



THE COMPREHENSIVE STUDY OF KESHA SHAREER(HAIR ON THE SCALP) IN PITTAJ PRAKRITI PURUSHA WITH SPECIAL REFERENCE TO PALITYA(PREMATURE GREYING OF HAIR)

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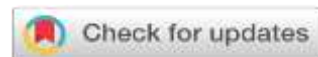
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ABSTRACT

Today's era has expanded and explored each median of life including cosmetology and personality development, and in this race, hair plays a major role not only in the upbringing of the personality of an individual but also in boosting his/her confidence. Healthy hair is a sign of general well-being and youth. Unlike other animals, the function of hair in human beings is being debated. Nevertheless, hair serves as a great esthetic tool and means of nonverbal communication. As graying of hair is perceived as a sign of old age, premature graying of hair (PGH) can bear an adverse effect on the self-esteem of the individual. Also, Hair shaft abnormalities such as graying of hair, hairfall, and hair pigmentation are very common issues faced by middle-aged individuals nowadays. Therefore, profound knowledge of Hair biology and embryology is very necessary to understand the different symptom complexes...In Ayurveda, the shape, colour, and structure of hair can be considered a standard to identify the prakruthi. Even though Ayurveda considers Kesha to be Mala of Asthi dhatu, the protection and maintenance of Hair on the part of an individual are emphasized specifically in this life science. Further, the type of Hair pertaining to different Prakruti is specified making the physician alert while prescribing medicines for Graying of Hair. Keeping all this in mind present study is chosen to investigate the detailed structure and properties of kesha(hair on the scalp) and to find out its Co-relation in pittaj prakruti purusha with special reference to palitya(premature Graying of Hair)"

Keywords: Keshha Shareer, Pittaj Prakruti, PGH (Premature greying of hair)

INTRODUCTION

HAIR is seemed to have a million-dollar business in today's contemporary era, where the market has a wide range of preparations in the form of oils, gels, and conditioners and also different types of dyes and colors exclusively for hair treatment, still, the effectiveness of the treatment is always under scrutiny. Today's era has expanded and explored each median of life including cosmetology and personality development, and in this race, hair plays a major role not only in the upbringing of the personality of an individual but also in boosting his/her confidence. Healthy hair is a sign of general well-being and youth. Unlike other animals, the function of hair in human beings is being debated. Nevertheless, hair serves as a great esthetic tool and means of nonverbal communication. Hair color and style can significantly alter the physical appearance of a person and thus alter his/her body image. As graying of hair is perceived as a sign of old age, premature graying of hair (PGH) can bear an adverse effect on the self-esteem of the individual.

Ayurveda, the science of life has its different principles in each ground, and in the case of hair too, it has set certain principles and vision, one of which is Prakriti. Prakriti is a unique concept in Ayurveda. It is the constitutional behavior of an individual, which incorporates both physical and psychological traits referred to under the caption of Dosha Prakriti. The Prakriti of the person largely depends upon the dosha predominance at the time of fertilization of the germinative factors called in Ayurveda shukra and shonita. Prakruthi is a unique concept of Ayurveda. For the identification of the prakruthi of an individual, observation of each and every part of the body is advised. So, the shape, colour, and structure of hair can be considered as a standard to identify the prakruthi. Even though Ayurveda considers Keshha to be Mala of Asthi dhatu and protection and maintenance of Hair on the part of an individual is emphasized. Further, the type of Hair pertaining to different Prakruti is specified making the physician

alert while prescribing medicines for Greying of Hair. Genetic predisposition or exogenous factors produce and maintain Hair shaft abnormalities such as greying of hair, hairfall, hair pigmentation, etc. Therefore, profound knowledge of Hair biology and embryology is very necessary to understand the different symptom complexes. Hence, there is a keen need to discuss the fact that whether there is any deep co-relation between premature greying of hair and prakriti of an individual. Also, what are the possible causes, complications, and solutions in treating hair abnormalities. Keeping all this in mind present study is chosen to investigate the detailed structure and properties of keshha (hair on the scalp) and to find out its Co-relation in pittaj prakruti purusha with special reference to palitya (premature Greying of Hair)"

Need of the study

In today's contemporary era, Healthy hair is a sign of general well-being. Hair works as a cosmetologically weapon serving as a great esthetic tool and means of nonverbal communication. Hair color and style can significantly alter the physical appearance of a person and thus alter his/her body image. As graying of hair is perceived as a sign of old age, premature graying of hair (PGH) can bear an adverse effect on the self-esteem of the individual. Also, Ayurveda emphasizes its own fundamental principles which say that The Prakriti of the person largely depends upon the dosha predominance at the time of fertilization of the germinative factors called in Ayurveda as shukra and shonita. So the shape, colour, and structure of hair can be considered as a standard to identify the Prakriti. Hence, there is a genuine need to investigate the detailed structure and properties of keshha (hair on the scalp) and to find out its Co-relation in pittaj prakruti purusha with special reference to palitya (premature Greying of Hair)"

AIM

To study the structure and properties of keshha (hair on the scalp) in detail and to find out its Co-relation in

pittaj prakriti purusha with special reference to palitya (Greying of Hair)”

Objectives of the study

1. To make a complete comprehensive study of the literature related to kesha with respect to its utpatti, shtiti, roga, and upaaya.
2. Comprehensive literary study of the concept of pittaj prakriti in ayurveda samhita and its relative understanding in the western system of medicine.
3. To make an analytical study of pittaj prakriti and find out its relevance in the Palitya (premature Greying of hair).

Keshotapatti

According to Sushruta, the hair is one of the Pitruja Bhava” means the structure, color, and quantity of hair of a progeny are dependent on the paternal side. Acharya Charaka considered hair as parthiva dravya as well as Pitruja bhava because of its qualities like roughness, steadiness, heaviness, etc. There is no detailed description found in the Ayurvedic claim regarding the production of Kesha in particular but it has been stated in the process of Dhatu Nirmana that when Paka of Asthidhatu occurs by its own Agni, the Majja Dhatu emerges from sara bhaga and at the same time hair of scalp and body emerges as mala. Sharangdhara believes in the theory that kasha is the updhatu of Majja dhatu. Keshotapatti Kala According to Charaka the Keshotapatti Kala in the foetus is at the seventh month. While according to Vagbhata it is in six months. Kesha Poshana According to Charaka ingested food is digested to assimilable Ahara Rasa which is further divided into two parts namely Sara bhaga and Kitta bhaga. The kitta bhaga is responsible for the production and nutrition of so many things like sweat, urine, and hair. According to Sushruta, kesha poshana occurs from the end part of Dhamani which is attached to Romakoopa. Kesha Varnotapatti The colour of Hair differs in different Desha, Jati, etc. An exotic range of colour is seen in hairs ex. Black, brown, red, golden, etc. but Ayurveda has adored the black colour of hair. Regarding the production of the colour of hair, Ayurveda says that Teja Mahabhuta is responsible for the colour of hair. Bhrajaka pitta one of the manifestations of Teja Mahabhoota combines

with Prithvi and Vayu Mahabhootas and produces black colour. In short. Krishna Vama = Teja + Prithvi + Vayu

Ayurvedic View of Canities (Palitya)

Cause of Palitya: There are four main reasons. The first one is dietary (Aharaja), the second one is lifestyle (viharaja), the third one is psychological (Mansik) & fourth one is other reason or unknown (Adibalapravritta).

1. Nutritional (Aharaja): There is a description of excess use of pungent (katu), sour (amla), salt (lavana), pungent (tikshna), hot (ushna), light (laghu), vidahi, sesame oil (tilaitaila), pinyaka, kulathha, mustard (sarshapa), linseed (alasi), green vegetable (haritakashaka), the flesh of godha, fish (matsya), goat (aja), sheep (aavika), curd (dadhi), takra, kurchika, the water of curd (mastu), sauviraka, suravikara, and amlaphala cause the vitiation of pitta and leads to palitya. (9) The study shows that a deficiency of Iron, vitamin B12, Calcium & Vitamin D3 causes the graying of hair. (10) Excess use of salt causes palitya because lavana is pitta prakupita diet as mentioned in charaka sutra sthana Atreya Bhadrakapiyay adhyay. Alsi or tisi and mustard aggravate the Raktapitta and vitiate the pitta as mentioned in charakasutra sthana anapanavidhyadhyay. There is no such study that mustard and linseed affect the absorption of iron and vitamin B12.
2. Environmental & behavior (Viharaja): Overindulgence in physical exercise & exertion, awakening during the night (raatrijagarana), excessive exposure to sunlight (atiatapasevan), use of smoking & dust particles (atirajo and dhumasevan), intake of vitiated air (dushitvayusevan), excess exercise (ativyayama) and fast (upvasa) may cause the palitya. (11)
3. Psychological (Mansik): Certain psychological factors like anger (Krodha), grief (shoka), afraid (bhaya), and mental stress (mansika shrama) vitiate the pitta dosha causes palitya & other paittika diseases. (12)
4. Unknown/Genetic (Adibalapravritta): There is no exact pathology, but it has been inherited in an au-

tosomal dominant way. Graying of hair is from familial inheritance or pathologic condition. The genetic architecture of normal variation in human pigmentation and Genetic diversity within an individual's pacific population is very low. Molecular genetics of human pigmentation gene diversity tyrs1c45a2, slc24A5, and OCA2 has accessed their impact on melanin content and tyrosinase activity (13)

KESHA SHAREER AND ITS RELATION TO PRAKRUTI: Keshha and prakruti are inter-related. **PIGMENTATION OF HAIR**

Hair pigmentation is one of the most unique features in humans ranging from black, brown, and blonde to red. The color of human hair is due to the pigment melanin produced by melanocytes which are neural crest derivatives. Human hair follicles contain two types of melanin as follows: eumelanin and pheomelanin. The diversity of hair color arises mostly from the quantity and ratio of black-brown eumelanin and reddish-brown pheomelanin. It has been hypothesized that the pH and cysteine level of melanosomes influences the phenotype of hair. As pH reduces, there is a progressive reduction in tyrosinase activity leading to increased pheomelanin and reddish or blonde hair.

Premature Graying (Akala Palitya)

A thousand years back, Ayurveda highlighted this issue and was categorized under Palitya. Greying of hairs is called Palitya, which is of two types, i.e Akala Palitya (Premature grey hair) and Kala Palitya. When vitiated Doshas Vata, Pitta, and Kapha move above one's head causing the burning of hair roots to give rise to Palitya. Long-distance walking, heavy

weight lifting, or old age leads to fatigue and thereby Khalitya and Palitya. Acharya Bhela described five types of Palitya.

ROLE OF PITTA DOSHA IN PALITYA

If we look at the predisposing factors of Palitya, ushna, tikshna and drava guna of pitta excessively increased in disturbing the balance between the tridosha and also at the level of bhrajak pitta in hair roots. This leads to a burning sensation at the level of the scalp region also leading to vitiation of local vata and kapha dosha. Al, these incidences disturb the normal physiological action of hair metabolism.

POSSIBLE ETIOPATHOGENESIS OF GRAYING

To date, the exact etiopathogenesis of graying remains incompletely understood. PGH can occur as an autosomal dominant primary disease. Graying can also occur with premature aging disorders such as progeria and pangeria. Association with atopic diathesis and autoimmune diseases has also been reported.

- Oxidative stress can also be a result of ultraviolet (UV) rays, pollution, emotional factors, or inflammatory causes.
- Vitamin B12 deficiency can cause PGH through an unknown mechanism.
- Certain chemotherapeutic drugs and antimalarials can cause PGH.
- Vitiligo is another condition with early graying of hair. Melanocytes in patients with vitiligo are more sensitive to oxidative stress.
- Smoking has been studied as an etiological agent in early-onset achromotrichia. Studies revealed that there was a significant correlation between smoking and premature hair graying.

KESHA SHAREER IN RELATION TO PITTA PRAKRUTI

Sr.no	KESHA SHARRER (HAIR PARAMETERS)	EXAMINATION METHOD	PRESENTATION IN PITTA PRAKRUTI
1	<i>Kesha Sphutitva (Splitting of Hairs)</i>	<i>Darshan & Sparshan</i>	Splitting of hairs at the end along with shaft in many hairs in four quadrants observed
2	<i>Kesha Snigdhatva (Smoothness of Hairs)</i>	<i>Darshan & Sparshan</i>	Dryness of hairs observed Rough to touch
3	<i>Kesha Ghanata (Hair Density)</i>	<i>Darshan pariksha</i>	2-4 hairs/follicular unit
4	<i>Kesha varna (Hair Texture)</i>	<i>Darshan pariksha</i>	<i>Dhusar kesha</i> Dry, lusterless, rough hairs Dusty hair

5	<i>Kesha Kutilta</i> (Hair structure)	<i>Darshan pariksha</i>	Significant curly hairs
6	<i>Kesha khalitvatva</i> (Hair fall/follicle)	<i>Darshan & Sparshan</i>	<i>Kshipra sampoorna khalit kesha</i> Complete baldness is seen in all the four quadrants
7	<i>Kesha palitvatva</i> (Premature graying of hair)	<i>Darshan & sparshan</i>	<i>Kshipra sampoorna palit kesha</i> Graying of hairs in all the four quadrants

DISCUSSION

With the globalization of Ayurveda, the whole world seems towards Ayurveda with a ray of hope for successful treatment keeping limitations and adverse effects of modern treatment in mind. Keeping the prakruti of a person in mind, we can prevent hair diseases like premature graying of hair, alopecia, etc. Let's discuss all the parameters of kasha sharer in special reference to pitta prakruti.

1. SPUTITATVA (SPLITTING OF HAIRS)-Kesha Sputitvatva is specifically observed in pitta prakruti individuals. The ushan and drava gune of pitta significantly demonstrates the hair structure with splits. It is specifically observed in pitta anubandh vata prakruti.
2. SNIGHDHATA ((SMOOTHNESS OF HAIRS)- it shows significant snigdhatva in kapha as well as pitta pradhana prakruti. Kapha dominating prakruti volunteers should have more Snigdhatva than the other two prakruti according to the literature review. From observations, it will be clear that both kapha and pitta predominant prakruti, shows Snigdhatva in their kesha.
3. KESHA GHANATA (HAIR DENSITY)- A significant Ghanata in kapha pradhana prakruti, which again proves that kapha prakruti individuals have ghanata which means thick hair. While pitta prakruti individuals do not have thick hair.
4. KESHA VARNA (HAIR TEXTURE)-talking about the varna of hair, in pitta prakruti, basically dry lusterless and dusar-kapil varna hairs are observed while in kapha prakruti individuals, the hair varna is Neel varna and Ghana hairs are seen.
5. KESHA KUTILATA-specifically in pittaj prakruti individuals, the hairs are basically curly in nature with unequal width and rough to touch, while in

kapha prakruti the hairs are specifically straight in nature.

6. KHALITYA- *Kshipra sampoorna khalit kesha* Complete baldness is seen in all the four quadrants

7. PALITYA- *Kshipra sampoorna palit kesha* Graying of hairs in all the four quadrants

CONCLUSION

The study entitled "THE COMPREHENSIVE STUDY OF KESHA SHAREER (HAIR ON THE SCALP) IN PITTAJ PRAKRITI PURUSHA WITH SPECIAL REFERENCE TO PALITYA (PREMATURE GREYING OF HAIR) was undertaken. Based upon the results of the study displayed in the form of tables and graphs and critically discussed in the previous chapter, the following conclusions are drawn.

1. Sphutitva: Sphutitva is more significant in vata pradhana and pitta anubandghaj prakruti.
2. Snigdhatva: Snigdhatva is present in both kapha and pitta pradhana prakruti. But snigdhatva decreases if there is vata anubandha pittaj prakruti.
3. Ghanata: In kapha pradhana prakruti, Ghanata is appreciable.
4. Kesha varna: Kesha varna is significant in all three prakruti.
5. Palitvatva: Kshipra palitya is a characteristic feature of pitta pradhana prakruti.
6. Khalitvatva: Though khalitvatva is stated in pitta prakruti, sampoorna khalitvatva was not recorded as significant. But partial baldness and patches of baldness could be present.
7. Kutilta: Sampoorna kutil kesha was not significantly seen in kapha pradhana prakruti but curling of hair near the forehead region was observed.
8. The texture of hair: A conclusion regarding the texture of hair in different prakruti cannot be made.

9. Hair density: Hair density is thick in the case of kapha pradhana prakruti. 10. Rate of hair fall: The rate of hair fall is significant in pitta dominating prakruti. 11. Simple pull test: Simple pull test is positive in the case of pitta pradhana prakruti.

10.

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