

# Ayurveda Principles and Formulations in the Management of Alopecia Areata: A Case Report

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## ABSTRACT

Alopecia Areata, known as *Indralupta* in Ayurveda, involves abrupt hair loss from various scalp regions, attributed to an imbalance of *Vata*, *Pitta*, *Kapha*, and *Rakta* (bio-humours involving blood). This condition is increasingly prevalent due to contemporary lifestyle factors. Conventional medical treatments typically involve steroids and antifungal shampoos, which, despite their efficacy, can lead to undesirable side-effects, prompting the need for alternative treatments in Ayurveda. This case report examines the effectiveness of specific Ayurvedic treatment modalities for a 25-year-old female patient presenting with 2-3 bald spots on her scalp's parietal and occipital regions, enduring for 6-7 months without associated symptoms of itching or burning. The patient underwent a combination of internal and external Ayurvedic therapies. Internally, she was treated with *Panchatikta Ksheer Vasti* (a medicated enema prepared with milk and five herbal drugs) and oral medications, including *Aampachak Vati*, *Rasapachak Vati*, *Panchtikta Ghrita Guggulu*, *Krumikuthar Rasa*, and *Panchtikta Ghrita*. Externally, herbal head packs were applied, supplemented by dietary and lifestyle modifications recommended by Ayurvedic traditions. After three months of continuous treatment, the patient exhibited significant hair regrowth on the bald patches without any adverse effects or recurrence to date. This case report highlights the potential of both internal and external Ayurvedic treatments to effectively manage Alopecia Areata, offering a viable alternative to conventional therapies with minimal side-effects.

**Keywords:** Diet, Lifestyle modifications, *Panchatikta ksheer vasti*

## CASE REPORT

A 25-year-old unmarried female patient visited the Panchakarma Outpatient Department as she was suffering from two bald spots (one circular with a 1 cm radius and another oval with a 2.5 cm diameter) on the parietal and occipital regions of her scalp without itching and burning sensation for 6-7 months [Table/Fig-1]. She was well before 6-7 months, but she suffered from the aforementioned bald spots whose symptoms were worsening day by day. There was a continuous onset of lesions one by one. She had preferred allopathic treatment (Ketoconazole shampoo) for two months, once a day, but she only experienced temporary relief. Reluctant to follow her trichologist's recommendation to take steroids, she sought treatment in Ayurveda instead.



[Table/Fig-1]: Status of bald patches before treatment.

**Patient past-present-drug and family history:** Her dietary habits include a mixed diet with frequent consumption of non vegetarian food, salty snacks, and incompatible items like milkshakes. Her sleep was often disturbed and insufficient. Occupational hazards include exposure to dust and cold air, and travelling without adequate protection. Menstrually, she began at 13, with regular, moderate, painless cycles. No similar family history was found.

**Timeline and diagnostic assessment:** Upon arriving at the outpatient Department, the patient, previously diagnosed with Alopecia areata (compared with Ayurveda diagnosis as *Indralupta*), underwent a 14-day therapeutic purgation as a pretreatment protocol as mentioned in [Table/Fig-2]. This was followed by a strict dietary regimen of Khichadi and rice with dal, avoiding non vegetarian, spicy, salty, and pungent foods, and lifestyle adjustments, including no late-night awakenings and consuming only lukewarm water. Subsequently, she received a three-day medicated enema treatment and a 14-day nutritive enema with medicated milk and *Panchtikta Ghrita*. Alongside, specific oral treatment was prescribed for two months and seven days. The treatment plan is shown in [Table/Fig-3].

S. no.	Type of therapy	Drugs	Duration
1	<i>Deepan- Pachana</i>	<i>Amapchak vati</i> 250 mg two tabs before a meal with lukewarm water <i>Rasapachaka vati</i> 250 mg twice daily on an empty stomach (7 a.m.-5 p.m.) <i>Krumikuthar Rasa</i> 250 mg two tabs before meal with lukewarm water <i>Arogyavardhini vati</i> 250 mg two tabs before a meal with lukewarm water	5 days
2	<i>Arohi Snehapana</i> (Type of internal oleation therapy in the incremental pattern)	<i>Panchatikta Ghrita</i> (Ghee with <i>Guduchi</i> - <i>Tinospora cordifolia</i> , <i>Nimba</i> - <i>Azadirachta indica</i> , <i>Patol</i> - <i>Trichosanthes dioica</i> , <i>Kantakari</i> - <i>Solanum xanthocarpum</i> , <i>Vasa</i> - <i>Adhatoda vasica</i> )	6 days
3	<i>Sarwanga Abhyanga</i> (Full body massage) <i>Petisweda</i> (Box steam)	<i>Bala Taila</i>	3 days

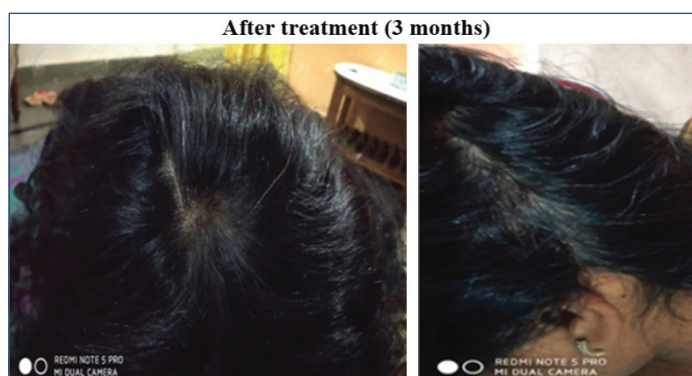
4	Virechana (Therapeutic purgation)	Ichhabhedhi Rasa 2 tabs with lukewarm water (Madhyam Shuddhi)	1 day
5	Samsarjan krama	Peyadi Krama (liquid diet regimen)	7 days
6	Sasneha niruha vasti	700 mL Dashmool decoction, 30 mL of Dashmmola oil, 15 grams of honey, and 10 grams of rock salt	3 days
7	Panchtikta ksheer vasti	120-150 mL Medicated Milk i.e. processed with Guduchi+Nimba+Patol+Kantakari +Vasa added with Panchatikta Ghrita 30 grams +Honey	Two cycles (each 14 days)

[Table/Fig-2]: Details of administered therapeutic interventions (Putative therapies).

S. no.	Internal medication	Dose	Frequency and time of administration	After drink	Duration
1	Krumikuthar rasa	250 mg	Two times after food	Lukewarm water	2 months and 7 days
2	Arogyavardhini vati	250 mg	Two times 1 hour before food		
3	Panchtikta ghrita guggulu	250 mg 3 tabs	Two times after food		
4	Panchtikta ghrita	15-20 gms	Two times before each food	Lukewarm milk	
5	Asthiposhak vati	250 mg	Two times after food		
6	Amala+Musta+Kachora with curd	Head pack	Weekly twice	-	

[Table/Fig-3]: Details of patient's therapeutic interventions (oral and external).

**Follow-up and therapeutic outcome:** During Ayurvedic therapies for alopecia areata, the patient's condition was monitored at treatment onset and reassessed after three months using symptom analysis and clinical images. Initially, no new bald spots developed, and existing spots did not enlarge. Slight hair growth began after therapeutic purgation. Following medicated enema and oral treatment, rapid hair growth was noted, culminating in full hair regrowth over all affected areas after the treatment's completion [Table/Fig-4].



[Table/Fig-4]: Status of bald patches after treatment.

**Patient perspective:** The patient was pleased with the treatment plan and the anticipated outcomes.

The patient gave written informed consent for this case study to be published and agreed to have her clinical information disclosed. The protocols and interventions recommended and carried out in this investigation adhered to the ethical guidelines outlined in the 1964 Declaration of Helsinki, as updated in 2013.

## DISCUSSION

Ayurvedic literature extensively discusses the disruption of Doshas (bio-humours), highlighting their importance in maintaining health. Alopecia areata, in particular, is associated with disturbances in Vata, Pitta, Kapha dosha, and Rakta, leading to impaired nutrient delivery to hair follicles and resulting in rapid hair loss from areas

such as the scalp and beard. This disruption causes hair clumps to shed, forming bald patches due to blocked nutrient pathways to the follicles [1].

In this case, the pathology of alopecia areata was influenced by four main factors: altered gut flora due to poor digestion, considerable mental and physical stress, and immune system abnormalities, elements commonly linked with autoimmune disorders. These factors create an environment that favours the overproduction of free radicals and a decrease in melatonin levels, further damaging the hair follicles and inhibiting hair growth, thereby leading to the development of bald patches. Ayurveda provides a comprehensive approach to mitigate the pathogenesis of alopecia areata. It postulates that the vitiation of Pitta and Vata causes hair loss, while Kapha combined with Rakta obstructs the hair follicles, preventing new growth and causing shiny bald patches [2].

In the patient's case, the consumption of excessive salty and pungent foods, which aggravate Pitta and Rakta, along with sweet foods that exacerbate Kapha, contribute to the onset of the alopecia [3]. The Ayurvedic treatment regimen encompasses a holistic approach, integrating detoxification methods such as therapeutic purgation (Virechana) and Shodhana Vasti (medicated enema), complemented by nutritive enemas and oral pharmacotherapy characterised by Keshya (hair tonic), Balya (strengthening), and Rasayana (rejuvenating) properties. This comprehensive strategy targets symptom management and addresses dietary, environmental, habitual, and psychological factors to mitigate recurrence by tackling the underlying aetiological factors [4,5].

Therapeutic purgation is particularly crucial for addressing vitiated Rakta, a central pathological element in alopecia areata. This process clears blockages in the Doshic channels and normalises Pachaka Pitta and Bhrajaka Pitta, enhancing digestion and purifying Rasa and Rakta [6]. Additionally, Panchtikta Kshir Vasti, recommended for Pitta-dominant conditions, effectively treats degenerative disorders related to bones, hair, and nails due to its properties of reducing moisture, strengthening, and rejuvenation [7,8].

**Aampachak Vati:** This formulation is designed to enhance digestion and promote the absorption of nutrients. According to Ayurveda, poor digestion leads to the accumulation of A'ma (toxins), which can disrupt bodily processes and contribute to disease states such as alopecia areata. By improving digestion, Aampachak Vati ensures better nutrient availability, which is crucial for healthy hair growth and follicle strength [9].

**Rasapachak Vati:** This preparation improves the 'digestive fire' (Agni), essential for breaking down food effectively and assimilating nutrients. It also helps in balancing Kapha and Pitta doshas. An imbalance in these doshas can lead to excessive sebum production and inflammation around hair follicles, respectively, both of which can contribute to hair loss. By restoring Doshic balance, Rasapachak Vati aids in maintaining healthy hair growth [10].

**Krumikuthar Rasa:** This formulation targets intestinal worms and other parasitic infections that can affect nutrient absorption and overall health. By eradicating these parasites, Krumikuthar Rasa helps improve the metabolic processes and ensures that the necessary nutrients needed for hair follicle health are available, thereby supporting hair growth [11].

**Arogyavardhini Vati:** This multipurpose formulation aids in digestion and also plays a role in moderating the body's immune responses. In alopecia areata, an autoimmune response leads to the body mistakenly attacking its own hair follicles, resulting in hair loss. Arogyavardhini Vati helps in moderating this autoimmune response, thereby protecting hair follicles and promoting regrowth [12].

Panchtikta Ghrita Guggulu and Panchatikta Ghrita alleviate inflammation and balance doshas. Both preparations cleanse the blood and remove impurities that can lead to skin disorders, promoting hair follicle health and hair regrowth. They contain

naturally anti-inflammatory herbs, reducing the local inflammation around hair follicles. These formulations help in modulating the immune response, particularly beneficial in alopecia areata, where the hair loss is often due to an autoimmune attack on the hair follicles [13,14]. For topical treatment, a head pack made with *Amalaki*, *Musta*, and *Kachora* mixed with curd nourishes the scalp, stimulates hair growth, and conditions the hair, improving health and appearance. This Ayurvedic treatment addresses the symptoms of alopecia areata and enhances the individual's overall health, ensuring a thorough and sustainable recovery [15].

The case report limitation lies in not utilising diagnostic tools like trichoscopy or dermoscopy, which could have provided objective, quantitative assessments of hair regrowth and scalp health, thereby strengthening the validity of the observed treatment outcomes in alopecia areata.

## CONCLUSION(S)

Ayurvedic therapies, including *Virechana* and *Panchtikta Ksheer vasti*, along with external treatments such as herbal head packs and oral medications, have shown effectiveness in managing Alopecia areata. These comprehensive interventions have led to notable clinical improvements without recurrence. Further validation through larger clinical trials is needed to solidify the role of Ayurveda in trichology.

## REFERENCES

- [1] Singhal P, Vyas V, Chhayani P, Patel M, Gupta SN. Ayurvedic management of alopecia areata: A case report. *J Ayurveda Integr Med.* 2022;13(3):100604. Doi: 10.1016/j.jaim.2022.100604. Epub 2022 Jul 19. PMID: 35868136; PMCID: PMC9307686.
- [2] Patil SB, Patil GS, Patil V. Effective management Alopecia totalis by Ayurveda- A case report. *J Ayurveda Integr Med.* 2023;14(6):100805. Doi: 10.1016/j.jaim.2023.100805. Epub 2023 Dec 2. PMID: 38043433; PMCID: PMC10711465.
- [3] Kumar S, Dobos GJ, Rampp T. The significance of ayurvedic medicinal plants. *J Evid Based Complementary Altern Med.* 2017;22(3):494-501. Doi: 10.1177/2156587216671392. Epub 2016 Oct 5. PMID: 27707902; PMCID: PMC5871155.
- [4] Kadus PA, Vedpathak SM. Anuvasan Basti in escalating dose is an alternative for Snehapana before Vamana and Virechana: Trends from a pilot study. *J Ayurveda Integr Med.* 2014;5(4):246-50. Doi: 10.4103/0975-9476.147445. PMID: 25624700; PMCID: PMC4296438.
- [5] Maurya SK, Seth A, Laloo D, Singh NK, Gautam DN, Singh AK. Śodhana: An Ayurvedic process for detoxification and modification of therapeutic activities of poisonous medicinal plants. *Anc Sci Life.* 2015;34(4):188-97. Doi: 10.4103/0257-7941.160862. PMID: 26283803; PMCID: PMC4535066.
- [6] Rais A, Bhatted S. Clinical study to evaluate the effect of Virechanakarma on serum electrolytes. *Ayu.* 2013;34(4):379-82. Doi: 10.4103/0974-8520.127719. PMID: 24696575; PMCID: PMC3968700.
- [7] Munshi R, Joshi S, Panchal F, Kumbhar D, Chaudhari P. Does Panchatikta ghrita have anti-osteoporotic effect? Assessment in an experimental model in ovariectomized rats. *J Ayurveda Integr Med.* 2021;12(1):35-42. Doi: 10.1016/j.jaim.2019.04.006. Epub 2019 Nov 7. PMID: 31708331; PMCID: PMC8039356.
- [8] Sawarkar P, Deshmukh M, Sawarkar G, Bhojraj N. A comparative efficacy study of the panchtikta Ghrita Matra Vasti and Panchtikta Ghrita Marsha Nasya in cervical spondylosis. *IJAM.* 2020;11(2):218-27. Available from: <https://www.ijam.co.in/index.php/ijam/article/view/1432>.
- [9] Manohar PR. Critical review and validation of the concept of Āma. *Anc Sci Life.* 2012;32(2):67-68. Doi: 10.4103/0257-7941.118524. PMID: 24167329; PMCID: PMC3807959.
- [10] Agrawal AK, Yadav CR, Meena MS. Physiological aspects of Agni. *Ayu.* 2010;31(3):395-98. Doi: 10.4103/0974-8520.77159. PMID: 22131747; PMCID: PMC3221079.
- [11] Ade VN, Mundhe SS. Management of Dadru Kushtha with ayurvedic interventions: A case study. *Int J Res Ayurveda Pharm.* 2019;10(6):91-94. Available from: <https://dx.doi.org/10.7897/2277-4343.1006131>
- [12] Pal S, Ramamurthy A, Mahajon B. Arogyavardhini Vati: A theoretical analysis. *J Sci Innov Res.* 2016;5(6):225-27.
- [13] Kumari H, Pushpan R, Nishteswar K. Medohara and Lekhaniya dravyas (anti-obesity and hypolipidemic drugs) in Ayurvedic classics: A critical review. *Ayu.* 2013;34(1):11-16. Doi: 10.4103/0974-8520.115437. PMID: 24049399; PMCID: PMC3764867.
- [14] Sharma AV, Dudhamal TS, Gupta SK, Mahanta V. Clinical study of Agnikarma and Panchatikta Guggulu in the management of Sandhivata (osteoarthritis of knee joint). *Ayu.* 2016;37(1):38-44. Doi: 10.4103/ayu.AYU\_103\_14. PMID: 28827954; PMCID: PMC5541466.
- [15] Sharma A, Gupta S, Iyer V. Therapeutic effects of Amalaki, Musta, and Kachora in the treatment of alopecia areata: A clinical trial. *Int J Ayurvedic Med.* 2024;35(1):112-19.

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