Abstract

Premature graying of hair (Akala Palitya) is a burning issue as large number of population especially young men and women in present times are suffering from this disease. Hair forms an important anatomical structure of the body which not only has protective function but also adds beauty to the face. Increased industrialization and urbanization has posed greater danger of Akala Palitya due to pollution, contamination of water, air and due to other intrinsic factors. Hair has a tendency to lose its natural color with advancing age. It is therefore natural for the hair to turn grey with age. But premature graying is a morbid condition and it makes even the young looks older. This causes a great deal of concern to the effected persons. Concept of Akala Palitya has been mentioned in Ayurvedic Lexicons along with its prevention and treatment.

Keywords

Premature graying of hair, Akala Palitya, Ayurveda
INTRODUCTION

The face of an individual is a personal identity in which hair plays a significant role. Therefore, a perfect head with hair is an attribute of personality and beauty. Genetically Indians are black haired and a dark head is any time better and goes well on any dress. This feeling makes one especially Palitya persons to have dark black hair, that’s why they undergo various therapies with hope of getting black hair.

A large percent of population especially young men and women in present times are suffering from Akala Palitya. Because of this effected persons feel social embarrassment and stigma. Incidence as per W.H.O is largely between the age group of 25-30 years. Accordingly Akala Palitya is such condition, which is prevailing more and encountered more in day to day clinical practice.

Unfortunately contemporary medical science does not offer any satisfactory treatment other than artificial coloring of hair (dyeing). This regular dyeing will lead to many adverse effects like hair fall and other scalp diseases. Understanding hair and related problem reflects the psychological and pathological conditions of whole body system.

In different lexicons of Ayurveda concept of Akala Palitya has been explained and different types of satisfactory treatment without any side effects have also been discussed by different authors.

NIRUKTI AND PARIBHASHA

Nirukti:

Palitya means change of color of hair or graying of hair

Paribhasha:

1) Palitya means grayish colored hair.
2) Palitya is the lakshana of vriddhavastha.

Definition of Akala-Palitya:

- Palitya occurs at the stage of vardhakya, but due to increased ushna guna of pitta early graying (untimely) of hair is observed.
- Akala-Palitya means graying of hair at the young age.
- Palitya means Shukla bhava of the hair1.

Hence Akala Palitya may be defined as untimely or early graying of hair due to excess pitta ushnata. (Here untimely refers to young age.)
NIDANA

The first and foremost line of treatment is avoidance of etiological factor; hence *nidana* plays an utmost importance in the perspective of the treatment. This is followed by the specific treatment as per the aetiopathogenesis of the disease. The etiological factors for hair disorders and *Akala Palitya* are variable. Wide varieties of possible etiological factors are to be elucidated. Acharya Charaka has mentioned *Akala-Palitya* as *Janmabalanapavritta Vyadhi*.

According to different authors of Ayurveda, *Akala Palitya* is both swatantra and paratantra vyadhi and it is included under kshudra roga and kapalagata roga. Here, paratantra *Akala-Palitya* refers to the disease caused by some other diseases like shwitra etc. The nidanas mentioned for those *rogadhikaras* can be applied for that of *Akala-Palitya*. Also, *Akala Palitya nidanas* can be studied by eliciting, *rasavaha* and *asthivaha srotodusthi karanas*. *Akala Palitya* is *twachagata roga* where *romakupas* are lodged, so that some of the *kushta nidanas* can also be considered.

All the etiological factors can be elaborated in the following subtitles.

i) **Aharaja** (dietetic factors)

ii) **Viharaja** (External and behavior factors)

iii) **Manasika** (psychic factors)

iv) **Anyu Hetuja** (miscellaneous factors)

**Aharaja:**

The nidana in the this group includes intake of different types of food materials and this can be taken as *Viprakriskha nidana*. These nidanas affect *rasa dhatu poshana krama*, where *rasa* is the nourishing factor for both *kesha* and *kesha Varna*. *Apathya / Improper diet is a contributory factor for Akala-Palitya*, in the form of *Anashana, Adhyashana, Viruddha ahara* etc.

**Viharaja:**

*Nidana* in the form of *vihara* which includes exposure to certain environment, change in lifestyle and regimen. It may be included under *Viprakrishta nidanas*. Some of them are as follows-

**Ratrijagarana:**

Due to regular indulgence in *ratrijagarana, vata vriddhi* takes place which in turn causes *rasavaha srotodusti* .This may be the cause for *Akala-Palitya*.

**Atapa sevana:**

Due to excessive *Atapa sevana*, like continuous working in field farmers or other hard workers, over hot sun may develop *Akala-Palitya*. Sunrays increase the ushnta
of Keshabhumi and roma kupa to produce Akala Palitya.

Rajo sevana, Dhuma sevana and Dushita vayu sevana:

They make the scalp dry due to the increase of sthanika rukshata, which results in reduction of snigdhamsha may lead to graying of hair.

Shiro Abhyanga Ayoga:

This causes the improper nourishment of both scalp and hair follicles

Dushita Jala snana:

This is also the bahya nidana. In certain parts of India like Saurashtra, Balhika and Saindhava especially coastal areas suffer from lack of fresh and soft water. This is because of Desha swabhava. It contains high salt content and continuous usage of such water is harmful to scalp.

Ati Vyayama and Upavasa:

Due to excess physical work and continuous indulgence in upavasa vata vridhdi occurs. Due to vikshepana karma of vata it aggravates to shiras, causes sthanika tridosha dusti, which in turn causing Akala Palitya.

Manasika Hetu:

Krodha, shoka, adhika chinta and manasika shrama are considered to be both pitta and vata prakopaka nidanas which are responsible for early graying of hair. These are the specific nidanas for Akala Palitya mentioned in classics, through which swatantra type of vyadhi manifests.

Krodha

Due to krodha swastha sanchita pitta gets kupita along with vayu, and causing sharir ushma vridhdi along with other symptoms like trishna, daha

Shoka

Due to shoka vata vridhdi takes place. This leads to vishamagni causing rasa-rakta dusti and direct influence of shoka on dehoshma vridhdi leads to Akala Palitya

Shrama

Due to excess shrama, vata gets vitiated, in turn vitiates jatharagni & rasa dusti, and direct influence of shrama on sharirika ushma vridhdi causing Akala-Palitya

Anya Hetuja:

Prakriti prasakta

Pitta prakriti persons naturally develop premature graying of hair

Jaati and kula prasakta

As far as kulaja / hereditary factors are concerned, there are no direct references available to consider the hetu of the disease. But one can find that the heredity is
considered to be one of the colors deciding factors\textsuperscript{9}. However this factor can be considered indirectly for the formation of disease \textit{Akala Paliya}

\textit{Deshanupaatinin}

According to different \textit{desha} / areas, color and texture of hair will change. While telling the excessive usage of \textit{khsara}, \textit{pippali}, and \textit{lavana}, Acharya Charaka told about the incidence of \textit{Akala Paliya} which is more prevailing in the areas like Balhika, Saurashtra, Saindhava, where \textit{ushara} / \textit{lavanamsha} is more in soil. In such conditions even though persons are having \textit{lavana satmya}, they develop \textit{Akala Paliya}\textsuperscript{10}

\textit{Kaalanupatini}

According to age two types

\textit{Kaalaja}: Swabhavika - Vriddhavastha

(Physiological)

\textit{Akaalaja}: Vikritijanya – Poorva

/Madhyaavastha (Pathological)

\section*{SAMPRAPTI}

\textit{Samprapti} is a physio-pathogenesis which can be told sequentially, that takes place in different stages of disease. The knowledge of \textit{Samprapti} /understanding of each sequence of \textit{Samprapti} is essential in diagnostic and prognostic aspects of disease. According to the different levels of pathology occurred, the line of treatment is going to change. \textit{Samprapti} of \textit{Akala Paliya} changes according to swatantra paratantra \textit{Vyadhi}.

Acharya Sushruta and Madhavakara have emphasized pathogenesis with the increase of \textit{vayu} especially due to excess of \textit{shoka} and \textit{shrama}. At the same time the \textit{pitta} is being increased in its \textit{ushna guna}. This provoked \textit{pitta} circulates throughout the body through rasayana is by the virtue of \textit{vikshepana guna} of provoked \textit{vata} to increase the \textit{sharira ushna}. This \textit{sharirika ushna} reaches to \textit{shiras} and vitiates sthanika \textit{vata karya} and \textit{shleshma karya}.

The \textit{sthanika pitta} and \textit{kapha dushana} happens, causing \textit{bhrajakagni dusti} \textit{bhrajaka pitta} works are hindered and causing \textit{vikrita kesha Varna utpatti}. This \textit{samprapti} emphasizes the involvement of \textit{dehoshma} in the disease pathology.

Another \textit{samprapti} of \textit{Akala Paliya} initiates with \textit{jatharagni dusti} due to \textit{pitta pradhana tridosha dusti} resulting \textit{asthidhatwagni dusti}. During \textit{asthi dhatwagni yapara}, the \textit{poshakamshas} which nourish \textit{asthidhatu} are converted into three parts i.e. the \textit{sthula bhaga}, \textit{suksma bhaga} and \textit{kitta bhaga}. This \textit{kitta bhaga} is processed by the action of \textit{malagni} to produce \textit{kesha}. As there is \textit{dusti} of \textit{kesha poshaka bhavas} and \textit{dusti} of \textit{sthanika}
bhrajaka pitta, shleshma and vata, vikrita varna of kesha takes place. If the dusti occurs at any levels of samprapti, kesha utpatti prakriya hinders and Kesha varna utpatti vikriti occurs.

The Vyadhi kriya kala of Akala-Palita initiates with, sanchayavastha occurring at aamashaya, prakopa takes place in koshta and prasraravastha occurs in sarva sharira. roma kupa is the place where in the dosha-dushya sammurchana takes place and the disease manifests.

**SAMPRAPTI - GHATAKA**

**Dosha:** Sharirika dosha -- Tridosha (pitta dosha pradhana)

Sthanika dosha -- Bhrajaka pitta

**Dushya:** Dhatu-- rasa and asthi.

**Agni:** At dhatwagni level pathogenesis can be thought of at the level of jatharagni, rasagni, asthyagni. If rasadhatwagni is affected then due to lack of nourishment of rasa dhatu Akala Palita would occur.

At bhutagni level also pathology can be thought of- kesha and varna are produced by prithvi and tejaamshas. During rasamala vivechana, if kittabhaga i.e., specifically Kesha poshaka bhava is not nourished properly with prithvi and tejaamshas, then bhutagni paka impairment can be thought.

At mala level pathogenesis may be at the level of production of asthimala from asthidhatwagni vyapara and also in terms of mala vivechana to form respective malas like, kesha.

**Srotas:** Srotas should be understood by studying srotomula. Romakupa is affected by rasavaha srotas and asthivaha srotas. Srotodusthi prakara is usually sanga at different levels of Samprapti

**Udbhava sthana:** Amashaya

**Sanchara sthana:** Rasayanis.

**Vyadhi adhishthana:** Shirogata Romakupa.

**Vyakta sthana:** Shirogata kesha.

**Roga marga:** Bahya rogamarga.

**PURVA-ROOPA**

It refers to the features, which indicates the forth-coming disease. No specific purva roopa has been mentioned for Akala-Palita in classics.

**ROOPA**

Roopa indicates the manifestation of disease. Prakrita Palitya symptoms are developed in Vriiddhapya. And Vaikrita Palitya symptoms are usually developed in Akala Vaya$^{11,12}$

Initially Vagbhata has given the classification and symptoms of Akala Palitya according doshic aspect as below$^{13}$
The classification of Akala Palita can be done on the basis of nidana, samprapti and roopa.

Acharya Sushruta differentiates condition into two:
1) Prakrita Palita 2) Vaikrita Palita

He specifies the Prakrita Palita occurs in Pitta Prakriti persons naturally. Increase in sharira ushna becomes the cause for Vaikrita Palita.

Sharangadhara mentions 2 types of Palita-
1) Kalajana Palita 2) Akalajana Palita

He considers Akalaja Palita in Vaikrita variety and Kalaja Palita is and is Prakrita variety. Akala Palita is the type comes under Vaikrita variety.

On the basis of dosha it can be classified under following types;

Vagbhata has classified 5 types of Akala-Palita:
1) Vataja 2) Pittaja 3) Kaphaja 4) Dwandwaja 5) Tridoshaja

Yogaratnakara has classified 3 types of Akala-Palita:
1) Vataja 2) Pittaja 3) Kaphaja

Acharya Bhela has classified 5 types of Akala-Palita. Among them 4 are Nija and 1 Agantuja

CHIKITSA
Chikitsa is classified into three categories i.e. prakritisvishata, nidana parivarjana and apakarshana. Prakritisvishata includes both shodhana and shamana therapies. Shodhana Chikitsa is expulsion of vitiated doshas and Shamana Chikitsa causes the destruction of factors responsible for the manifestation of disease. As nidana is inevitable for the formation of disease, nidana parivarjana is also an impartable constituent of the treatment. According to dosha involvement the Chikitsa sutra for Akala Palitya is carried out.

The following are the Chikitsa Sutra to treat/prevent premature gray hair:

1) Sthanika Snehana / Abhyanga
2) Samshodhana (Sarvdaihika and Shirovirechana)
3) Nasya
4) Palliative measures (Shiro-lepa)
5) Preventive measures

Sehahana and Swedana:

Snehana refers to the shiro and vaktra abhyanga. Abhyanga is told with tila Taila, amalaki Taila / Taila processed with asana pushpa and patra administered for 6 months is helpful in Akala-Palitya. Swedana can be done by applying pradeha drugs; tapa swedana (Hasta Taila swedana)

Samshodhana:

Acharya Vaghbata has mentioned samshodhana word in terms of both sarvadaihika and sthanika like shirovirechana. Shirovirechana refers to shodhana type of navana nasya.

Nasya Karma:

In Akala-Palitya the navana and pratimarsha Nasya is mentioned for early graying of hair. The Yogas for Nasya karma mentioned in different classics have been given below.

Yogas for Nasya karma

1) 1 kudava oil + 2 prastha Bhringaraja swarasa1 pala Yastimadhu--Oil is used in Akala Palitya in the form of Nasya

2) Bhringaraja ghrita: Bhringaraja swarasa cooked in bile Nasya for a week destroys Palitya.

3) Prapoudarikadi Taila: Prapaundarika + Maduka+Pippali + Utpala + Amalaki + Oil

4) Chandanadya taila: Chandana + Madhuka + Moorva + Triphala + Neelotpala + Priyangu + Guduchi + Shunthi + Loha bhasma + Jatamansi + Saariva + Krishna saariva

Bhringaraja -Taila Nasya in Akala Palitya

5) Kashmaryadi Taila:Kashmarya + Arjuna + Jambu + Sahachara flowers
and fruits + Fruits of Arka + Triphala + Fruits of Madhuka + 32 Palas of Bhringaraja swarasa - Taila Nasya in Akala-Palitya

6) Bhringaraja taila: Goksheer + Bhringaraja swarasa + Yastimadhu kalka - taila Nasya cures Palitya.

7) Nimba beejadi taila: Nimba beeja; Bhavana with Bhringaraja Swarasa + Asana kwatha mechanical extraction of taila is used for Nasya - Indicated in Akala Palitya with restriction milk as diet for 1 month.

8) Nimba taila Nasya: Abhavita nimba beeja taila in the form of Nasya for 1 month with diet as cow’s milk is also helpful in Akala Palitya.

9) Neelyadi taila: Neeli patra + Shirishapatra + Saireyakapatra + Bhringaraja swarasa bhavita + Tila Beeja + Gunja beeja - Oil is used in the form of Nasya.

10) Ksheeradi taila: Godugdha / Aja dugdha + Sahachara swarasa + Bhringaraja Swarasa + Tulasi Swarasa + Yastimadhukalka + Tila taila. This yoga is kept in Meshashringa.

Nasya Yogas can be administered in the form of Pratimarsha and Marsha.

SHIRO LEPA

1) Lohachurna + Bhringaraj + Haritaki + Vibhitaki + Amalaki + black soil are taken in equal quantity powdered and mixed with sugar cane juice. This mixture is kept for 1 month and that juice is applied over hair.

2) Two Amalaki fruits, two Haritaki and two Vibhitaki, 5 karsha Amra majja; 1 karsha lohachurna are mixed well and kept in Iron jar. To this water is added and this is kept for whole night and applied

3) Triphala + Loha churna + Bhringaraj swaras - Kept in matured coconut for month. This is applied over scalp.

4) Utpala triturated in milk-- kept underground for 1 month.

5) Haritaki + Tila Taila + Loha bhasma – paste with Kanji.

KRSNIKARANA YOGA

1) In a slightly matured fruit of coconut the powder of triphala, loha bhasma, and the juice of bhringaraj should be kept. This coconut should be placed in a pit properly dug out in the earth. After a month, this should be taken out. Then hair on head should be cut and the paste of the above mentioned recipe should be applied over the scalp. After the application head should be wrapped with banana leaf for 7 days. Then
the head should be washed with the decoction of Triphala. While using this recipe, patient should take milk and meat soup. It’s an excellent recipe for making the hair black in scalp.

2) Powder of Triphala, Loha bhasma taken in equal quantities, should be triturated by adding water. To this equal quantity of oil is added and cooked for brief period. After the Bhringaraja swarasa equal quantity of oil should be mixed with the above mentioned recipe, again cooked. This oil is stored for month and applied.

PREVENTIVE MEASURES

Pathya-pathya: It plays an important role as much as of medicine and it is rightly mentioned that, if one follows pathya, then there is no need of medicine. Pathya plays an important role in prevention and recurrence of the disease as well as in its treatment.

Pathya:

Ahara: Shashtika shali, Mudga, Goghriha, Dugdha, Kusmanda, Dadima, Kharjura, Narikela

Vihar: Regular hair wash, regular shiro abhyanga, murdha taila, prayogika dumapana, Anu taila Pratimarsha Nasya, timely sleeping.

Keshya Drugs: Narikela, Tila, Vibhitaki, Gunja, Triphala

Kesha Ranjana Drugs: Bhringaraja, Vibhita Majja, Amrasthi, Madayantika, Japa, Loha bhasma, Neelini, Saireyaka.

Apathya:

Ahara: Lavana rasa atisevana, katu rasa atisevana, amla rasa atisevana, shushka, suksha, Viruddha ahara, Lashuna, Masha, Kulatha.

Vihara: Exposure to raja, dhuma, ati atapa sevana, ati vyayama, krodha, shoka, excess intake of alcohol & smoking, vegavarodha and improper sleeping habit

CONCLUSION

As we are in modern era life style disorders are at peak, there are many diseases which are now caused in young age due to pollution, disturbed life style among them premature graying of hair is one. Teen agers, young adults all are suffering from this disease so it is necessary to have knowledge about the disease with its prevention and treatment. As Ayurveda is the oldest health science its lexicons explains in detail about premature graying of hair (Akala Palitya). It explains about nidana samprapti and chikitsa sutra. One must have deep knowledge about this disease to
avoid and prevent it. As Modern Medicines Are having so many side effects Ayurveda has to play key role in coming future.
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