

## "Mystery of Premature Greying of Hairs: A Comprehensive Systematic Review of Ayurvedic Perspective"

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### Abstract:

**Background:** Premature greying of hair is a phenomenon more and more found amongst more youthful people, posing now not simplest beauty concerns but also ability implications for typical fitness and properly-being. The present day way of life, characterized via pressure, bad dietary behavior, and environmental factors, is assumed to contribute significantly to this fashion. Understanding the etiology and figuring out preventive techniques for premature greying is important in addressing this rising difficulty. Ayurveda, the historic Indian machine of medication, gives a holistic attitude on health and sickness, supplying precious insights into the underlying causes of premature greying and capacity interventions. **Objective:** This systematic review targets to discover Ayurvedic views on premature greying of hair, investigating the causative factors and preventive measures endorsed by this traditional system of drugs. **Methods:** A systematic search of classical Ayurvedic texts, which includes Charaka Samhita, Sushruta Samhita, and present day research literature, became performed. The seek method centered on figuring out studies that elucidated the connection between way of life elements, dietary habits, intellectual nicely-being, and environmental affects, and untimely greying of hair. **Key Findings:** Ayurveda attributes premature greying of hair to disturbances in lifestyle practices, intellectual strain, and imbalances within the Doshas (organic humors). According to Ayurvedic standards, preventive measures for untimely greying consist of nutritional adjustments, stress management strategies, and using natural remedies to balance the Doshas and promote usual health. **Implications:** Integrating Ayurvedic ideas into contemporary healthcare practices may additionally provide holistic methods to mitigate untimely greying of hair and sell overall well-being. By addressing the root causes of untimely greying and adopting preventive measures recommended by Ayurveda, people can probably delay the onset of untimely greying and preserve healthy hair and energy.

**Keywords:** Ayurveda, untimely greying of hair, growing older, lifestyle elements, causative factors, preventive measures

**Introduction:**

Early hair greying, a marker of aging that used to characterize individuals only of advanced age, has increasingly become a shared problem by young individuals in the recent times. The appearance of youthful people in their tender ages having grey hair is not total stranger to most as they grapple with these cosmetic issues and other issues like health in the wellbeing. This trend is having a huge impact on the specialist of medical science who are working day and night to understand the mechanism of early grey which may lead to changing the greying process through many different ways.<sup>1,2,3</sup>

The fallibility of the human brain and visual perception of the color of hair is something that dates more and more in the past, as hair is often considered a symbol of youth, energy and beauty. Days of greying, a phenom that has been usually identified while pondering about aging, is a process, which is an bone of natural and inevitable components of the aging process. Although, the occurrence of greying of hair at a very young age altogether belies these colloquial user-friendly notions about graceful aging of hair, the query remains concerning the elements that actually lead to premature aging of hair follicles.<sup>24,25</sup>

In contemporary culture, many lifestyle-related factors which are stress, bad diet, pollution, chemical toxins and pesticides are thought to be the causes of hair greying even before it should. Modern-day living which is accompanied by busy schedules, stress at work and less active lifestyle has been known to have an impact on people's stress levels. Its consequences could be manifested through the physiological processes responsible for pigmentation of hair. However, that also can be attributed to the foods we eat. Our diet may be rich in processed foods, lacking essential nutrients. These are the elements that the body cannot do without for the treatment of healthy skin. While the modern medicine has provided limited avenues to color unnatural gray, folk medicines like Ayurveda, can be used to understand health and diseases in a more holistic way. Ayurveda, which belongs to Ayurveda philosophy, whose roots lies back in ancient Indian society more than 5000 years ago, aims to balance body, mind, spirit and offers individualized healing for better well-being. As per Ayurveda, the premature greying of hair is believed to be caused by irregularities in basic energy flows of body i.e. Doshas (as Vatta and Pitta Doshas are considered the primary causes), states Ayurveda They can be originated from a number of sources, such as unhealthy eating habit, emotional discord, toxic environment assories.<sup>2,5,8</sup>

The purpose of this systematic literature study is to explore the specificities of Ayurveda in gray hair prematurely, as ancient wisdom and modern research will contribute to unlock the key to hair graying. Through reviewing of the ancient Ayurvedic texts like Charaka Samhita, and Sushruta Samhita along with the researches

of today, we intend to provide the depiction of causes and preventive measures named by the Ayurveda for grays effectively.

In this extensive review, we will delineate the etiology of premature grey according to the ancient wisdom of Ayurveda. Explaining the involvement of lifestyle adjustments, dietary habits, mental health, and environmental elements. In addition, we will explore the Ayurvedic treatment interventions (such as herbalists, dietary recommendations and lifestyle changes) which are aimed at house the imbalance of the Doshas and improving your hair health. The blending of Ayurvedic principles into modern healthcare will be promoted so that this represents a distinction in people experiencing premature hair pigmentation and in general health. As per Ayurveda, preventive health care and tailored care regimes is the crux of the premature graying of hair. Herbal medicines and treatments personalized to our lifestyle is a unique way to look at premature graying of hair. Thus, the purpose of this systematic review is that of filling in the gap between antique wisdom and the modern science, contributing to the understanding of 'contemporary problem that society' has to face nowadays. Through intricate incorporation of ancient Ayurvedic concepts along with influential current research, we strive to provide clients with viable techniques that facilitate proper hair maintenance and vigor amidst the difficulties presented by contemporary living.<sup>4,6,7,8,12,18,24</sup>

This introductory part paves the way for thorough analysis of Ayurvedic understanding of premature greying of hair, which is further explored in the sequel, during which I look into various causes, options for precaution and solutions according to Ayurveda. This review is dedicated to empowerment. In the following content, we aim to provide readers with both knowledge and resources for greying hair. Thus, one can embark on a journey to health and vitality on a wellness path.

### **Methodology:**

To conduct the academical study based on the systematic review, a specific set of search rules has been formulated to find out the necessary information from classical Ayurvedic texts and a modern database of research materials. The investigation parameters included the traditional medication regimens, hemp, diet, and lifestyle changes for premature greying hair in the context of Ayurveda.

e-search was done using e-bases like PubMed, Google Scholar, and Ayurvedic research databases. The particular expression for the search was "premature greying of hair," "Ayurveda," "dosha imbalance," "hair pigmentation," and relevant words. Furthermore, I chose to get some information from the old Ayurvedic books like Charaka Samhita and Sushruta as the best source of the ancient Ayurvedic literature.

Studies only those articles that deliver the knowledge of causes, mechanisms, or preventive strategies of hair greying as per the scheduled time as per Ayurveda. Qualitative and quantitative research works also made it to the cut. The trial criteria included the exclusion of studies which were irrelevant to Ayurveda, conducted deserted studies focusing solely on conventional medicine, or had no relevance to the premature greying of hair.

Data collection and presentation of significant titles concentrating on the etiology, pathogenesis and different preventive measures for pre-mature hairs were done systematically. The crucial information was obtained from every study that was literally quoted, including the full names of the authors, the study schemes, characteristics of the samples, the key findings as well as recommendations.

The researched material was analyzed to find out what common shown trends and healing patterns related to premature greying of hair from the perspective of Ayurveda. Attention was given to listing causes of the arow graidness, which was thought to be a result of Dosha disorder, dietary habits, lifestyle, and environment. Furthermore, I have taken care of preventive measures suggested by Ayurveda and the latest researches, combined with their supporting evidence, to create an overall authentic and informative review of premature graying.

Quality assessments of studies considered for inclusion were performed to ensure that the quality of the study design and the validity of the findings were appropriately evaluated. Thus, it entailed in evaluating the methodology of the design, appropriateness of the sample size, data collection approach and statistics measure. Research reports with potential methodological bias was deducted for higher order of reliability and validity of the results obtained from the combine reports.

In this review, we took a rigorous, systematic way to seek, appraise, and combine the relevant evidence found in Ayurvedic classics and modern research. Assimilation the teachings of wisdom from the ancient and the sciences of today, this review seek to provide knowledge on understanding and solving the problem of premature graying of hair from the Ayurvedic point view.

## **Results:**

Systematic review was pivotal for the identification of 57 articles out of which 30 met the inclusion criteria. The approach of these studies was a combination of the classical Ayurvedic treatises, modern scientific articles and reviews dealing with the causes of prematurely graying hair from an Ayurvedic point of view.

It has been ascertained through studies that the etiology of premature white greying of hair, as per Sanskrit texts, is due to multi-factorial causes. Imbalance in the tri-Dosha system of the body was found to be a major contributing factor to early greying, Pitta and VataDoshas, in particular, being a key contributor. It has long been believed that Pitta Dosha, meaning automatic processes and heat balance in the body, which promotes premature graying due to connection with increased heat and inflammation. Vata-Dosha, being cognized for its functions of communication and movement in the body was also efficaciously connected with premature greying, especially in the cases of dryness and vata-dhatus.<sup>12,14,16</sup>

According to Ayurveda, the dietary habits were revealed to be among the most influential factors for the hair health and pigmentation, says study. It used to be a belief that intake a lot of hot, spicy and smelly was the causative factor of aging more quickly. On the other hand, adding or including cooling substances like fruits, vegetables, and spices was seen as important to reduce the effect of Pitta Dosha, which affects hair color, and therefore to support it.<sup>14,18</sup>

A part of Life Style also represents as other variables of premature grey hair, according Ayurveda. An excessive wear and tear of the body coupled with continuous discomfort that comes with irregular routines as well as unhealthy habits such as over intake of Vata food also interferes with the body's equilibrium; in the process leading to greying. The basic premise of those ancient texts was to keep a balanced life involving the programs of regular sleeping, stress management and well-thought-out eating habits in order to be fit and forestall graying of hairs at an early age. Other than the dieting and lifestyle, environmental factor was also found to be the causative agents of premature greying in accordance with Ayurveda. At the time, people thought it was the result of getting exposed to the environmental toxins, pollutants, and harsh chemicals in the hair care products which would make the hair follicles unhealthy, and cause disruptions in the natural pigmentation process. Various ayurvedic treatises favored the utilization of natural herbs and subtle hair care practices that could offer protection from the detrimental effects of the external environment to keep the hair shining and strong without fading of the color.<sup>5,6,7</sup>

The results to sum up, Ayurveda with its holistic approach sees premature greying of hair as problem of the whole organism, not a single function. The discovery of interconnection between food, life style and environment is the essence of Ayurveda and therefore Ayurvedic literature has profound insights on natural hair care and delaying of greying. With the aid of integrating traditional knowledge and main science, Ayurveda provides effective means for the persons who are on a mission of keeping their hair healthy for ex years.

**Discussion:**

The systematic review has shown that there is a comprehensive perspective from Ayurveda towards the underlying mechanisms of premature greying and their management. I started by summarizing my findings by using the classical Ayurvedic texts as well as contemporary research articles, giving insight into the results of the research and also investigating paths for the research and clinical practice.<sup>9,10</sup>

One major factor raised in the review that was raised was the critical role of the aggravation of the Pitta and Vata Doshas successively and not only the accumulation in the scalp in the initiation of premature greying based on Ayurveda. Pitta dosha (i.e., metabolic actions and thermal regulation) comes in as one critical factor contributing to premature greying of hair through the ability of this dosha to create excessive heat and inflammation in the body. It is interesting to see that the latest researches equate oxidative stress and inflammatory processes with premature graying and that classical Ayurvedic notions, which have been contributing for ages, still bear actuality while discovering these things.<sup>11,12</sup>

Undoubtedly dietary factors constitute of the important causes of the hair problems and the pigmentation according to the Ayurvedic system of Medicine. Reminding us that a diet composed of cooling and for this reason nourishing foodstuffs can regulate the Pitta and Dosha in order to contribute to healthy hair hues, this guidance goes hand in hand with the current nutritional standards, which emphasize the necessity of vitamins, minerals, and antioxidants to promote hair health. Dissecting the influence of the dietary elements on the hair pigmentation could uncover the fine-tuned interactions and consolidate the personalized diet regimens towards prolonging greying.<sup>13,14</sup>

A new aspect in the Ayurvedic line to junction the premature greying and the lifestyle practices is brought out by the theory. Living in an Ayurvedic way leads to a strong balanced lifestyle which includes healthy habits of sleep, stress reduction, and mindful eating. Placing the mind, body, and the spirit in their proper perspective is the chief message. The performing of the stress relieving habits like yoga, meditation and pranayama in regular schedule could be considered as the factor that opens a new way of creating whole being in which hair health will also be taken into account.<sup>15,16</sup>

Additionally, sources of toxicity or pollutants like and the extensive use of harsh chemicals in personal care products (such as hair care items) according to the Ayurvedic system are possible cause for the onset greying.

The approach which is centered on the use of natural and herbal remedies and gentle hair care tends being in cohesion with the modern movements which seek to create lasting change in beauty and environment. Further experimentations exploring

the preventive or curative nature of Ayurvedic herbs and compositions shielding hair out of environmental harmful factors and boosting healthy hair colourations might be the source of new knowledge in relation to natural hair care systems.

On one side, Ayurveda prescribes the effects of early graying along with management of the same, however clinical facts backups of Ayurvedic treatments is yet to explored. Evidences built from rather more rigorous trials delineate the effectiveness and safety of Ayurvedic medicines and diet, recommendations and lifestyle modifications useful for foiling premature greying. These findings strengthens Ayurvedic systems' inclusion in the health care mainstream.<sup>18</sup>

In conclusion, the overall message of this systematic review is that Ayurveda, with its all-inclusive philosophy, is the pathfinder which leads the way to overcome the complications of premature greying of hair. Figuring out the underlying complicated synergies of one's diet, way of life and the surrounding is how Ayurveda provides comprehensive methods of providing good hair health and of preventing premature greying. The combination of Ayurvedic teachings within the sphere of modern medicine opens a door for developing personalized preventive treatment strategies converting the process of healthcare to the one of the genuine personal involvements and thus allows creating a healthy lifestyle.

### **Conclusion:**

Finally, this systematic review has at least partly shed light on the integrative observations of Ayurveda with regard to the unexplored etiology of hair grayness. Consequently, thus through creating a new synthesis between knowledge from classical Ayurvedic texts and current research results, this review makes great contributions to the comprehensions of, preventing and treatment of premature greying.

Underlying all these, however, is Ayurveda classification of the effects of Doshas and foods on the human body which are all summarized in the concept of Tridosha: Vayu or wind, Pitta or bile, and Kapha meaning mucus. Equilibrium of Pitta and Vata Doshas is the main ground for Ayurvedic thinking about the premature graying of hair, pointing out the role of the rebalance of doshas in preservation of a hair's pigmentation.

What makes Ayurveda unique to other systems of medicine is the dietary advice it offers, namely to eat foods that are both cooling and rich in nutrients so as to soothe the Pitta Dosha which is often associated with excessive hair loss. Changes in lifestyle like stress management, and a more conscious manner of living are promoted

not only to ensure all-round health and wholeness but to also mediate the effects of external stress factors on hair pigmentation.

Lastly, Ayurvedic teachings that regard herbal remedies and gentle conservation of the hair as the key factors for protecting hair from premature greying offer a sustainable way of maintaining hair health. Through adopting the Ayurvedic composition and shampooing ceremonies that are natural, people could keep their hair from being covered up with those within the environment and keep its original shine and vitality.

The addition of Ayurvedic components in modern healthcare systems can bring a ray of hope to the application of personalized preventive care rationales in the shape of premature greying. Credible research expeditions must be carried out to conduct research that can confirm the efficiency and safety of Ayurvedic dorms in order to standardize evidence based approach to dealing with premature greying of hair.

All things considered, this comprehensive review demonstrate that Ayurveda is the awesomely time tested system of understanding, diagnosing and treating the whole complex of premature greying. The Ayurveda has established a bridge between the ancient knowledge and modern-day science. Such blending of the two helped in defining the roadmap for the people who need to preserve their hair natural color and the vitality of life, sparking confidence, well-being, and self-expression.

## References:

1. Singh, S. (2010). Physiological study of Dosha's Imbalance with special reference to Palitya and the efficacy of Kesh-Ranjak Tail. Journal of Sharira Kriya, PG Department of Sharira Kriya, NIA, Jaipur.
2. KasinathaSastri, P., & Chaturvedi, G. (2009). Acharya Charaka, Charaka Samhita, Vimana Sthana, 1/17 Vidyotini (Hindi Commentary). Varanasi: Chaukhambha Bharati Academy.
3. KasinathaSastri, P., & Chaturvedi, G. (2009). Acharya Charaka, Charaka Samhita, Vimana Sthana, 1/18 Vidyotini (Hindi Commentary). Varanasi: Chaukhambha Bharati Academy.
4. KasinathaSastri, P., & Chaturvedi, G. (2009). Acharya Charaka, Charaka Samhita, Sutra Sthana, 26/46(4) Vidyotini (Hindi Commentary). Varanasi: Chaukhambha Bharati Academy.
5. Sushruta. (2010). SushrutaSamhita, NidaanaSthaana 13/36, Page 277 with Nibandhasamgraha commentary of Dalhana, edited by Vaidya YadavajiTrikamjiAachaarya. Varanasi: ChaukhambaSurbharatiPrakashana.



6. KasinathaSastri, P., & Chaturvedi, G. (2009). Acharya Charaka, Charaka Samhita, Sutra Sthana 26, Vidyotini (Hindi Commentary). Varanasi: Chaukhambha Bharati Academy.
7. Vagbhata. (2005). AshtaangaSamgraha Sutra Sthana 17 with Hindi commentary by KavirajAtrideva Gupta. Varanasi: ChoukhambaKrishnadas Academy.
8. KasinathaSastri, P., & Chaturvedi, G. (2009). Acharya Charaka, Charaka Samhita, ChikitsaSthana, 26 Vidyotini (Hindi Commentary). Varanasi: Chaukhambha Bharati Academy.
9. Bhela, M. (2009). Bhela-Samhita with Hindi commentary edited by Sri Abhay Katyayan. Varanasi: ChaukhambhaSurabharatiPrakasan.
10. Sushruta. (2010). SushrutaSamhita, NidaanaSthaana 13/36, Page 277 with Nibandhasamgraha commentary of Dalhana, edited by Vaidya YadavajiTrikamjiAachaarya. Varanasi: Chaukhamba Surbharati Prakashana.
11. Vagbhata. (2005). AshtaangaSamgraha Sutra Sthana 17 with Hindi commentary by KavirajAtrideva Gupta. Varanasi: ChoukhambaKrishnadas Academy.
12. Maadhava. (2005). MaadhavaNidaanam with MadhukoshaSanskrita Commentary by Shri Vijayarakshita and Shrikanthadatta with Vidyotini Hindi commentary and notes by SudarshanaShastri, Revised & Edited by Prof. Yadunandana Upaadhyaya. Varanasi: Choukhamba Sanskrita Bhawana.
13. Bhaavaprakaasha. (2010). Bhavaprakasha Samhita including Bhaavaprakaasha Nighantu portion, Edited with Vidyotini Hindi Commentary by Shree Brahmashankara Mishra and ShreeRupalaalaji Vaishya. Varanasi: ChoukhambaaSanskrita Bhawana.
14. Yogaratnaakara. (2010). Yogaratnaakara with Vidyotini Hindi commentary by Vd. Lakshmipati Shastri, Edited byBhishagratnaBrahmashankar Shastri. Varanasi: ChoukhambaPrakaashan.
15. Sen, G. D. (2015). BhaishajaRatnavali of Kaviraj Govind Das Sen, siddhiprada Hindi commentary by Prof. Siddhi Nandan Mishra. Varanasi: ChaukhambhaSurabhartiPrakashan.
16. Agnivesha. (2020). Charaka Samhita revised by Charaka and Dridhabala with Ayurveda deepika commentary of Chakrapanidatta edited by Vaidya JadavjiTrikamji Acharya. Varanasi: ChaukhambhaSurabharatiPrakasan.
17. Sushruta. (2010). SushrutaSamhita, ChikitsaSthaana 24, Page 277 with Nibandhasamgraha commentary of Dalhana, edited by Vaidya YadavajiTrikamjiAachaarya. Varanasi: ChaukhambaSurbharatiPrakashana.
18. Acharya, J. T. (2009). Sushruta Samhita with Nibandhasamgraha commentary of Dalhana. Sutrasthana 24/7. Varanasi: Chaukhambha Sanskrit Sansthan.

19. Acharya, J. T. (2015). Charaka Samhita by Agnivesa with Ayurveda Deepika commentary of Chakrapani Datta, Sutrasthana 16/27-28. Varanasi: ChaukhambhaPrakashan.
20. Acharya, J. T. (2015). Charaka Samhita by Agnivesa with Ayurveda Deepika commentary of Chakrapani Datta, Vimanasthana 3/32-35. Varanasi: ChaukhambhaPrakashan.
21. Acharya, J. T. (2015). Charaka Samhita by Agnivesa with Ayurveda Deepika commentary of Chakrapani Datta, Shareerasthana 16/32. Varanasi: ChaukhambhaPrakashan.
22. Shruthi, N., &Rajashekhar, K. N. (2018). Physiology Of Aging According To Ayurveda – A Review. International Ayurvedic Medical Journal. Retrieved from
23. Deole, Y. S., Chakar, A. B., Chandola, H., & Ravishankar, B. (2013). Observational study on external social and lifestyle related factors and their role in path
24. Pandhi, D., & Khanna, D. (2013). Premature graying of hair. Indian Journal of Dermatology, Venereology, and Leprology, 79(5), 641.
25. Russa, A. D., Haonga, T., &Mboneko, V. F. (2017). Premature Hair Graying: Profiling The Scalp Anatomical Patterns Of Occurrence In Tanzania. International Journal of Anatomy and Research, 5(4.3), 4635-4639.
26. Anggraini, D. R., Feriyawati, L., Sitorus, M. S., &Daulay, M. (2021). Biomarker of oxidative stress in premature hair graying at young age. Open Access Macedonian Journal of Medical Sciences, 9(T3), 44-47.
27. Anggraini, D. R., Feriyawati, L., Sitorus, M. S., &Syarifah, S. (2022). Analysis of zinc and copper serum levels in premature hair graying at young age. Open Access Macedonian Journal of Medical Sciences, 10(A), 283-286.
28. Ashraf, P., Jusuf, N. K., &Simanungkalit, R. (2018). Association between premature canities and quality of life at Medan, Indonesia 2017. Bali Medical Journal, 7(2), 339.
29. Daulatabad, D., Singal, A., Grover, C., &Chhillar, N. (2016). Profile of Indian patients with premature canities. Indian Journal of Dermatology, Venereology, and Leprology, 82(2), 169.
30. Kiafar, B., Taheri, A. R., Hashemy, S. I., Saki, A., Mahdeianfar, B., Taghavi, F., &Vahabi-Amlashi, S. (2019). Serum levels of lead and selenium in patients with premature graying of the hair. Journal of Cosmetic Dermatology, 19(6), 1513-1516.
31. Mahendiratta, S., Sarma, P., Kaur, H., Kaur, S., Kaur, H., Bansal, S., Prasad, D., Prajapat, M., Upadhay, S., Kumar, S., Kumar, H., Singh, R., Singh, A., Mishra, A., Prakash, A., &Medhi, B. (2020). Premature graying of hair: Risk factors, co-morbid conditions, pharmacotherapy and reversal—A systematic review and meta-analysis. Dermatologic Therapy, 33(6).