



Case Study

EFFICACY OF AYURVEDIC COMPOUNDS AND LEECH THERAPY IN *KITIBHA* (PSORIASIS) - A CASE REPORT

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ABSTRACT

Kitibha described in Ayurveda clinically stimulates with Psoriasis. According to modern medicine Psoriasis is an autoimmune disease. The treatment of Psoriasis is challenging due to its high reoccurrence rate and non-responsive to modern treatment also. But Ayurveda considers it has *Kshudrakustha* and is a curable disease. According to World Psoriasis Day consortium 125 million people worldwide approximately 2 to 3 percent of the total populations have psoriasis. Many studies show that between 10 to 30 percent of people with psoriasis also develop psoriatic arthritis. The present case report of 41 year old female suffering from Psoriasis since 15 years attended in OPD in CARICD, Delhi. On examination she has bright pink lesions with pronounced edges, covered with silvery white scales which were easily separated from the lesion. Under the scales there appears a pinkish moist tender skin. On scraping of the moist skin there appeared tiny blood droplets (Auspitz's sign) in her left foot since 15 years. The patient was given Ayurvedic compounds orally along with Leech therapy for 84 days. After 84 days of medication and 12 shifts of leech application, the PASI score reduced from 21 to 6 and DLQI Scores reduced from 3 to 1.7 and marked improvement in sign and symptoms was noted. Since it is a case report, researcher can initiate a pilot study based on this report. The Ayurvedic compound along with leech application is found to be effective in the treatment of *Kitibha* (Psoriasis) in this study.

KEYWORDS: *Jalaukaavacharana*, *Kustha*, *Kitibha*, Psoriasis.

INTRODUCTION

Psoriasis is a common chronic, non-infectious, recurrent, immune mediated disease^[1]. In Ayurveda the causative factors of skin diseases are elaborately classified. Acharya Charak described that continued practice of *Apathya Aharavihara* (wholesome and unwholesome) and *Manovritti* (psychic imbalance) causes vitiation of *Doshas* and *Dhatu*s and causes *Kitibha*^[2,3]. In *Kitibha*, *Vata* and *Kaphadosha* are predominantly involved and this disease is included under the category of '*KshudraKushta*'^[4]. *Kitibha* is clinically stimulates with Psoriasis of Modern Medical diagnosis. Cases characterized with well-defined erythematous plaques with large adherent silvery scale with exfoliation are taken up for study^[5]. Application of Leech (*Jalaukaavacharana*) in skin disease is well documented in *Shusruta Samhita*^[6]. In this study the combination of three drugs i.e. *Arogyavardhinivati*, *Kaisoregugulu* and *Haridrakhand* was given orally along with weekly leech application in the affected site.

Case Report

A 41-year-old female presented to our outpatient department in Central Ayurveda Research Institute, Punjabi Bagh, New Delhi with complain of a lesions over her left foot. On examination bright pink lesions with pronounced edges, covered with silvery white scales which can be easily separated from the lesion, under the scales there appears a pinkish moist tender skin on scraping of the moist skin there appear tiny blood droplets (Auspitz's sign) was found.

The initial lesion first appeared fifteen years ago and gradually over the time new lesion appeared. She denied joint pain and/or a history of infections prior to lesion development. Her past medical history was significant only for post traumatic distress disorder and depression. There was no personal or family history of psoriasis or other dermatologic disease. Prior to presentation in my outpatient Department, she had a skin biopsy of the affected part which showed chronic spongiotic dermatitis with parakeratotic foci and superficial perivascular mononuclear infiltrates. Based on the results, and

after evaluating Ayurvedic sign and symptoms psoriasis (*Kitibha*) was considered as potential diagnosis, and she was started with *Arogya vardhini vati*, *Kaisore gugulu*, *Haridrakhand* along with weekly Leech application.

**Procedure of Leech Application and Medication^[7]
Procedure**

The part from which the blood is to be sucked was first cleaned by non-chlorinated water. Then the leeches were taken out from the container and sprinkled over with water saturated with turmeric powder. Then they were kept in a basin full of water for a moment, and after 5 minutes when they had regained their natural vivacity and freshness they were applied to the affected part. Their bodies were covered with a piece of white cotton. A small needle prick was given to the affected part prior to application of Leeches in case the leeches refuse to stick to the desired spot. The leeches were allowed to suck the blood till they left spontaneously. If not than a pinch of *Haridra* powder is sprinkled over the bite site.

Post bite Therapy Course and Follow-up

The ulcer incidental to an application of leeches was washed with spray of cold water. The ulcer was rubbed with *Haridra* powder or a piece of cotton soaked in the same substance applied as a compress over the part. The ulcer was rubbed with honey in case of insufficient bleeding, while it was washed with a copious quantity of cold water if excessive bleeding set in.

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Outcome Measures

The outcome measures were relief in signs and symptoms (change in baseline in psoriasis) of the disease by reduction in Psoriasis Area and Severity Index (PASI) Score, PASI 50 (50% improvement in PASI score) and relief in signs and symptoms (change in baseline in plaque psoriasis) of PASI, improvement in Dermatology Life Quality Index (DLQI) Questionnaire and any adverse drug reaction or event noted during the trial.

Drug Intervention

Haridrakhand 6gm twice daily before food with luke warm water, and *Arogyavardhini Vati*^[6] 250mg twice daily after food with luke warm water and *Kaisore Gugulu* 500mg twice daily with Luke warm water after food was given internally for 84 days and Leech application was done weekly once over the affected area of skin.

Total Duration of Treatment

84 days.

OBSERVATIONS AND RESULTS

Table 1: Clinical Features Base Line and at the end of Treatment

S.No	Symptoms	Score at Base line	Score at End of 84 days
1	Itching	09	00
2	Dryness of the skin	09	00
3	Roughness	08	01
4	Circular erythema	09	01
5	Exfoliation	07	00
6	Hyper pigmentation	07	00
8	Pin point bleeding after removal of skin	03	00

Table 2: Changes in Assessment score at Baseline and at the end of Treatment

S.No	Assessment Tools	Base line	At the end of 84 days
1	PASI Score	21	06
2	DLQI Scores	3	1.17

DISCUSSION AND RESULT

Kitibha (Psoriasis) is one of the varieties of eleven *Kshudra Kushtas*. The *Dosha* involved in this disease are *Vata* and *Kapha*. The clinical features are *Shyavam* (blackish brown discoloration of skin), *Khinakharasparsha* (affected skin will be rough to touch like the scar tissue) *Parusha* (hard to touch). It can be compared to Psoriasis. It is characterized by sharply demarcated and erythematous, papulosquamous lesion. Less often, nearly all the body surface is involved, or numerous small, widely disseminated papules and plaques are seen. From the clinical prospective, Psoriasis can be regarded as a spectrum of different cutaneous manifestations. Different variants may co-exist in a particular individual, but the skin lesions all share the same hall marks erythema, thickening and scale. Psoriatic lesions are classically very well circumscribed, circular, red papules or plaques with grey or silvery white dry scale is seen. The lesions are distributed symmetrically on scalp, elbow, knees, lumbo-sacral area and in folds of body. *Kaishore guggulu* is an herbal remedy based on purified *Guggulu* in Ayurvedic medicine. Antiallergic, antibacterial and blood purifying properties are found in this herbal preparation^[8]. The drug *Kaisore guggulu* and *Arogya vardhini vati* predominantly have *Tiktakashaya rasa*, *Vata-kapha hara* properties, *Kitibha* is *Vata-kaphadosha* predominant disease. So, the formulations might have helped to pacify the symptoms of *Kitibha*. Most of the ingredients of *Kaisoregugulu* and *Arogyavardhnivati* contain *Guduchi*, *Triphala* and *Gugulu*. *Guduchi* is an immunomodulator, *Triphala* is *Tridosha samak*. *Guduchi*, *Amlaki* which are ingredients of *Arogya vardhini* and *Kaisore guggulu* poses immune modulator activity helps to pacify the immune mediated reaction in Psoriatic patients. *Arogya vardhini vati* contains *Sudha gandhak* which is having *Kustagna* and *Kandugna* properties which also may added up to relieve the symptoms of psoriasis. *Gugulu* is having anti-inflammatory activity useful in alleviation of psoriasis indurations. Hence the synergetic effect of all these ingredients might help in relieving the subjective and objective parameters of *Kitibha* (Psoriasis). The Leech saliva contains hirudin, Gelin, and eflins. Hirudin is having anti-thrombin III^[9] activities. Hence increases the local blood flow and thereby heals the wound. Gelin and eflins C are similar thrombin inhibitor present in leech saliva.

They are anti-inflammatory and known to have effect on inhibiting the activity of α -chymotrypsin, chymase, subtilisin elastase and cathepsin G and hence reduce the local swellings. The leech saliva is having some antimicrobial action and hence reduces the local infection^[10]. They de-stabilise chloromycety, theromacin, theromyzin. According to Ayurvedic concept Leech Therapy entails the purification of blood, hence is administered to treat diseases pertaining to the skin, such as psoriasis, rash, eczema, acne, leucoderma and chronic itching.^[11]

CONCLUSION

In this case, the patient responded favorably to combination of Ayurvedic formulations along with Leech therapy which opens the possibility of using Ayurvedic formulations and individualized Leech therapy in patients with psoriasis.

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