



A CASE REPORT ON AYURVEDIC INTERVENTION IN THE MANAGEMENT OF ALOPECIA AREATA (*INDRALUPTA*)

Ayurveda

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ABSTRACT

Background: Cosmetic disorders cause negative impact towards the individual and their quality of life. Alopecia areata, an autoimmune disease characterised by hair loss on the body especially on scalp without any clinical inflammatory signs. It can be correlated with *Indralupta* under *Kshudraroga* in Ayurveda. **Objectives:** This case study aims to investigate whether Ayurvedic intervention can manage Alopecia Areata (*Indralupta*) without any surgical or parasurgical intervention. **Case report:** A 24 years old girl came to the outpatient department (OPD) of Regional Ayurveda Research Institute for Gastro-Intestinal Disorders, Guwahati with complaint of hair loss on scalp with mild itching. **Method:** This case of Alopecia Areata (*Indralupta*) was managed by Ayurvedic intervention of *Kaishore Guggulu* 1 gm twice a day, *Sanjivani Vati* 250 mg thrice a day and local application of *Suddha Gandhak* with luke warm coconut oil in every third night and *lepa* of *Palash flower kalka* with water for 1 hour before bathing in alternate day for 3 months at OPD level. **Result:** The response to the treatment was found highly effective. At the end of the treatment period of 3 months as compared with baseline, a highly significant change was observed. **Conclusion:** Above mentioned treatment was found very effective and safe in a patient of Alopecia Areata (*Indralupta*).

KEYWORDS

Alopecia areata, *Indralupta*, *Kaishore Guggulu*, *Sanjivani Vati*, *Palash pushp*

Introduction:

Cosmetic disorders cause negative impact towards the individual and their quality of life. It may be considered that face is the mirror of our personality and it should be maintained from the hair style we keep. In Present era, there are lots of changes in the food habits and the lifestyle therefore ill effects are seen on the body and out of which hair has erupted as a major problem. Normal hair break up is about 50-100 strands per day. Though, it is replaced by new ones, however, aging, hereditary and hormonal change contributes permanent loss of hair. Alopecia areata, an autoimmune disease characterised by hair loss on the body especially on scalp without any clinical inflammatory signs. Its prevalence in general population was estimated at 0.1-0.2% with a lifetime risk of 1.7%¹. Male was reported to be more affected with the disease in comparison to children and women, but it cause more emotional problems in woman and children due to cosmetic concern.² Its main treatment in contemporary science is corticosteroids which is having harmful side effects and not advisable for long term use.³

Since no such successful management is mentioned in modern system of medicines, so world is expecting successful management from alternative system of medicine. Ayurveda offers different effective treatment modalities for the management of different autoimmune diseases. Alopecia areata can be correlated with *Indralupta* disease mentioned under *kshudra roga*. Sushruta has mentioned *Indralupta* as *Raktapradhoshaja vikara*.⁴ Pitta associated with *Vata* gets lodge in *Romakupa* and causes hair fall, later on *Kaphadosha* associated with *Rakta* causes obstruction to the hair roots and restricts the regrowth.⁵ However Acharya Vagbhata mentioned the *samprapti* same as Sushruta but only difference he said that *khalitya* is loss of hair gradually and *indralupta* is the loss of hair suddenly.⁶

In Ayurveda, both *shodhana* (Internal and external cleansing procedures) and *shamana* treatment (Disease specific internal medications) are prescribed for *Indralupta*. Here a case of female patient suffering from Alopecia areata was successfully treated with Ayurvedic *Shamana* therapy along with *nidanaparivarjana*. *Kaishore Guggulu* is a polyherbal remedy containing purified *Guggulu* and is used as antiallergic, antibacterial and blood purifier. It acts as health promoter for aging skin, useful as supportive herbal supplement in many health conditions such as diabetes and skin diseases. Polyherbal formulation *Sanjivani Vati* has lifesaving property. Its *Deepana-Pachana* (appetizing and digestive), *Anulomana* (laxative),

Jwaraghna (antipyretic), *Krimighna* (antihelminthic) etc., properties can be utilized to check the pathogenesis of various diseases at different levels.⁸ Sulfur (Gandhak) has mild antifungal and antibacterial activity. However, its precise mechanism of action is unknown. When applied to skin, sulfur is thought to interact with cysteine, present in the stratum corneum, to form hydrogen sulphide. Hydrogen sulfide can break down keratin, thus demonstrating sulfur's keratolytic activity.⁹ Antifungal study of *Gandhak* has been conducted in microbiology department of JSS Medical College, Mysore¹⁰. *Palash pushpa* is *kaphapittanashak* property and acts as *sthambaka*, *raktastambhana*, *dahaprashamanam*, *grahi*, *rasayana*.¹¹

Case Report:

A 24 years old unmarried female patient came to Out Patient Department (OPD) of Regional Ayurveda Research Institute for Gastro-intestinal Disorders, Borsojai, Guwahati on 30th Oct 2019 vide registration no. 4687 with complain of patchy hair loss on scalp with mild itching over affected area since last 1 year. There was no personal history of psychological and pathological disorders. She dint had any other auto immune disease or any family history in first degree relation suggestive of these disorders. She underwent Allopathic treatment for hair loss for 6 months but she didn't notice any exaggerating or relieving factors. There was a patchy hair loss measuring 5×6 cm and 3×3 on parietal region and on frontal region respectively (Image-1). After general examination it was observed that she had a medium built of body. On local examining she had no skin lesion, tumor in localized area nor any other abnormalities observed.

The patient was prescribed to take orally *Kaishore Guggulu* 1gm twice daily before meal and *Sanjeevani Vati* 250 mg thrice daily after meal. Externally the patient was advised to apply *Suddha Gandhak* with luke warm coconut oil in every third night and *lepa* of *palash pushpa kalka* which was advised to be prepared at home by mixing it with water in the affected area 1 hr before bathing in every alternate days for 3 months. The patient was asked to follow-up after 15 days, on second visit no such change was observed however the itching was reduced to some extent. On fourth visit that is after 45th day from the baseline some brownish hair appeared over the bald patches and finally on 90th days bald patches were filled up with blackish hair there after (Image-2). Later she was asked to continue *palash pushpa kalka lepa* and *kaishore guggulu*. *Suddha gandhak* and *Sanjeevani Vati* was stopped after 3rd month. She was advised to clean and wash her hair every alternate day.

The hairs on the patches gradually grown longer and after 6 months the hair was observed to be similar with the neighboring areas (Image-3).

Table 1 Physical examination:

General examination		Dashavidh pariksha		Ashtavidh pariksha	
Pulse	76/min	Sarira prakriti	Vata pittaja	Nadi	76/min
Blood pressure	110/70	Manas prakriti	Rajas	Mal	Sama
Weight	50kg	Sara	Tridoshaja	Mutra	Samyaka
Height	160cm	Samhana	Madhyama	Jivha	Sama
Respiratory rate	18/min	Satva	Madhyama	Shabda	Spashta
Temperature	98°C	Satmya	Madhyama	Sparsa	Mridu
Tongue	Moist	Ahar shakti	Avara	Drik	Shukla
Disease specific examination	Jarana shakti	Avara	Akriti	Madhyam	
Site of involvement	Scalp	Vyayam	Madhyama		
Pattern	Asymmetrical	Desha	Anupa		
Skin colour	Whitish	Kala	Visarga		
Discharge	Absent				
Dandruff	Present				
Scaling	Present				

Table 2: Medicines prescribed:

Medicines	Dose with anupan	Pharmacological actions	Therapeutic action
Kaishore Guggulu	1 gm twice daily with warm water	Anti inflammatory ¹²	Vatarakta, kasa, kustha, sotha, udar roga, pandu, prameha, mandagni ¹³
Sanjeevani Vati	250 mg thrice daily with warm water	Deepana, pachana, anulomana, jwaraghna, krimighna etc. ¹⁴	Ajeerna gulma, sarpadamsha, sannipatajajwara, visuchika. ¹⁴
Suddha Gandhak	Externally With coconut oil	Anti fungal ⁹	Kasa, swasa ¹⁵ , kustha ¹⁶ , prameha ¹⁷ , mutrakriccha ¹⁸
Palash	Externally With water	Antihelmenthic, antileprotic, antigout, antifungal, antiestrogenic, antiasthmatic, bactericidal ¹⁹	Krimighna ²⁰

Table 3: Ingredients of Kaishore Guggulu

S.N.	Ingredients	Botanical name/ Other name
1.	Haritaki	<i>Terminalia chebula</i> Retz
2.	Vibhitaki	<i>Terminalia bellirica</i> Roxb.
3.	Amalaki	<i>Embolia officinalis</i> Gaertn.
4.	Guduchi	<i>Tinospora cordifolia</i> (Willd.) Miers ex Hook.F.
5.	Maricha	<i>Piper nigrum</i> L.
6.	Shunthi	<i>Zingiber officinale</i> Rosc.
7.	Pippali	<i>Piper longum</i> L.
8.	Vidang	<i>Embelia ribes</i> Burm. f.
9.	Danti	<i>Baliospermum montanum</i> (Willd.) Muell.-Arg.
10.	Trivrita	<i>Operculina turpethum</i> (L.) Silva Manso.
11.	Ghrita	Cow ghee
12.	Guggulu	<i>Commifora mukul</i> (Hook. ex.)

Table 4: Ingredients of Sanjivani Vati

S.N.	Ingredients	Botanical name/ Other name
1.	Vidanga	<i>Embelia ribes</i> Burm. f.
2.	Nagara	<i>Zingiber officinale</i> Rosc.
3.	Krishna	<i>Piper longum</i> L.
4.	Haritaki	<i>Terminalia chebula</i> Retz.
5.	Vibhitaki	<i>Terminalia bellirica</i> Roxb.

6.	Amalaki	<i>Embolia officinalis</i> Gaertn.
7.	Vacha	<i>Acorus calamus</i> L.
8.	Guduchi	<i>Tinospora cordifolia</i> (Willd.) Miers ex Hook. F.
9.	Bhallataka	<i>Semecarpus anacardium</i> Linn. f.
10.	Shuddha	<i>Vatsanabha Aconitum ferox</i> Wall. ex Ser.
11.	Gomutra	Cow's urine

Kaishore Guggulu balances Pitta and Kapha, particularly when it affects musculoskeletal system. Its main ingredients-Guduchi, Triphala and Trikatu [Table 3]- when combined with Guggulu, create a detoxifying and rejuvenating effect. The pharmacological properties of Guggulu in Ayurveda are Tikta (bitter) in Rasa, Laghu (light) in Guna (property), Ushna (hot) in Virya (potency) and Katu (pungent) in Vipaka. Pharmacological action of Guggulu as described in Ayurveda is Brimhana (corpulent), Kaphavatahara (reduces Kapha and Vata), Pittala (increases Pitta), Vrishya (aphrodisiac), Lekhana (reduce fat), Deepana (increases gastric enzyme) and Balya (provides strength). Therapeutic indications of Guggulu are multiple according to different Ayurvedic classical textbooks such as Sthaulya (obesity), Vata Vyadhi (diseases of nervous system), Amavata (rheumatoid arthritis), Vidradhi (abscess), Udara Roga (abdominal disorders), Vatarakta (gouty arthritis) kustha (skin disorders).²¹

Sanjivani Vati is a diaphoretic formulation [Table 4]. It is a detoxifying formulation as well which reduces Aama. 'Aama' is produced due to poor digestive capacity which gets accumulated as endotoxins diseases in the body. This 'Aama' leads to blockage in channels and causes many diseases such as high cholesterol, blocked coronary arteries, piles, auto-immune disorders such as sarcoidosis and rheumatoid arthritis.²²

Dandruff and pityriasis versicolor are common chronic infections of the skin caused by yeasts of the genus Malassezia. Sulphur (*Gandhak*) reduces the itching and flaking associated with seborrheic dermatitis and dandruff.²³

Palash (*Butea monosperma*) flowers have tikta, katu, kashaya rasa; snigdha, laghu guna, sheeta veerya, madhura vipaka and is kaphapitta shamak properties.²⁴ The Palash flowers act as astringent, sweet, cooling, constipating, diuretic, homeostatic tonic.



Image 1: before treatment Image 2: After Treatment (90th day)



Image 3: Follow-up after 6 month

DISCUSSION:

Acharya Charaka said that *Tejas* along with *Vatadi Dosha* when reaches the scalp, it results in *Indralupta*²⁵. Acharya Sushruta described that *Pitta* along with *Vata* by affecting the roots of hair (*Romakoopa*) causes fall of hair and after that *Shleshma* along with *Shonita* obstructs the channel of *Romakoopa* which leads to the stoppage of regrowth of hair and this condition is known as *Indralupta*, *Khalitya* or *Ruhyā*²⁶. Thus *Vata*, *Pitta* and *Kapha Dosha* and *Rakta Dushya* are the main causative factors of *Indralupta*. Charaka in *Vimanasthana*, while describing the disorders occurring due to over indulgence in *Kshara*, *Lavana* and *Viruddha Ahara* has mentioned the occurrence of Hair Loss as a consequence. It has been mentioned that the *Viruddha Ahara* like, simultaneous intake of *Lavana* (salt) with milk in the diet induces *Indralupta*, as observed in the people of *Saurashtra* and *Bahlika*. Thus, it can be said that a person habituated to excessive *Lavana* or *Kshara* intake and taking *Viruddha Ahara* in routine is prone to have *Indralupta*²⁷. *Mithya Ahara* and *Vihara Manobhigata* like mental stress, fright, anger, shock etc. may collectively increase the *Pitta* and *Vata Dosha*. The *Ushna* and *Tikshna* properties of *Pitta* get augmented whereas the *Vata* suffers an aggravation in *Ruksha*, *Khara* and *Chala* properties. Here an aggravated *Pitta* (*Bhrajaka Pitta*) supported by the vitiated *Dehoshma* burns the *Keshabhoomi* whereas an increased *Vata* gives rise to more frequent and comparatively prolonged *Shira Sankocha* by its *Ruksha* and *Khara Guna*. The *Snigdhatva* and the *Pichchhilatva* of the normal *Kapha Dosha* is prevalent throughout the pores of the skin so as to keep it soft and moist. By the augmentation of the *Ushna*, *Tikshna*, *Ruksha* and *Khara* properties of *Pitta* and *Vata Doshas* respectively, the *Sneha* and the *Pichchhilatva* of the *Kapha Dosha* are dried up within the pores of the skin of the scalp thus, obstructing the growth of new hairs, causing *indralupta*²⁸.

In modern era, successful management of alopecia is difficult and management of these patients includes support and reassurance. Any underlying condition should be treated first. However scalp surgery and autologous hair transplants are expensive but sometimes effective in this alopecia treatment.²⁹

The Ayurvedic management here in this *indralupta* had a very beneficial effect of *Palash pushpa kalka lepa* in regrowth of fresh new hair for a period of three months. It is effective and safe. Its exact mechanism of action cannot be identified. *Butea monosperma* has potent anti inflammatory activity^{30,31}, which could be responsible for decreasing local inflammation and hence help in hair growth. Its anti fungal activity too may contribute to its efficacy.³²

CONCLUSION:

Hair disorders cause negative impact towards the individual and his/her quality of life.

Ayurvedic management with *Kaishore Guggulu*, *Sanjivani Vati* internally and externally use of *suddha Gandhak* with coconut oil and *lepa of palash pushpa kalka* was found very effective and safe in the management of a case of *indralupta*. The observed benefits may be attributed due to antiallergic, antibacterial, blood-purifying and skin health promoter properties of *Kaishore Guggulu*, detoxifying (*Aam pachana*) property of *Sanjivani Vati*; anti fungal property of *suddha gandhak* and anti-bacterial, anti-fungal properties of *palash pushp lepa*. The above ayurvedic management suggests that *indralupta* (alopecia areata) can be managed without any form of hair transplantation. *Nidanaparivarjana* was also a necessary part of the treatment. However this treatment protocol needs clinical evaluation on large number of patients to confirm their efficacy.

Declaration of the patient:

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given her consent for her images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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