

A Persuasive in the Management of *Indralupta* (Alopecia areata) with Ayurvedic approach

Case Report

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Abstract

The aim of the case study is to evaluate the efficacy of Leech therapy along with ayurvedic treatment in Alopecia areata (*Indralupta*). It is prospective interventional case report on alopecia areata treated with leech therapy and *ayurvedic* formulations. Using a subjective evaluation, an improvement in growth of hair on bald patches over scalp region was observed. An 18-year-old female patient, resident of Delhi, presented with complaints of two bald patches (right parietal & vertex) over the scalp without any secondary changes. With these complaints, the patient visited *Shalya Tantra*, Outpatient department (OPD No 16) at Chaudhary Brahm Prakash Ayurved Charak Sansthan, New Delhi. She took treatment for six weeks and got complete remission in her symptoms. Line of treatment adopted was *tridosha shamaka*, *rakta-shodhaka* and *raktamokashana* (Leech application). Leech therapy supplemented with *ayurvedic* formulations have definite role in Alopecia Areata (*Indralupta*) especially of recent origin. A case series or pilot study may further strengthen above case report and open new treatment arena for such cases. This case report can also be used to formulate hypothesis for management of baldness from an *ayurvedic* perspective.

Key Words: Alopecia areata, *Ayurveda*, *Ayurvedic* treatment, *Indralupta*, Leech therapy, *Shalya Tantra*, Baldness.

Introduction

Alopecia areata (1) is a common form of baldness in which sudden loss of hair can be observed from scalp in patches. Loss of hair may involve entire scalp region (*Alopecia areata totalis*) or entire body surface (*Alopecia areata universalis*) and in severe cases, loss can be permanent. The term alopecia areata was coined by Sanvages in 1760 and described by Comelius celsus, (2) non-inflammatory type of alopecia accounts for approximately 25% of all the cases (3) and prevalence of alopecia areata in general population is estimated at 0.1-0.2%. Although both the sexes are equally affected; some researches show male predominance (4). Usually the onset occurs in early childhood. The youngest patient reported is 4 months old and oldest was in late 70's. Highest rate of prevalence to be was noted between 30-59 yrs of age. Familial involvement is present in 8.7 – 20% of cases (5).

It is seen that the first episode usually resolves spontaneously (6), but if it persists; it can act as important prognostic factor to assess the severity of the

disease (7). In alopecia areata, patches are smooth and normal skin colour, characteristic yellow dot pattern is often seen with micro exclamation of hairs (short, fractured hairs with proximal tapering).

Many hypothesis are proposed to ascertain the etiology of alopecia areata, but it is still an enigma. It is believed to be an autoimmune disease (8), triggered by various factors like stress, emotional trauma, hormonal changes, infectious agents. Alopecia areata is considered as hair follicle specific autoimmune disease in genetically susceptible individuals, triggered by various factors. The types of hair loss patterns are reticular, ophiasis (snake like) & sisaipho (ophiasis inversus). Definitive cure or preventive treatment for alopecia areata has not been established yet. Available treatment used, is mainly for hair growth, have never been proven to change the disease activity.

This includes use of oral/parenteral/topical/systemic or intralesional steroids, photochemo-therapy and topical immunotherapy (9). Hair pieces and hair additions can also be used as a camouflage to address the emotional problems caused by cosmetic concern of alopecia areata.

Case Presentation

An 18-year-old female patient, resident of Delhi was apparently well six months back (Feb. 2017), however gradually, while combing hairs, her mother noticed loss of hairs from 2 patches over the scalp region. Later on, there was increase in size of the patches. On enquiry it was told that the loss of hair was not associated with itching, discharges, redness, edema

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etc. No significant aggravating and relieving factors were observed. On examination it was observed that the patches are present over right parietal and vertex region of scalp. She took consultation with allopathic and homeopathic doctors, but no improvement was noticed. With above mentioned complaints patient visited *Shalya tantra* OPD No 16 of Chaudhary Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi for management.

History of Past illness

History of Jaundice in Jan. 2016. No H/o DM/HTN/Koch's/Asthma/Fever/surgical intervention was present in the patient. In family history her Sister had Leucoderma X 5-10 years.

Personal history

Patient is vegetarian with normal appetite of 3 meals a day, leading an active life style, with no addiction, getting 9-10 hours of sound sleep. It was also told that patient was fully Immunized during childhood. No relevant history of allergies was found.

Dashvidhpariksha

- *Prakriti-vatapittaj*,
- *Vikriti-prakritisamsamveta*,
- *Sara - Mamsa sara*,
- *Samhanana- madhyam*,
- *Praman- madhyam*,
- *Satmya-madhyam*,
- *Satwa-Madhyam*,
- *Ahar- madhyam*,
- *Vyayam- madhyam*,
- *Vaya- yuva*,

Asthtavidha pariksha

- *Nadi* – 78/min regular, full volume;
- *Mutra* – pale yellow, burning micturition, 4-5 times a day 1-2 times night,
- *Mala*- once a day fully evacuated,
- *Jihwa*- niram pink in color, no anatomical deformity, no lesions seen,
- *Shabda* – *spashta (clear)*,
- *Sparsha* – smooth without swelling,
- *Drik* – no change in skin color: margins – irregular,
- *Aakriti* – circular and longitudinal.

General examination

General examination of the patient was within normal limit.

Local examination of scalp

Inspection: 2 bald patches, longitudinal (2.5cmX5cm approx) & circular (2cm radius approx) with ill-defined margins were found on right parietal & vertex (Figure 1,2) respectively over the scalp.

Palpation

There was no local rise in temperature, no tenderness/induration.

Laboratory Investigations: Hb – 12.8 gm%, BT – 1 min 29 sec, CT – 4 min 2 sec., HIV 1 and 2-Negative, HbsAg– Negative.

Concurrent treatment: No concurrent treatment was continued during study. Optimum (2-3 weeks) washout period was adopted to wean off the left-out effects of previous medication.

Nidana Panchak

- **Nidana:** Faulty food habits: It was told that patient used to have junk food frequently due to active/busy lifestyle & stress.
- **Purvaroop:** Fall of hair
- **Roopa:** 2 patches of skin with loss of hair over the right parietal and vertex region of the scalp.
- **Samprapti:** *Nidana sewana – Vata-Pitta dosha prakopa – rakta + kapha dooshit – romakoopaavrodha – hairfall* (10).
- **Treatment:** Optimum washout period for previous medicine was adopted. She was advised internal & external therapies. External therapy consists of leech therapy (11) and local application of *Bhringraja* oil (16) followed by wet towel steam thrice a week. Internal therapy consists of *Amalki Churna* (12) 3gm BD, *Brihat Manjisthadi Kwatha* (13) 40 ml. BD, *Saptamrita Lauha* (14) 500 mg BD, *Samshamni Vati* (15) 2 tab. BD (Twice daily). Total duration of treatment was 8 weeks (internal therapy) and Leech therapy (17) for 6 weeks under aseptic conditions. The date of initiation of *Samshamana* therapy was 21.07.17 and of *Leech* therapy was 28.07.2017.

Outcome and follow up

Gradual reduction in hair loss was noticed (Figure 3 to 6), Bald patches over scalp covered with minute hairs within 6 weeks and after 6 months normal hair growth was seen over patches (Figure 7 & 8). No further hair loss was observed, no new patches appeared.

Discussion

The cases of *Alopecia areata* are keep on increasing day by day because of the altered lifestyle. In clinical practice, we frequently encountered with such cases and now it is increasing in young subjects. Cosmetically hair are important part of personality and baldness produce lots of side effects e.g. lack of confidence, personality defects, inferiority complex. According to *ayurvedic* principles, vitiated *Vata* and *Pitta* are responsible for hair fall and vitiated *Rakta* and *Kapha* obstructs the channels of hair follicles (18). Closed follicles lead to stoppage of regeneration of new hairs, the condition known as *Indralupta* (hair fall in patches i.e. *Alopecia areata*), *Khalitya* or *Ruhya* (19). It can be ascertained that in cases of *Indralupta*, *Tridosha* along with *Rakta* are the main causative factors. Line of treatment for this condition is *Snehana* (Oleation), *Swedana* (Fomentation) followed by *Raktamokashana* (Blood letting) (20).

Drugs used for oral therapy are mainly *Tridosha shamaka*, *Rakta shodhaka* and *Rasayana* in nature of action. *Bhringraja (Eclipta alba)* taila (Snehana) was topically used for head massage as it is a proven, potent hair revitalizer followed by wet towel steam (*Swedana*) which improves circulation and helps in opening of ducts of hair follicles. Along with *Bhringraja* it also contains *Manjistha (Rubia cordifolia)*, *daruharidra (Berberis aristate)* (21,22,23) which are potent antimicrobial drug. *Brihat Manjishtadi kwath* is indicated in *Vata rakta*, *Raktashodhaka*, *Tvak vica* and *Kushtha*. It is used as potent blood purifier contains *Varun (Crateva nurvala)*(24) which facilitates removal of toxins from the body. *Amalki (Embelica officianalis)* *Churna*, *Samshamni Vati* and *Saptamrita Lauha* are mainly used as *Rasayana* in action.

Rakta, being the vehicle to carry and transport absorbed nutrients, oxygen, metabolites etc from one place to another, so correction of any abnormality in the *Rakta* by taking it out (Blood-letting) effectively cures number of diseases. *Raktamokashana* in this case performed with leech application as it is described as best method to pacify the vitiated *Pitta* and *Rakta*. Leech sucks the blood and improves local blood circulation mainly by injecting histamine like substances that causes vasodilatation. After the evacuation of vitiated blood from the affected site, re-channelization of blood flow is stabilized. Many studies have confirmed that leeches have more than hundred bioactive substances in its saliva, which mainly have analgesic, anticoagulant and anti-inflammatory effects. This is the reason for selecting the combination of topical application, systemic medications and leech therapy for treating this particular case. The available treatment in modern medicine mainly based on steroid and minoxidil etc. which have their own side effects. Leech therapy works similar to minoxidil as it improves the local blood circulation along with its anti-inflammatory action.

Conclusion

Leech therapy along with ayurvedic systemic therapy has a definite role in alopecia areata especially of recent origin.

A case series or pilot study should be conducted in the similar cases to validate the above case report which may treat many such cases.

This case report can also be used to generate hypothesis for management of baldness from an ayurvedic perspective.

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Rani Manju et al., A persuasive in the management of Indralupta (Alopecia areata) with Ayurvedic approach

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Table No. 1: Details of drug used for this study

S.No.	Name of the drug	Ingredients	Dose	Dosage form
1	Brihat Manjishthadi Kwatha	Manjistha, Musta, Kutaja, Guduchi, Kushtha, Nagara, Sharangi, Kshudra, Kataka, Vidanga, Chitraka, Trymana, Bhringraja, Patha, Chandana, Varuna, Bakuchi, Shakhotaka, Karanja etc.	40ml orally	Decoction
2	Bhringraja Oil	Bhringraja, Manjishtha, Chandana, Bala, Daruharidra, Priyangu, Parpaundrika, Sarivaetc	3 application per week, 1 hr before head wash	Exteranal application, Nasya, Shirodhara
3	Amalaki Powder	Powder of emblica officinalis	5gm BD, orally	Powder
4	Sanshamni Vati	Guduchirasakriya	2 BD, orally	Tablet
5	Saptamrita Lauha	Madhuka, Amalaki, Vibhitaka, Haritaki, Lauha Bhasma	2 BD, orally	Tablet

Table No. 2: Timeline

Date	Detail of visits
February 2017	Severe hair fall started
March 2017	Patient's mother noticed 2 bald patches (Longitudinal {2.5cmX5cm approx} & circular {2cm radius approx} in shape) over the scalp (right parietal & vertex) without any redness/ swelling/dyscoloration etc
April – June 2017	Tried various allopathic and homeopathic treatment but got no relief
First 2-3 weeks of July	Wash Out Period
21.07.17	Patient started treatment at Shalya dept. of CBPACS. Patient was advised following treatment: Brihat Manjishthadi decoction, Amalaki churna, Tab Saptamrita Lauha, Sanshamni vati along with protein rich diet. Preliminary investigations for leech therapy was done. Head steam with Bhringraja oil application thrice weekly was advised.
28.07.17	1 st sitting of Leech therapy done, rest medications continue.
05.08.17	2 nd sitting of leech application done. Sparse vellus hair with brownish appearance visible over the bald patches.
12.08.17	3 rd sitting of leech application done. More vellus hair visible over the patches
19.08.17	4 th sitting of leech application done. Small blackish hairs visible.
26.08.17	5 th sitting of leech application done. Patches partially covered by thick black hairs.
02.09.17	6 th sitting of leech application done. Both Patches fully covered by thick hairs.
Sep 2017	Complete resolution.
Follow Up	6 months No episode of Alopecia observed.

Figure 1 & 2 : Before Treatment



Figure 3 & 4 : 1st Leech application



Figure 5 & 6 : after 4th Leech application



Figure 7 & 8: Final Outcome


