

AYURVEDIC METHOD OF DIAGNOSIS, PREVENTION AND CURE OF HAIR FALL (ALOPECIA)

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ABSTRACT

Hair fall generally indicate the fall of hair from head. *Ayurveda* and modern science both has been described about the hairs and hair fall in details. Alopecia is the end result of hair fall which has also mentioned in both *Ayurveda* as well as modern science. All the four dosha including *vata*, *pitta*, *kapha* and *rakta* are responsible for the pathogenesis of primary Alopecia which is known as *Indralupta* or *Khalitya* or *Rujya*. *Darunak*, *Tinia capitis*, use of chemical agent, Folliculites and Telogen effluvium these are the local causes while use of excessive salt, chemotherapeutic agents, *vata vardhak aahar -vihaar*,

Vitamin A, Steroids, Anticonvulsants, Hypoglycemic agent, Contraceptive pills, Antihypertensive drugs these are some systemic cause of Alopecia. *Asthi kshay*, *Raktaj krimi*, Thyroid dysfunction, Psychological stress, Rheumatoid arthritis, secondary Syphilis are also responsible for systemic secondary loss of hair. Deficiency of Protein, Iron and Biotin and Anemia also cause of Hair fall. Patients of hair fall should be diagnosed by using *Trividha pareeksha*. *Sodhan karma*, *Prachaan karma* and application of oil and lepa should be beneficial in primary Alopecia along with *Nasya* while *nidan parivarjan* and symptomatic management should be given in secondary Alopecia. Thus *Ayurveda* may play a major role to manage the hair fall by using basic Principle of *Ayurveda* and its formulations.

INTRODUCTION

Hair is a protein element that grows from follicles, found in dermis. Hair is the one of the define characteristics in animals. There are various types of hair found in human body according to their body parts. But when question arises about hair fall it is consider the fall of hair follicle from head.

Over 40%, 65%, and 70% man notice significant hair loss by the age of 35, 60 and 80 respectively while about 40% and 55% female notice hair loss by age of 50 and 80 respectively.^[1] Hair and hair loss is not new for *Ayurveda* and described under *kesh* and *keshpatan* respectively. *Ayurveda* has also mentioned hair loss under the heading of *Indralupta* or *Khalitya*. Modern science has mentioned two type of hair loss. First is Primary hair loss due to Alopecia areata, Alopecia totalis and Secondary hair loss by other local-systemic causes.

The diagnose and management of hair loss also mentioned in *Ayurveda* but matters are scattered. This research article has highlighted to evaluate, elaborate and discussion of diagnosis and management of both type of hair loss in detail.

AIMS AND OBJECTIVES

- 1) To evaluate, elaborate and discussion of etiological factors and method of diagnosis of Hair fall (Alopecia).
- 2) To give complete protocol of Ayurvedic management of Hair fall.

METHODOLOGY

The matter related to etiology, pathology and management has been collected from text book of *Ayurveda* and its concert commentaries. The text book of modern medicine has been reviewed to collect concert matters of Hair fall in details. National- International, Index- non index, peer reviewed, Journals has been also referred to update the knowledge of diagnosis and management of Hair fall.

All the collected matters have been framed into primary hair loss and secondary hair loss along with its etiology, pathology and *Ayurvedic* management.

Conceptual and Fundamental Study

- 1) Cause of hair fall (hetu)

1.1) Primary cause of Hair fall (Alopecia) :- As per *Ayurveda* -*Acharya Sushruta* have mentioned about hairfall in *Sushruta Samhita Nidan sthan*- When the *vata dosha* get vitiated along with *pitta dosha* it goes in to *roomkupam* (hair follicle) and which results in hair fall. The next pathology that occurs is that a *rakta dosha* along with the *kapha dosha* obstructs the *roomkupam* which leads to the stoppage of regeneration of hair. This disease is known as *Indralupta* or *Khalitya* or *Rujya*.^[2]

1.2) Primary causes of Hair fall(Alopecia) as per modern science :- Alopecia means loss of hair in area where ordinarily hair would be found. Generally loss of terminal hair on the scalp is called Alopecia. It can be classified into two major groups.

- a) Scarring Alopecia – There are associated fibrosis, inflammation and loss of hair follicle. A smooth scalp with a decreased number of follicular openings is usually observed clinically.
- b) Non- scarring Alopecia- In non- scarring Alopecia, the hair shafts are gone, but the hair follicles are preserved.^[3]

1.2 Secondary cause of Hair fall (Alopecia)

Secondary cause of hair fall has been divided either local or systemic in both *Ayurveda* and Modern science.

Table no.1: shows the local cause of Hair fall as per *Ayurveda* and Modern Science.

Sr. No	Hetu (cause)	<i>Ayurveda</i>	Modern
1	<i>Darunak</i> (dandruff)	+	-
2	<i>Tinia Capitis</i> (Fungal infection) ^[3]	-	+
3	Hair cleansing and coloring agent	-	+
4	Folliculitis ³	-	+
5	Telogen effluvium ³		

Table No.2: shows the systemic cause of Hair fall as per *Ayurveda* and Modern Science.

Sr. No	Hetu	<i>Ayurveda</i>	Modern
1	<i>Ati lavna</i> ^[4]	+	-
2	<i>Ati kshar</i> ^[5]	+	-
3	<i>Asthi kshaya</i> (Osteoporosis) and <i>asthi pradosaj</i> (Bone deformities) ^[6,7]	+	-
4	<i>Vata Vardak aahar</i> like Loki, Jamun, Aaloo, matar etc and vihar like excessive sleep in day, lack of sleep in night ^[8]		
5	<i>Raktaj krimi</i> ^[9]	+	-
6	Over dosage of vitamin A ^[10]	-	+
7	Systemic lupus erythematosus ^[10]	-	+
8	Thyroid dysfunction ^[10]	-	+
9	Radio & Chemotherapy ^[10]	-	+
10	Psychological Stress	-	+
11	Vitiligo ^[10]	-	+
12	Rheumatoid Arthritis ^[10]	-	+
13	Secondary syphilis ^[10]	-	+
14	Usage of contraceptive pills antihypertensive drugs and anti diabetic drugs ^[10]	-	+
15	Deficiencies of protein, Iron, Biotin ^[10]	-	+
16	Long term usage of steroids	-	+
17	Anticonvulsants (carbamazepine, valproate) ^[10]	-	+
18	Anemia	-	+

Trividha Pareeksha of the patients of Alopecia (Hair Fall)

Ayurveda has recommended *trividha pareeksha* (tri examination system) like *darshana*, *sparshana*, *prashana* to diagnose the patient.^[11]

A) Darshana Pareeksha (Inspection) B) Sparshana Pareeksha (Palpation)

To diagnose the cause of hair fall *darshana* and *sparshana pareeksha* is very important because it will be done direct examination by doctors. It should be done on two level that are sthanic (local) & sarvadhahik (systemic) Pareeksha.

a) Local:- In patient of hair loss the doctor should be examine for % of baldness, dandruff, dry hair root. Single or multiple patch of hair loss, sometimes black dot (often with broken off hairs) should be examine to rule out *tinia capitis*. Pimples or pustules located around hair follicle, rashes should be examined to rule out folliculitis.

b) Systemic:- Some systemic disorders may impaired and causes hair loss. Hence systemic *darshana* & *sparshana pareeksha* should be done like.

- 1) Any saririk rukshata (roughness of the whole skin) to rule out Vata Dusti.
- 2) Any deformities in teeth and bones should be examine to rule out *Asthikshaya* and *Asthi Pradhosaja* hair loss
- 3) The systemic examination of nail, hair from the face & eye brow destroy should be examine to rule out *rakataj krimi* in hair loss.
- 4) Dry rough, yellowish skin should be examined to rule out chronic vitamin A toxicity.
- 5) Swelling & deformities in small joints should be examined to rule out rheumatoid arthritis.
- 6) Butterfly rash, mouth ulcer should be examine to rule out Systemic lupus erythematosus in hair loss.

C) Prashana Pareeksha (Questioning)

Prashana pareeksha is very important pareeksha to diagnose disease. In hair fall *prashana pareeksha* are.

- 1) Whether you use more salt & salty food regularly in your daily diet?
- 2) Whether you use soap & shampoo daily in hair wash?
- 3) Whether you use chemicals to colour the hairs regular to regular?
- 4) Do you have more than 100 hair loss in a day?
- 5) Do you have dandruff in your hairs?

- 6) Whether you use much more vata vardhak aahar like Jamun, Matar, Palak, Lokki, khira in your daily diet?
- 7) Do you sleep in a day regularly?
- 8) If you are on chemotherapy or radiotherapy?
- 9) Do you take Vitamin A capsule? If yes than how long you use?
- 10) If you are on epileptic medicine?
- 11) If you use contraceptive pills regularly?
- 11) If you have any type of stress like family / academic/ social/ occupational?
- 12) If you have been a trouble of Rheumatoid arthritis, Thyroid dysfunction, Systemic lupus erthramatus?
- 13) If you use antihypertensive medicine or ant diabetic medicine?
- 14) Do you have joints pain or Fatigue?
- 15) Whether you are on long term steroids?

Treatment of Hair loss

The treatment of hair loss should be done on the basic of their cause. Broadly it should be divided in two groups.

1) Treatment of Primary Hair fall (Alopecia)

2) Treatment of Secondary Hair fall (Alopecia)

1) Treatment of Primary Hair fall (Alopecia):- As per *Ayurveda* treatment of primary Alopecia are *Sodhan Karma*, *Prachaan karma*, Local application of Lepa and oil and *Nasya* therapy. Thus these are suggested four segments in *Ayurveda*.^[12, 13]

1.1) Shodhan:- If patient have any systemic clinical manifestation of either *kapha*, *pitta* or *vata* parkopa then *vaman* or *virechan* or *shodhan basti* should be given respectively to removed out vikriti of *kapha*, *pitta* or *vata* before any local treatment of *Khalitya*. The *Sodhan karma* should be done after proper completion of *Purva karma* like *Snehan* and *Savedan*. *Sansarjana karma* should be also recommended after *shodhan karma*.

1.2) Prachaan karma:- *Prachaan karma* described in *Ayurveda* for treatment of *Indralupta* should be done in following stage.

- 1) Patient should be asked wash the head by using hair cleansing *Ayurvedic* agent like *sikakaai* and fresh water.

- 2) Then the balded area should be clean by using savlon and sterile cotton gauze with clean hand.
- 3) Then Prachaan karma should be done by using either sterile disposal needles of 18 Number or tip of surgical knife.
- 4) The Prachaan on the scalp should not be depth more than epidermal layer.
- 5) Prachaan should not be nearer to less than 1cm.
- 6) Then it should be further clean by using antiseptic or sterile cotton gauze with clean hand.

1.3) Local applications:- After *shodhan* or *prachaan karma* local application like lepa or oil should be used in treatment of hair fall. In *Ayurveda* samhitas there are many oil described in *Indralupta* treatment.

Table No. 3: shows some local applicable lepa.

Sr. no	Chikitsa	Susruta	Astang samhita
1	<i>Gunjadi lepa</i> ^[14,15]	+	+
2	<i>Bhalatak lepa</i> ^[16]		+
3	<i>Dhatura lepa</i> ^[17]		+
4	<i>Kantkari rasa lepa</i> ^[18]		+
5	<i>Tagar & Devdaru lepa</i> ^[19]	+	
6	<i>Karveer rasa lepa</i> ^[20]		+

All these lepa should be use in morning before one hour of bath.

Table No. 4: shows some local applicable oil.

Sr. No.	Chikitsa	Charaka	Sushruta	Sharangadhar
1	<i>Vidarigandhadi tailum</i> ^[21]	+		
2	<i>Maltyadi oil</i> ^[22]		+	
3	<i>Bhringraj oil</i> ^[23]			+
4	<i>Karanja oil</i> ^[24]			+
5	<i>Nilikaadi oil</i> ^[25]			+

All these oil should be use in night before sleeping locally.

1.4) Nasya :- As per *Aacharya Vagbhata* *Nasya* therapy is very important an integrated part of treatment of primary Hair fall or *Indralupta*. It includes facial oil massage or application of steam to face, forehead, neck. After then main step of *nasya* is instillation of medication oil like *nimba* oil or *anu taila* in both nostrils 2-2 drops alternately with the help of proper dropper. After then the mouth is cleaned by giving Luke warm water to gargle.

2. Treatment of Secondary alopecia

2.1 *Nidan parivarjan* is an integral parts of treatment of any disease from any *pathya* including Ayurveda. It should be the causative factors (*Apathaya*) which are mentioned for Hair fall should be avoid.

2.2 The vikriti founds are either local or systemic should be corrected according to basic principle of ayurveda.

Table no.5:- Possible local cause of hair fall and its management.

Sr.no	Cause	Treatment
1	<i>Darunak</i>	<i>Aamrabeeja- haritaki lepa</i> ^[26]
2	Fungal infaction/ <i>tinia capitis</i> / <i>dadru</i>	<i>Chakramardadi lepa</i> ^[27]
3	<i>Ati khashar</i> (local)	<i>Chandan bala lakshadi oil</i> , ^[28]

Table no. 6:- Possible systemic cause of hair fall and its management.

Sr. no	Cause	Treatment
1	<i>Ati lavna</i>	<i>Aamlaka rasayan</i> ^[29]
2	<i>Ati khashar (systemic)</i>	<i>Padamkaadi ghrit</i> ^[30]
3	<i>Vata vikriti</i>	<i>Basti</i> ^[31]
4	Stress	<i>Medhaya rasayana (sankhapuspi, bhramhi, yashtimadhu, guduchi)</i> ^[32]
5	<i>Asthi kshaya</i>	<i>Praval pisti</i> ^[33]
6	Anemia	<i>Punarnava mandur</i> ^[34]

1.3) The treatment of Hair fall related to Thyroid, Rheumatoid, SLE, Vitiligo will be managed according to concern disease and the treatment of hair fall related to contraceptive pills, ant diabetic pills, antihypertensive, & steroids will be managed according to concern toxicity.

DISCUSSION

Hair loss is now burning cosmetic issues as it plays a disfigurement of head and face which result a losing of beauty. In *Ayurveda* the Primary baldness has been described under the heading of either *Indralupta* or *Khalitya*. These are primary baldness in *Ayurveda* can be correlate with Alopecia Areata, Alopecia Totalis and Universalis, Ciatricial Alopecia. In *Ayurveda* there are so many causes of Hair fall has been found in scattered form in various chapter rather than *Indralupta* or *Khalitya*. These all the hetus (cause) of Hair fall resulted to Alopecia may be included in a secondary Alopecia. Though the classification of Alopecia in primary and secondary type has not been described directly in *Ayurveda* like Modern medicine. But *Aacharya Madavkar* has term its under savtantra and partantra vyadhi. Hense the hair fall which having end result of Alopecia can be divided into primary and secondary

Alopecia which will be beneficial to do the treatment. Thus *Darunak* is only secondary cause which has mentioned in *Ayurveda* as a cause of Hair fall while *tinia capitis* (fungal infection) and folliculitis are the cause of Hair fall described in modern science. In clinical practices the over usage of hair cleansing agent and hair coloring agent are also found as a cause of secondary hair fall. Thus *Darunak*, *Tinia capitis*, Folliculitis, over usage of hair cleansing agent and hair coloring agent these are local secondary cause of hair loss which are need to treat after proper diagnosis. Use of *Ati lavna* and *ati kshar*, *asthi khshay* and *asthi pradosaj*, *vata vardhak aahar – vihaar* and *raktaj krimi* these are some secondary systemic causes of hair fall found in Ayurvedic text. Overdosage of Vitamin A, Systemic lupus erythematus, Thyroid dysfunction, Radio and chemotherapy, psychological stress, Rheumatoid arthritis, Secondary syphilis, prolong use of warfarin, long term use of steroids, long term use of anti hypertensive drug, anti diabetic drug and anemia these are some of systemic secondary cause of hair fall according to modern science. Thus all these systemic cause either *from Ayurveda* or from modern should be rule out, diagnose and treat. *Ayurveda* has recommend *trividha pareeksha* to diagnose the patients. *Darshana*, *sparshna* and *prashna* which means Inspection, palpation and question may be helpful to proper diagnose of patient of Hair fall, either originated from primary or secondary, local or systemic hair fall. In primary Alopecia, *sodhan* is important if there any systemic clinical manifestation either kapha, pitta or vata prakopa. Otherwise it should be skip out prachan karma is integral part of treatment of *Indralupta* which will be proved beneficial if it done before the application of lepa and oil. In *Indralupta* the hair follicles will be closed due to obstruction of Rakta and kapha dosha, hence obstructed rakta within the hair follicle need to be remove. The prachan karma (local raktamokshan) will help to remove out the obstructed rakta along with kapha and open the room kupa(hair follicle) for new hair root. Then after prachan karma application of lepa should be done in the morning before one hour bath. Either gunjadi or bhallatak or kantkari lepa or karveer ras lepa should be beneficial in case of *Indralupta*. All these lepa contain visha dravya and having ushna, tikshana kapha- nashak properties along with visha darvya which will be helped to remove out obstructed kapha within follicle which causes the opening for new hair follicle. After then the application of oil in night before sleeping will be help vata pitta shaman(calm down) remaining within the roomkupa. The nostrils is the door of head. Its mean that any medication applied through nostril can be enter to head. Hence either nimb or anu taila nasya will be helpful to nourish the part of head. As the hair is part of head. The oil through nasya should be helpful to well nourish, to well growth, to protect and inhibit the hair fall. Nidan parivarjan recommend in *Ayurveda* will be helpful in the treatment of

secondary hair fall. Hense ati lavna, ati kshar, vata vardhak aahar – vihaar, over dosage of warferin, heparin, anti consulant, anti hypertensive, anti diabetic, steroids should be avoided. Along with nidan parivarjan these is need symptomatic management of secondary cause of hair fall. Aamrabeej / Haritaki lepa, *Chakramardadi* lepa, Chandan – bala lakhashadi oil should be used to remove out darunak, tinia capitis and effect of local cleaning agent respectively. Aamlaki rasyana, padamkaadi ghrit, basti, medhaya rasyana, praval pisti, and punnarva mandur there are some systemic drugs which will be helpful to counter act systemic ati lavna, ati kshar, vata dusti anemia respectively through there is further need of treatment as per involvement of sarotas.

CONCLUSION

Hair fall and Alopecia are the important clinical presentation as it is concern with beauty. Ayurveda has a potency to diagnose and manage either primary or secondary Hair fall and Alopecia.

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