



## Role of *Raktamokshana* by *Jalaukavacharana* in the management of *Vicharchika* (Eczema)

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### ABSTRACT:

Out of 11 *Kshudrakustha*, *Vicharchika* ranks in the topper striatum. The sign and symptom of *Vicharchika* as expounded in classical text are almost analogous to dermatitis (eczema). As far as eczema is concerned it is a known – contagious inflammation characterized uniquely by erythema scaling, oedema, vesaculation and oozing.

*Raktamokshana* is a process by which the blood is let out from the body for eliminating vitiated *dosha* present in blood as a part of achieving therapeutic effect. This is envisaged to be removing impurities of blood and enhancing the haemopoiesis. Though various methods had been in practice, yet *Jalaukavacharana* is proven to be the apt one for rendering *Raktamokshana*.

A clinical study has been carried out to ascertain the role of *Raktamokshana* in the management of *Vicharchika*.

Significant results pertinent to the parameter like *Kandu*, *Pidika*, *Shyava*, *Bahusrava* etc. were observed.

Critical analysis of the result will be presented in the full paper, on the basis of available results on explanation regarding mode of action of *Jalaukavacharana* in eczema will be also discussed.

**KEYWORD:** *Vicharchika*, *Jalaukavacharana*, Eczema.

## INTRODUCTION:

Any disease that involves skin hampers many functions and gives the person a hideous look. As skin diseases are perceptible to others, they are more painful for the patient and troublesome for the physician. Several skin diseases affect the person's psychological status and disturb the social life, thus patient have some kind of inferiority complex; eczema is one among them. In Ayurveda, skin diseases are explained under the common terminology "*Kushtha*" which implies exposed diseases. Eczema is a skin disorder characterized by itching erythema, scaling, edema, vesiculation, and oozing. The involvement of *Vata* results in dry or blackish lesion of eczema. However, itching in those affected areas is due to *Kapha*.<sup>[1]</sup> Modern medical science treats eczema with corticosteroids. But the therapy gives side effects like liver and kidney failure, bone marrow depletion, etc. The texts of Ayurveda consider *RaktaDusti* as one of the prime causes of skin diseases;<sup>[2]</sup> on the other hand, patients may get relief after letting out the vitiated *Rakta*. Acharya Sushruta propounds practical guidelines for bloodletting and claims it as most effective therapy in half of the body ailments.<sup>[3]</sup> Among various methods for

bloodletting<sup>[4]</sup> such as *Jalaukavacharana Karma*, *Prachhanna Karma*,<sup>[5]</sup> and *Siravedhana Karma*.<sup>[4]</sup> *Jalaukaavacharna Karma*<sup>[6]</sup> (Leech therapy) is considered as the ideal method to expel out the vitiated blood safely, quickly, and effectively. So, *Jalaukavacharana* is considered to evaluate their comparative efficacy in cases of *Vicharchika* (Eczema).

### Aims and Objectives

To assess clinical effect of *Jalaukavacharana* in the management of "*Vicharchika*."

### Materials and Methods

Patients attending the O.P.D. and I.P.D. of Shalyatantra department CARC akurdi, pune having classical signs and symptoms of *Vicharchika* (Eczema) were selected irrespective of religion, sex, occupation, etc. The study was approved by Institutional Ethics Committee. A special Proforma including all the etiological factors of *Kushtha* with *Dushti Lakshana* of *Dosh*, *Dushya*, *Srotas*, etc., was prepared for proper assessment.

### Inclusion criteria

Patients having signs and symptoms of *Vicharchika* (Eczema) described in

classical Ayurvedic texts as well as in Modern Medical literature; patients above 16 years and below 70 years of age; and chronicity not more than 5 years were included.

### **Exclusion criteria**

The patients less than 16 years and above 70 years of age were excluded. Patients suffering from diseases like anemia, hemorrhagic disorders, diabetes mellitus, cancer, tuberculosis, hemiplegia, convulsions, and other severe complicated systemic disorders were excluded. Wounded, timid, thin patients, pregnancy, and chronicity more than 5 years were also excluded.

### **Criteria of assessment**

Total effect of therapy was assessed considering following criteria:

Cured: 100% relief in the signs and symptoms with plain skin surface. Significant changes in color of the affected skin lesion toward normal was considered as cured. Marked improvement 76 to 99% relief in the signs and symptoms were recorded as complete remission with marked improvement in pigmentation and thickening of the skin. Moderate improvement: 51 to 75% relief in signs and symptoms were considered as moderately improved with moderate

improvement in pigmentation and thickening of the skin. Mild improvement: Patients showing improvement in between 26 and 50% in signs and symptoms with slight improvement of pigmentation and thickening of the skin was taken as mild improvement. Unchanged: Below 25% relief in signs and symptoms was considered as unchanged.

All the patients were examined weekly during the treatment. Assessment was done on the basis of relief in the signs and symptoms of the disease *Vicharchika*. For this purpose, cardinal signs and symptoms were given scores according to their severity before and after the treatment.

### **Pathological investigation**

Routine hematological investigations like hemoglobin, total count, differential count, erythrocyte sedimentation rate (ESR), bleeding time (BT), clotting time (CT), and urine examination were done to rule out any other disease pathology as well as to evaluate safety and efficacy of the trial therapy.

### **Sampling**

Total 30 patients of *Vicharchika* (eczema) were registered for the present study. Four sittings of *Jalaukavacharana Karma* were carried out in consecutive four weeks. Number of *Jalauka* applied was decided

on the basis of the size of lesion (example, 1 cm = 1 leech). Out of total 30 patients only 2 patient discontinued course of treatment.

### Procedure

*Jalaukavacharan karma* was done after local abhyanga and swedan on the effected part of the body. But was discontinued on the day before and on the day of *Jalaukavacharan*. There were four sitting of *Jalaukavacharana* in one month with gap of seven days. *Jalauka*, three water bowl, cotton, bandage, turmeric powder and paper tap were used for this process.

### Pathya-Apathya

*Pathya-Apathya* was advised to the patient as per classics.

### Observations

Maximum numbers of patients, (24.14%), were of the age group 21 to 30 years, 41.38 % were housewives and 86.21% were habituated to vegetarian diet. Maximum numbers of patients, (62.07%), were having regular bowel habit, and 100% were having *Madhura* and *Amla Rasa* dominancy in their diet. The 82.76% were having dietary pattern of *Visamashana* and 68.96% were addicted to Tea. Maximum, (51.72%), patients were having *Pitta-KaphaPrakriti*. Maximum numbers of patients, (100%),

were taking *ViruddhaAhara* (milk + *Khichadi*, New *Annasevana*, and excess intake of salt). *Chinta* (Stress) was reported in maximum, (40.70%), of patients. The 17.24% of patients were having contact irritant with rubber.

In the present study, *Kandu* was observed in maximum (96.55%) number of patients. Signs and symptoms like *Vaivarnya* (discoloration), *Raji* (lichen ification), *Raktima* (redness), and *Rukshata* (dryness) were observed in 93.10%, 72.41%, 68.96%, and 58.62% of patients, respectively. *Pidika* (boil) and *Daha*(burning) were observed in 65.52% of the patients. Symptoms like *Srava* (discharge) (37.93%), *Shotha*(inflammation) (24.14%), and *Ruja* (pain) (17.24%) were observed in some of the patients. The 93.10% of patients were having gradual onset, while 72.41% of the patients were having chronic course of the disease. The 68.96% of the patients were having *Sushka* (dry) type of Eczema.

In winter season, aggravation was observed in 24.14% of the patients. The 51.72% of the patients were having lesion size 5 to 10 cm. On maximum, 46.67%, patients, average 11 to 15 number of *Jalauka* were applied during full course of treatment. During four sittings in 15 patients' treatment, maximum

47.50% *Jalauka* sucked the blood for average 30 to 35 minutes. Average sucking time for *Jalauka* was found to be 20 minutes.

## Results

Effect of therapy on laboratory parameter is depicted at [Table](#). All the changes were statistically insignificant. *Jalaukavacharana* showed highly significant increase in CT [Leech saliva contains anticoagulant substance like hirudin, calin, and destabilase, which increase bleeding time and clotting time during course of therap.[7]

Effect of therapy on chief complaint after *Jalaukavacharana* *Karma*: Percentage-wise improvement was observed in signs and symptoms like *Kandu* (23.26%), *Pidika* (66.67%), *Raktima* (53.23%), and *Daha* (80%) which was statistically highly significant ( $P<0.001$ ). Statistically significant ( $P<0.01$ ) improvement was observed in signs and symptoms like *Srava* (77.78%), *Vaivarnya* (27.27%), and *Rukshata* (21.74%). Signs and symptoms like *Raji* ( $P<0.05$ ), *Shotha* ( $P<0.05$ ), and *Ruja* ( $P<0.10$ ) were improved percentage wise (28.57%, 80%, and 33.33%, respectively), but it was statistically insignificant [

## Total effect of therapy

No patient was completely cured, whereas 21.43% and 50% of patients got marked improvement and mild improvement, respectively. Remaining 28.57% patients were having little change in their symptomatology.

### Table

Overall effect of Leech therapy

	Jalaukavacharana	%
Cured	0	0
Marked Improvement	0	0
Moderate Improvement	3	21.42
Mild Improvement	7	50
Unchanged	4	28.57

## Discussion:

Majority of the patients belonged to age group of 21 to 30 years (24.14%). This age of individuals are prone to psychological stress and other exposure, (occupational, environmental, and unwholesome food were more) which are etiological factors for eczema. Maximum number of patients, (41.38%), were housewives, followed by 37.93% patients who were businessmen. This reflects that housewives are more exposed to household appliances, related to dust, and detergents, etc., which are

common causative factors for *Vicharchika*. Servicemen like teachers and engineers who are having job with continuous standing may be prone to stasis to eczema.

The 27.59% of patients were having *Chinta*. Emotional conflicts are among main etiological factor for skin manifestation. Eczema may become more aggressive in this state.[8] *Viruddha Ahara* (incompatible diet), (milk + Khichadi, fast food, curd, non-vegetarian diet) and sleep during day time which leads to vitiation of *Kapha* and *Rakta*. These

vitiated *Doshas* reach to *Dushya* like *Twaka*, etc., and results into *Sthana Sanshraya Avastha* and then produces symptoms of *Vicharchika*.

Most of the time, at the biting and during entire *Jalaukavacharana* process, patients did not experience any discomfort, but in rare case, patients felt like pricking pain, itch on the affected lesion, and numbness of lower limb due to long-lasting sitting in one posture. Two patients of 14 reported itching all over body after the completion of leech application. Maximum patients reported feeling of little hardness of skin at the site of *Jalauka* bite, which subsided after 20 to 25 days without any mark left at that site.

### Effect of therapy after *Jalaukavacharana Karma* on chief complaints

*Kandu* (itching) was relieved in 23.26%. *Kandu* is caused by vitiated *Kapha*, [9] *Pitta*, [10] and *Vata*. [11] So, here, *Tridosha* vitiation is responsible for it. Relief in *Kandu* may be due to expelling out of vitiated morbid *Dosha* (toxins) from local region. Leech salivary secretions also provide early healing effect by secondary hemorrhage which might have reduced itch impulse. [12]

On *Pidika* (Carbuncle), 66.67% relief was observed. Leeches are antiphlogistic, used for the local obstruction of the blood. Due to this reason, *Pidika* might have subsided. Congested blood is also removed from the local area by leech; so, better relief in *Pidika* might have been provided by *Jalaukavacharana*.

*Srava* (discharge) was relieved in 77.78%. *Ushna* and *Tikshna Guna* of vitiated *Pitta* are responsible for *Srava*. *Siravedhana* corrects the vitiation of *Pitta* better in comparison with *Jalaukavacharana*, hence reduces the *Srava* on the local lesions level.

*Vaivarnya* (discoloration) was relieved in 27.274%. *Jalauka* removes impure blood and allows oxygenated blood to enter the



wound area, which might have provided better color to skin.

*Raktima* (redness) was relieved up to 53.23%. Leech saliva contains anti-inflammatory substances, eglins and bdellins, which may relieve redness of lesion.

On the *Daha* (burning), 80% relief was observed. Leech saliva contains histamine-like substances and acetylcholine which is vasodilator and removes local inflammation mediators, thus relieve burning sensation of lesion.

The 28.57% relief was observed in *Raji* (lichenification) due to better removal of impure and congested blood by effect of hirudin, calin, destabilase, and Factor Xa inhibitor.

*Shotha* (Edema) was relieved up to 80% due to reduction of local pressure by substance like eglins and bdellins present in leech saliva.

The 33.33% relief was observed in *Ruja* (pain). Leech saliva contains anesthetic substance which helps in pain relieve.

Hb decreased by 1.81%. Leech therapy is always associated with a certain degree of blood loss, which is clinically irrelevant in most cases.

CT was increase in 6.27%.Leech saliva contains anticoagulant substance like hirudin, calin, and destabilase, which increase bleeding time and clotting time during course of therapy.

## Conclusion

*Jalaukavacharana Karma* provides statistically high significance ( $P<0.001$ ) in the symptoms of *Vicharchika* like *Kandu*, *Pidika*, *Raktima*, and *Daha*. Leech saliva is reported to have many therapeutic contents like hirudin, bdellins, Hyaluronidase, etc.; among them, eglins and bdellins have anti-inflammatory and antifungal property which gives relief in symptoms of *Vicharchika*. In present study, “*Jalaukavacharana Karma*” proved to be effective in the management of *Vicharchika*. *Jalaukavacharana* is safest and scientific method among *Raktamokshana*.

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