

A PILOT STUDY ON THE ROLE OF BAKUCHI RASAYANA IN THE MANAGEMENT OF KITIBHA KUSHTHA (PSORIASIS)

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ABSTRACT

Psoriasis is an autoimmune inflammatory psychosomatic disease with chronic and relapsing nature. The clinical symptoms of *Kitibha Kushtha* described in *Ayurveda* texts resemble with the clinical symptoms of Psoriasis. According to *Ayurveda* *Kitibha Kushtha* is a disease of vitiated *Vata Kapha dosha*. Disease is characterized by patches of abnormal skin, typically red, itch and scaly. Medicines which are used in *Ayurveda* for skin disorders are safe and being practiced since thousands of years. Various procedures and drugs are described in *Ayurveda* for the treatment of *Kushtha* (Skin Disorders). *Bakuchi Rasayana* is considered as a best *Rasayana dravya* for all skin disorders. Hence *Bakuchi Rasayana* was used to assess the efficacy in subjects of *Kitibha Kushtha* (Psoriasis). Present Pilot study of 20 subjects shows significant improvement in scaling and thickness in all subjects.

Keywords: *Bakuchi Rasayana*, *Kitibha Kushtha*, Psoriasis, PASI Score

INTRODUCTION

Psoriasis is an autoimmune disease which is chronic in nature and characterized by patches of abnormal skin, typically red, itch and scaly. They may vary in severity from small and localized to complete body coverage. It develops when a person's skin cells grow too quickly. New skin cells forms in a day's rather than weeks. The body does not shed these excess skin cells. The skin

cells pile up on the surface of the skin, causing patches of psoriasis to appear. Cause of disease is not identified yet but researchers believe that the disease develops due to combination of immune, genetic, psychological and environmental factors [1]. Many treatment options are exists, but till now no cure for Psoriasis is available [2].

The clinical symptoms of *Kitibha Kushtha* described in *Ayurveda* texts resemble with the clinical symptoms of Psoriasis. It is a type of *Kshudra Kushtha*. Though all varieties of *Kushthas* (Skin Disorders) are *Tridoshaj* in origin but according to *Charak Samhita*, *Kitibha* have predominance of *Vata* and *Kapha dosha* [3]. Medicines which are used in *Ayurveda* for *Kushthas* (Skin disorders) are safe and being practiced since thousands of years. Among various drugs depicted in *Ayurveda*, *Bakuchi* is considered as a best *Rasayana dravya* for all *Kushthas* (Skin Disorders)[4]. *Bakuchi Rasayana* is a formulation of *Sushrut Samhita*, which was described in *Medha-Ayushkaamiya Adhyaya* of *Chikitsa sthana* [5]. Psoriasis is an autoimmune inflammatory psychosomatic disease with chronic and relapsing nature. *Rasayana* promotes rejuvenation in a

healthy person and restores a diseased person to health. *Bakuchi Rasayana* has role on immune mediation with therapeutic effect over skin disorders. Hence *Bakuchi Rasayana* was selected as an oral drug for present pilot study.

Bakuchi Rasayana [5]:

Acharya Sushrut advised to administer black *Bakuchi* (*Psoralea corylifolia*) seeds powder as a *Rasayana* in the patients of *Kushtha* (Skin Disorders), *Pandu* (Anaemia), and *Udara roga* (Ascitis). It has to be used in the quantity of *half pala* (approx.20gm) along with *Gomutra* (cow's urine) in the morning for one month to cure diseases, to enhance memory and for healthy life of hundred years.

Table 1: Properties of ingredient of *Bakuchi Rasayana*:

Sanskrit Name	Latin / English Name	Family	Useful Part	Rasa (Taste)	Vipaka (Post digestion effect)	Veerya (Potency)	Dosha-ghnata (Effect on Dosha)
<i>Bakuchi</i> [7]	<i>Psoralea corylifolia</i>	Leguminosae	Seed	<i>Tikta</i> (Bitter)	<i>Katu</i> (Pungent)	<i>Sheeta</i> (Cold)	<i>Vata-Kapha-shamaka</i>
<i>Gomutra</i> [8]	Cow's Urine	--	Urine	<i>Katu</i> (Pungent), <i>Tikta</i> (Bitter), <i>Kashaya</i> (Astringent)	--	<i>Ushna</i> (Hot)	<i>Vata-Kapha-shamaka</i>

Aims and Objectives:

To assess the effect of *Bakuchi Rasayana* in the management of *Kitibhakushta* (Psoriasis).

Materials and Methods:

20 Cases suffering from *Kitibha kushtha* (Psoriasis) were selected from OPD of Shri Gurudeo Ayurveda Rugnalaya, Gurukunj Ashram (Mozari). All patients were examined and assessed by detailed history, through clinical examination to establish final diagnosis.

Inclusion Criteria:

1. Having classical signs and symptoms of *Kitibha kushtha* (Psoriasis) according to *Ayurveda* and Modern Medical science.
2. Positive Auspitz sign.
3. Patients in the age group of 20 - 70 years.
4. Patient willing to participate in this Clinical trial.

Exclusion Criteria:

1. Patients having cardiac, renal, endocrine disorders were excluded from study
2. Patients below 20 years and above 70 years of age.

3. Patients of Psoriatic arthropathy and psoriatic erythroderma were also excluded.

Administration of Drug

Samshodhana Karma: Prior to *Bakuchi Rasayana* administration, *Haritakyadi Churna* was given to

every patient in the dose of 5gm with lukewarm water on empty stomach in the morning for *Samshodhana* purpose [9]. Barley gruel with ghee was given as a diet for three days.

Table 2: Composition of *Haritakyadi Churna*:

Sanskrit Name	Latin English Name	Family	Useful Part	Rasa (Taste)	Vipaka (Post digestion effect)	Veerya (Potency)	Dosha-ghnata (Effect on Dosha)
<i>Hareetakee</i> [10]	<i>Terminalia chebula</i>	Combretaceae	Fruit	<i>Madhur</i> (Sweet), <i>Amla</i> (Sour), <i>Katu</i> (Pungent) <i>Tikta</i> (Bitter), <i>Kashaya</i> (Astringent)	<i>Madhur</i> (Sweet)	<i>Ushna</i> (Hot)	<i>Vata Pitta Kapha-shamaka</i>
<i>Amalakee</i> [10]	<i>Emblica officinalis</i>	Euphorbiaceae	Fruit	<i>Madhur</i> (Sweet), <i>Amla</i> (Sour), <i>Kashaya</i> (Astringent)	<i>Madhur</i> (Sweet)	<i>Sheeta</i> (Cold)	<i>VataPittaKapha-shamaka</i>
<i>Vacha</i> [11]	<i>Acorus calamus</i>	Araceae	Rhizome	<i>Tikta</i> (Bitter), <i>Katu</i> (Pungent)	<i>Katu</i> (Pungent)	<i>Ushna</i> (Hot)	<i>Vata Kapha-shamaka</i>
<i>Vidanga</i> [11]	<i>Embelia ribes</i>	Myrsinaceae	Fruit	<i>Katu</i> (Pungent)	<i>Katu</i> (Pungent)	<i>Ushna</i> (Hot)	<i>Vata Kapha-shamaka</i>
<i>Haridra</i> [11]	<i>Curcuma longa</i>	Zinziberaceae	Rhizome	<i>Katu</i> (Pungent) , <i>Tikta</i> (Bitter)	<i>Katu</i> (Pungent)	<i>Ushna</i> (Hot)	<i>Kapha Pitta-shamaka</i>
<i>Pippali</i> [10]	<i>Piper longum</i>	Piperaceae	Fruit	<i>Madhur</i> (Sweet), <i>Katu</i> (Pungent)	<i>Madhur</i> (Sweet)	<i>Anushna</i> (Semi-Hot)	<i>Vata Kapha - shamaka</i>
<i>Ardraka</i> [10]	<i>Zinziber officinale</i>	Zinziberaceae	Rhizome	<i>Katu</i> (Pungent)	<i>Madhur</i> (Sweet)	<i>Ushna</i> (Hot)	<i>Vata Kapha - shamaka</i>
<i>Saindhava</i> [10]	<i>Sodii chloridum</i>	--	Salt	<i>Lavana</i> (salty)	<i>Madhur</i> (Sweet)	<i>Sheeta</i> (Cold)	<i>VataPittaKapha-shamaka</i>
<i>Guda</i> [10]	Jaggery	--	--	<i>Madhur</i> (Sweet)	--	<i>Ushna</i> (Hot)	<i>Vata Kapha-shamaka</i>

Bakuchi Rasayana: Then selected patient were advised to take *Bakuchi Rasayana* in the dose of 5 gm with *Gomutra* (Cow's urine) as an *anupana* for one month. Patient was advised to avoid *amla rasa* (bitter taste), *guru anna* (heavy to digest), milk, curd, non-veg, jaggery etc.

Criteria of Assessment:

All the patients were screened for their demographic profile. During the trial and follow-

up study the patients were assessed on the following parameters:-

- A) Clinical Improvement
- B) Psoriasis Area Severity Index Score(PASI Score)

Observations and Results:

Psoriasis is characterized by patches of abnormal indurated skin, erythema, scaling and itching. All subjects are assessed on the basis of Psoriasis Area

Severity Index (PASI) Score. Among these symptoms scaling and induration was very significantly reduced in all subjects treated by *Bakuchi Rasayana*. Erythema is also reduced

significantly in all subjects of Psoriasis. Significant changes were found in PASI Score and the same was shown in following table

Table 3: Clinical Effect of *Bakuchi Rasayana* in 20 cases of Psoriasis

	MEAN BT	MEAN AT	MEAN DIFF.	% of Relief
Head				
Erythema	0.75	0.35	0.4	53.33
Induration	1.1	0.45	0.65	59.09
Scaling	1.1	0.35	0.75	68.18
Area	0.8	0.5	0.3	37.5
Arms				
Erythema	1.65	0.7	0.95	57.58
Induration	2.25	0.8	1.45	64.44
Scaling	2.15	0.65	1.5	69.77
Area	2.45	1.4	1.05	42.86
Trunk				
Erythema	1.45	0.7	0.75	51.72
Induration	2	0.65	1.35	67.5
Scaling	1.9	0.75	1.15	60.53
Area	2.45	1.35	1.1	44.9
Legs				
Erythema	1.3	0.7	0.6	46.15
Induration	1.6	0.5	1.1	68.75
Scaling	1.65	0.55	1.1	66.67
Area	2	1.2	0.8	40
PASI Score	17.31	4.105	13.205	76.28

DISCUSSION

Kitibha Kushtha (Psoriasis) is a serious skin disease that affects a person's daily life on many levels including professional and social life. The physical and psychological impacts of disease are comparable to those of cancer, heart disease, diabetes, or depression [12]. Although many modern system studies have been done on the possible causes of psoriasis, the origin of the disease remains unknown. Hence pin point exact medication is not possible yet. The main symptom of Psoriasis is scaling and thickening, which is a result of excessive growth and differentiation of epidermal layer of skin [13]. Present study shows significant improvement in scaling and thickness in all subjects. That suggests *Bakuchi Rasayana* may have pathology modifying properties.

Bakuchi is having *Madhur* (Sweet), *Tikta* (Bitter) *rasa* (taste), *Laghu* (light), *Ruksha* (notsoft) *guna* (qualities), *Katu vipaka* (Pungent). These characteristics of *bakuchi* perform *deepana* (carminative), *pachana* (digestive), *Pittashodhaka* and *Vata-Kaphashamaka* properties [7]. Research Study shows that *Bakuchi* (*Psoralia corylifolia*) possess a marked anti-inflammatory, antipyretic, mild analgesic [14], antidepressant (15, 16) and strong antioxidant properties (17). As psoriasis is chronic complex autoimmune inflammatory disease and present pilot study shows improvement in scaling, thickness and erythema. Clinical improvement observed in present pilot study may prove that *Bakuchi* may have Anti-inflammatory action, Antibacterial and Antioxidant activity by virtue of *Vata-*

Kaphashamak property. Chemically *Bakuchi* contains Psoralens and isopsoralens. Psoralens inter-react with ultraviolet rays of sunlight. It suppresses DNA synthesis so inhibit epidermal proliferation and also act as an immuno-suppression of helper T-cells, which get excessively activated in psoriasis. *Acharya Bhavaprakash* mentioned that *Bakuchi* possess *Twachya, Keshya and Kushthghna properties* [7]. *Acharya Sushrut* and *Vagbhata* considered *Bakuchi* as a *Rasayana dravya* for all Skin disorders [5, 18]. It suggests that *Rasayana dravya* has capacity to contain the autoimmune response So it eliminate root cause and act as *Rasayana* for skin disorders like psoriasis.

CONCLUSION

The treatments available for psoriasis have increased rapidly in recent years; however, they are still incomplete regarding complete remission. *Bakuchi Rasayana* improves the metabolic activities which in turn ensure proper bio-transformation at the level of skin leading to significant reduction in symptoms of disease and boosting up the immune system. Present pilot study of *Bakuchi Rasayana* seems to be more effective in management of *Kitibha Kushtha* (Psoriasis). However, assessment of long-term management to avoid recurrence with and without local application has not been tested.

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