.

KEY WORD: Khalitya, Hairfall, Prachhana Karma, Derma Roller, Shirolepa

INTRODUCTION:

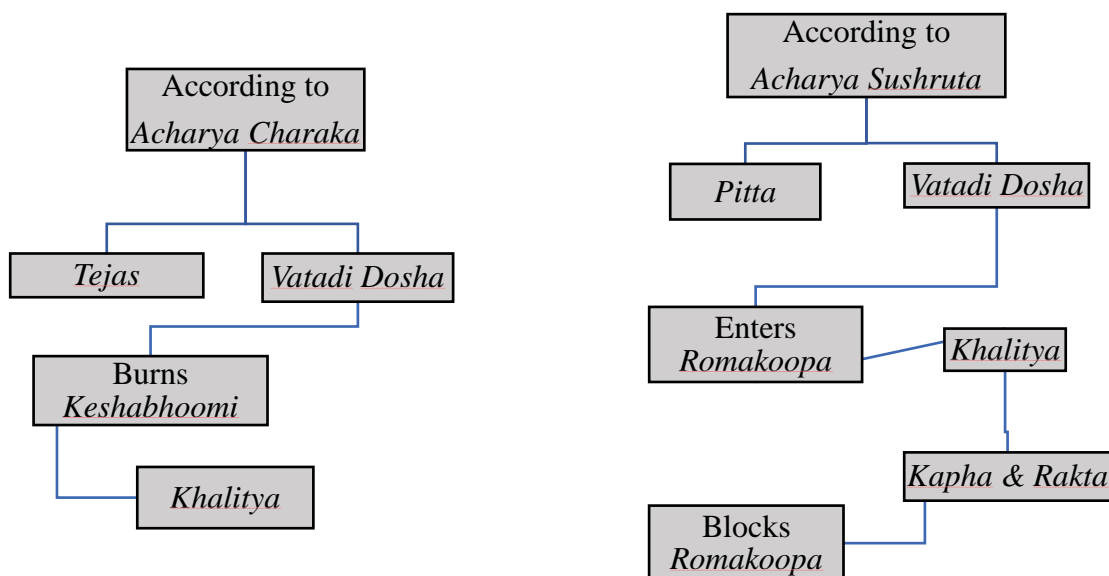
Hairs on scalp is additive factor to the one's personality. It is important to maintain healthy hairs for each individual especially in today's world where cosmetic importance have increased day by day. In General Hair fall is considered as geriatric physiological phenomena if it's affecting around mid-forties but if it is affecting before that it is considered as disease. Hair fall is affecting approximately 1.7 % of world population. In current era hair fall is increased due current lifestyle, Diet pattern and stress. It is wide spread problem affecting teenagers and adults both irrespective of their genders, locality or socioeconomical status. The Hair consist of an elongated part, which grows from the dermis and protrudes from the surface of the skin, known as hair shaft. Hair grows from the hair follicle. The Hair follicle is elongated tube-like

structures in the skin. It is lined by cells and the hair grows out of the base of the follicle. Average number of Hair follicle is found to be around 5 million on the person's body and 100,000 on the scalp approximately. The number varies based on the hereditary factors and shade of the hair but there is no significant difference in the number of hair follicles between male and female (1). In Ayurvedic literature Hair fall is described as *Khalitya*. *Acharya Charaka* and *Astanga Hridayakara* has mentioned it under *Shiroroga*.(2) This inclusion is done based on *Sthana* and *Samprapti*. In *Astanga Hridaya* it is mentioned that the disease which occurs on the scalp are called as *Shiroroga*. *Shushruta Samhita*, *Astanga Hridaya*, *Yoga Ratnakara* and *Madhava Nidana* have included under *Kshudra roga*. Hair fall is not life threatening situation and less severe. So due to the mildness of disease it is included under *Kshudra roga*(Minor disease)(3).

CAUSATIVE FACTORS OF *KHALITYA*

Acharya Charaka have mentioned that *Tejo* with *Vatadi doshas* burns *Keshbhoomi* and which leads to *Khalitya*(4). *Acharya Sushruta* have mentioned that *Pitta* along with *Vata* enters into *romakoopa* and produces *Khalitya* whereas *Kapha* along with *Rakta* blocks the *Romakoopa* and thus stops the production of new hair (5). It is included under *Shiroroga* and causative factors of *Shirorogas* are exposure to smoke, sunlight, mist, excessive play in water sports, excessive sleep or avoiding sleep, sweating, direct breeze, weeping too much, drinking water & wine in excess quantity, presence of worms in side body, suppression of urges, avoiding the use of pillow, bath and oil anointing, always looking downward etc. by indulgence in these and similar causes the *doshas* get aggravated and produces diseases in head (6). This can produce *Khalitya*.

Figure 01: showing *Samprapti* of *Khalitya* according to *Charaka* & *Sushruta* (4-5)



CASE REPORT

Pradhan Vedana:

Patient complains of loss of hair over frontline, parietal region, thinning of hair, white hair since 1-2 years.

Vedanta vruttanta:

A 34 year old Male Patient was apparently well before 2 years then gradually developed with hair fall over frontline and parietal region, thinning of hair and came to Khemdas Ayurveda Hospital for treatment.

Purva vedana vruttanta: No significant History related to the case

Kula vyadhi Vruttanta: Mother was said to be diabetic

Vyakthika vruttanta:

Ahara	Vihara	Mansika
Vegetarian	Sleep disturbed	Chintya
Madhur, snigdha,	Sedentary lifestyle	
Irregular meal time	Bowel – 1 time/day	
	Micturition – 6-7 times in a day and 5-6 times in a night	

Samanya pariksha:

- Appearance – Fair
- Pulse rate -75/min
- B.P. -130/90 mm hg
- R.R. – 17/ min
- Weight- 172 cm
- Height- 78 kg
- Temperature – Afebrile
- R.S. – Bilateral Air entry clear
- C.V.S. – S1S2 heard, no abnormal Murmur heard
- C.N.S. – conscious and oriented

Rogi Pariksha:

- *Prakruti: Pittakapha*
- *Sara: Madhyama*
- *Satva: Madhyama*
- *Samhanana: Madhyama*
- *Kostha: Krura*
- *Agni: Vishama*
- *Pramana: Madhyama*
- *Aharashkti: Madhyama*
- *Jaranashakti: Madhyama*
- *Vyayamashakti: Madhyama*
- *Vaya: Vruddha*
- *Jihwa: Saama*

Ashtavidha pariksha

- *Nadi : Vatakapha*

- *Mutra*: 4-5 times/day
- *Mala* : 1 time/day
- *Jihwa* : *Saama*
- *Shabda* : *spashta*
- *Sparsha Samshittoshna*
- *Druka*: *Prakruta*
- *Akruti* : *Madhyama*

Materials and Methods

- Centre of study: Parul Institute of Ayurveda and Research Hospital IPD, Vadodara,
- Simple random single case study

Sr. No.	Diagnosis	Inclusion Criteria	Exclusion Criteria
01	<i>Khalitya</i>	Gradual Hair fall	-----
02	<i>Indralupta</i>	Hairfall	<ul style="list-style-type: none"> • Sudden onset • Patchy Hairloss

Diagnosis: *Khalitya*

Treatment Protocol

Day	Treatment
1	<i>Prachanna karma with Derma roller</i>
2,4,6	<i>Shirolepa with Haridra, Triphala, Kukutandalepa</i>
3,5,7	<i>Shirolepa with Haridra , Triphala, Bhrungaraj swarasa</i>

Day	Treatment
37	<i>Prachanna karma with Derma roller</i>
39,41,43	<i>Shirolepa with Haridra, Triphala, Kukutandalepa</i>
40,42,44	<i>Shirolepa with Haridra , Triphala, Bhrungaraj swarasa</i>

Intervention:

Oral Medications

1. Rasayana vati 1 BD A/f with warm water
2. Bhringaraja Ghanavati 2 BD A/f with luke warm water

3. Bhringaraja Oil for Local Application 3 times a week

Advice to the Patient –

Maintaining Proper daily routine, Time for meals and sleep

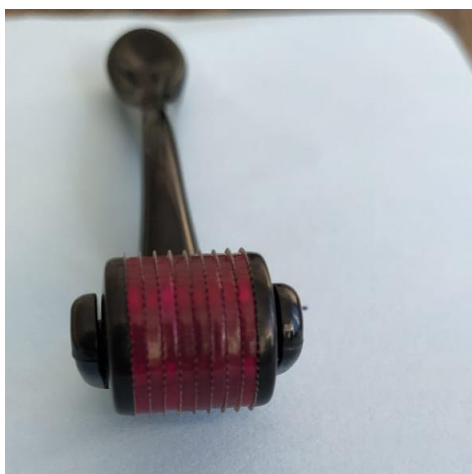
Patient must avoid occurrence of constipation

Avoiding late night sleeping, hot & spicy food, Junk foods, Fried items

Procedure of Prachhana Karma with Derma roller

The scalp was prepared by using betadine and normal saline. A derma roller was rolled over the affected areas of the scalp in a longitudinal, vertical and diagonal directions until mild erythema noted, which was considered as the end point of the procedure.

Picture no.01 showing Derma roller



Picture no.02 showing picture of patient during procedure of Lepana



Picture no.03 showing Derma roller

Before Treatment

After Treatment

Before Treatment

After Treatment



Probable Effect of *Prachhana karma* with Derma roller

Prachhana Karma stimulates the damage hair follicle to recover through their regenerative capacity. It removes the blockage at the hairroots. *Prachhane Pinditehitam* & stimulate scalp metabolism by increasing blood circulation (7). Here Derma roller was used for *Prachhana karma*. With the help of Derma roller microchannels are created on the scalp which help in penetration and absorption of various agents into the skin. *Prachanna Karma* is used to induce collagen formation, neovascularization and growth factor production of areas which needs to be treated. Probable mode of action is thought to be that needling increases the penetration of *Lepana* medications and by this mechanism it promotes hair growth.

Drugs used in Treatment:

For *Shirolepa*: *Triphala, Kukkutanda, Haridra, Bhringraja swrasa*

Other Medicine: *Rasayana Vati, Bhringaraja ghanavati, Bhringraja hair oil*

RESULTS

This treatment protocol was found to be very effective in this case. Hair growth was seen on the affected area at the end of treatment.

DISCUSSION

Hair fall is commonly seen now a days and it is becoming challenging disease to treat for a physician. Treatment protocol to be adopted for the *Khalitya* includes *Shodhana Karma*. Because of involvement of *pitta dosha, Virechana* and *Rakta mokshana* are commonly indicated in this disease. *Lepana Karma* performed by *vatadi doshahara dravyas* normalizes *vatadi doshas*. *Prachanna Karma* is type of *Raktamokshana* in which multiple times incision is done to remove the impure blood. Here, as *Kapha & Rakta* blocks *Romakoopa* so with the help of *Prachanna Karma* blockage is removed as it removes *Kapha & Rakta*. It also increase the circulation which improves the perifollicular vascularization and later *Lepana* is done so the effectiveness of *Lepanadravya* increases. *Rasayana* therapy is anti-oxidant, immunomodulation and rejuvenating action which is very beneficial for the hair fall.

CONCLUSION:

Khalitya can be prevented by some minor changes of life style and dietary habits. Proper hair care life, oiling, washing, protection from external factors like environment, chemicals, heating etc is important for preventing hair fall and keeping them healthy. Before planning any treatment modalities for hair fall physician should identify the cause and then first treatment should be *Nidanparivarjana* or management of that particular cause. Then after that other

therapies like *Prachhana Karma*, *Abhyanga*, *Lepana*, *Shodhana*, *Nasya*, *Rasayana* should be prescribed according. As *Prachhana Karma* with derma roller facilitates the penetration various medicine into the skin it is found to be very effective in the treatment of *Khalitya*. Hence studies can be done to understand more about the effecte of *Prachhana Karma* by using derma roller with Ayurvedic medications to find out the more accurate results in large group of people.

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