



## Case Study

### ROLE OF JALAUKAVACHARANA (HIRUDOTHERAPY) IN THE MANAGEMENT OF SCALP PSORIASIS - A CASE STUDY

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#### ABSTRACT

Psoriasis is a common, Chronic, inflammatory, multisystem disease of the Skin. Psoriasis localized to certain areas of the body like scalp, nails, palms and soles need special treatment modalities and it is very difficult to control the disease in these areas because of various reasons like unrealistic expectations of the patients, time consuming treatment approaches, cosmetic- non acceptability, non-compliance by patient. Scalp is the first site of Involvement in up to 25% of patients of Psoriasis. In Modern science, psoriasis is treated with Photo chemotherapy and Corticosteroids which has adverse side effects like hepatic & nephrotoxicity. However in Ayurvedic Texts use of Leech therapy is mentioned beneficial in the many skin disorders and also mentioned that the diseases treated with *Raktamokshana* has less chances of re-occurrence. This article covers the use of Leech therapy (*Jalaukavachanrana*) in a case of Scalp psoriasis where the patient undergone *Jalaukavacharana* therapy for 3 sittings in OPD without any supportive medications internally or any other therapies. The important observation found was there is a significant decrease in the characteristics like Erythema, Thickening, Scaling and True Area percent of the scalp affected by psoriasis. On a whole, *Jalaukavacharana* was found to be very effective even without any internal medications. If it is supported by internal medications we can expect better results in the management of Scalp Psoriasis.

**KEYWORDS:** *Jalaukavacharana*, Scalp Psoriasis, *Raktamokshana*, Leech.

#### INTRODUCTION

Psoriasis is a common, Chronic, inflammatory, multisystem disease of the Skin. Scalp is the first site of Involvement in up to 25% of patients of Psoriasis<sup>[1]</sup>. Scalp Involvement will be ranging from mild to severe depending on the Chronicity. It is often seen between 15 to 40 years of Age. Scalp Psoriasis appears as a small bump, a papule, sub mounted by a scale<sup>[2]</sup>. When these papules coalesce, a plaque is formed which is often covered by a thick layer of horny scale. When this scale is shed it appears as dandruff. Scratching these plaques either because of itching will make things worse. In Modern science, psoriasis is treated with Photo chemotherapy and Corticosteroids which has adverse side effects like hepatic & nephrotoxicity. However in Ayurvedic Texts use of Leech therapy is mentioned beneficial in the many skin disorders where the re-occurrence is also minimal. In Ayurveda, various skin disorders are quoted under the heading *Kushta*. *Ekakushta* can be co-related to the Psoriasis as it has many similarities in symptoms and presence on Examination. *Bhavaprakash* says "*Kshudrakushta-mukhyatvata Ekakushtamiti*" which means *Khudrakushta* is the first among all *Kushtas*.

*Lakshanas* of *Kshudrakushta* mentioned in classical texts are *Aswedanam* (Dry & Rough without moisture), *Mahavastu*<sup>[3]</sup> (Bigger Lesions & Deeply rooted), *Matsya Shakalopamam* (Well-defined raised macules, papules, & erythematic plaques found which covered with

silvery scales), *Krishna-Aruna Varna* (erythematous thick lesions reddish-black in color), *Twak Parushya* (Dryness in Skin)<sup>[4]</sup> which can be well in resemblance with the Psoriasis. These specifications show that *Ekakushta* can be resembled with Psoriasis and also concludes that *Ekakushta* involves *Rasa, Rakta* and *Mamsadhatudushti*. Generally all *Kushtas* are caused due to vitiation of *Tridoshas*, *Ekakushta* is *Vata-kapha* predominance *Pittanubandhi* disorder. Acharya *Charaka* notes the role of *Panchakarma* therapy by stating that the any *Vyadhi* which is treated with *Shodhana* therapies will never reoccur, whereas the treatment with *Shamana* therapy may reoccur in some course of time. As per Ayurvedic classics, *Raktadushti* (vitiation of blood) is one of the prime causes of skin diseases<sup>[5]</sup> and Ayurveda also emphasizes on disease which doesn't respond to the various medical treatment are definitely of blood vitiated disorders<sup>[6]</sup>. So, *Jalaukavacharana* can be the procedure of choice in the management of Scalp Psoriasis.

There are some researches already carried out on effect of *Jalaukavacharana* like "*Exploratory Study to Assess the Efficacy of Jalaukavacharana (Hirudotherapy) in the Management of Vicharchika (Eczema) - by Abhay Prakash et al.*", "*Effects of 'Jalaukavacharana' (leech therapy) along with Shaman chikitsa (pacification) in Jeernavicharchika (chronic eczema)- a case study - by Dr Meenal Lad*" proved

that the *Jalaukavacharana* can be performed on skin diseases safely without any complications and side effects.

**AIM & OBJECTIVE**

To find out the better approach in treatment of scalp psoriasis.

**CASE REPORT**

A 40years Male patient, resident of Pune, came to OPD of Panchakarma department of *Ayurveda Rugnalaya*, College of Ayurved and Research centre, Pune with CASE ID: 16/G/0748, on 1 Feb 2016, presented with complaints of Erythematous Patches over the Scalp Area which are dry and silvery-white scaling in appearance since 1 year. Initially it started with the small circular patches with some papules, eventually increased in the number and thickening which extended to the complete scalp.

Past History: Nothing Significant, Surgical History: Nothing Significant, Family History: Nothing Significant, Diagnosis: As per the Signs and Symptoms.

**TREATMENT & FOLLOW UP**

The Patient was administered with Leech therapy using 4 leeches on the involved area of the scalp. Patient had undergone 3 sittings of Leech therapy with a gap of 2 days between each sitting. A follow up visit was performed after 7days after completing the 3<sup>rd</sup> Sitting.

**ASSESSMENT CRITERIA**

PASI (Psoriasis Area & Surface Index) score was assessed for the Scalp area before treatment at Visit 1, Visit 2, Visit 3 and Follow Up Visit.

Grading	Erythema	Thickening	Scaling
None	0	0	0
Slight	1	1	1
Moderate	2	2	2
Severe	3	3	3
Very Severe	4	4	4

True Area Percent: It was assessed by PALM method as per the PASI Standards. PASI Score was calculated with the help of PASI Calculator<sup>[7]</sup>

**MATERIAL & METHODOLOGY OF JALAUKAVACHARANA**

**Material Required:** 4Non Poisonous Leeches, *Haridra* powder, Gloves, Gauze, Cotton, Scissors, artery forceps and two bowls.

**Leech Preparation:** Four Non-Poisonous leeches were taken which are active and placed in a clean water bowl.

**Patient Preparation:** The Head of the patient was carefully shaved with taking erythematous lesions into consideration, Head was washed and pat dried. The Vitals of the Patient were recorded and then the patient was asked to lie down on the *Panchakarma* table in a

comfortable position with both the hands folded towards the face.

**Procedure of *Jalaukavacharana*:** Primarily a leech was placed on the involved site of the Scalp and observed for 2 minutes to allow the leech to suck the blood from the site, if the leech was unable to suck the blood, a small incision or a needle prick was given and a leech was placed over the site. Similar procedure is followed to place all leeches on the scalp. A wet Gauze was placed over the body of the leech to enable moisture to the leech. After 10-15 minutes the leech itself was detached from the site after sucking the blood. If it doesn't detaches, a small amount of *Haridra* was placed at the site of the bite and leech was taken out. A piece of Gauze was placed over the site of the bite to avoid further bleeding from the site of the scalp. This procedure was performed for 3 sittings without any complications.



**Before Treatment**

**Four Leeches were placed on the Site of the Scalp affected by Psoriasis**



After Treatment (on Follow Up Visit)

**Total Duration of Treatment**

**Visit 1:** 1 Feb 2016

**Visit 2:** 4 Feb 2016

**Visit 3:** 8 Feb 2016

**Follow Up Visit:** 15 Feb 2016

**After Treatment (on Follow Up Visit)**

**OBSERVATIONS AND RESULTS**

The skin became normal in color, the thickness of the Psoriatic patch was reduced to a great extent, the involved area became thin and soft, Redness decreased, Silvery-white scale formation was completely disappeared and Itching reduced to a maximum extent.

PASI	GRADING			
	Visit 1	Visit 2	Visit 3	Follow Up Visit
Erythema	4	3	1	0
Thickening	4	4	2	1
Scaling	4	3	2	1
True Area Present	2.5 Palms	2.5 Palms	2.5 Palms	2.0 Palms
PASI Score	<b>2.4</b>	<b>2</b>	<b>1</b>	<b>0.4</b>

(Calculated as per PASI Standards 1.7.1)<sup>[7]</sup>

**DISCUSSION**

The treatment followed in the scalp psoriasis in this patient was only *Jalaukavacharana*, no other specific treatment or internal medications were given to the patient. All the treatment procedure was recorded and well documented.

**CONCLUSION**

*Jalaukavacharana* alone was found effective treatment in the scalp psoriasis in relieving its signs and symptoms. PASI Score was reduced from 2.4 to 0.4 within a period of 15 days. Leech therapy is less time consuming, economical, acceptable treatment without any non-compliance. We can also examine further results if we can add *Panchakarma* therapies and internal medications

along with the *Jalaukavacharana* as a treatment of approach for better results.

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