

TO STUDY THE EFFECT OF COMBINATION THERAPY OF MANJISTHA, HARIDRA AND DARUHARIDRA ON PSORIASIS (EK KUSTHA)

*¹Dr. Preeti Bhatt Joshi, ²Dr. Dinesh Joshi and ³Prof. Dr. Swapnil Singhai,

¹Assistant Professor, Dept. of Dravyaguna, Beehive Ayurvedic College & Hospital, Dehradun (U.K.).

²Medical Officer, Uttarakhand Ayurveda & Unani Services, Government of Uttarakhand, Chamba.

³Dept. of Kayachikitsa, Main Campus, UAU, Dehradun, (U.K.).

Received on: 06/01/2019

Revised on: 27/01/2019

Accepted on: 18/02/2019

*Corresponding Author

Dr. Preeti Bhatt Joshi

Assistant Professor, Dept. of
Dravyaguna, Beehive
Ayurvedic College &
Hospital, Dehradun (U.K.).

ABSTRACT

Psoriasis is one of the most common dermatologic disorder and a chronic skin disorder of present day. Though this disorder is not a contagious but it is often source of social embarrassment. Patients often isolate themselves from the fear of rejection from the society. Psoriasis is marked by periodic flare-ups of sharply defined red patches, covered by a silvery, flaky surface. In Ayurveda almost all skin disorders brought under one term i.e Kushta. Under this one variety of Kshudra Kushta is Eka Kushta whose signs and symptoms co-inside with that of Psoriasis. Aswedana, Mahavastu, Mastya Shakalopama are the feature mentioned by Acharyas for Ek-kushta. In Psoriasis relapsing nature is most common, which suggests that it needs long term treatment. The research study is performed with some herbal drugs and their effects were evaluated with the help of clinical study. Total 30 patients diagnosed as Ek-kushta (Psoriasis) of any socio-economic status, age group of 15-65 years and irrespective of sex of all ethnic origins were randomly selected. The drug Manjistha, Haridra and Daruharidra Lepa was applied for 6 months. Assessment was done on subjective parameters and obtained data was analyzed using appropriated statistical tests and conclusion was drawn that the combination therapy is highly significant in cases of Ek-kushta (Psoriasis). The combination therapy provided a significant effect on the sign and symptom Aswedanam (68.18%), Matsyashaklopamam (73.23%), Krushnac-aruna varna (66.67%), Kandu (71.79%), Rukshata (66.67%), Mandala (75%) and Bahaltva (72.22%). In symptom Mahavastum 68.75%, Sraava 66.67% and Daha 62.50% effect was observed. Most of the patients that are 22 patients (73.34%) were showed moderate response, followed by 4 patients (13.33%) were got marked relief, 1 patient (10%) has showed mild improvement and 3 patients (10%) were completely cured after completion of the treatment.

KEYWORDS: Ayurveda, Kushta, Ek-kushta, Psoriasis, Manjistha, Haridra, Daruharidra.

INTRODUCTION

Psoriasis is one of the most common dermatologic disorder and a chronic skin disorder of present day. Though this disorder is not a contagious but it is often source of social embarrassment. Patients often isolate themselves from the fear of rejection from the society. Psoriasis is marked by periodic flare-ups of sharply defined red patches, covered by a silvery, flaky surface.

About the 3% of the world's population have some form of Psoriasis. The principle infection action prompting psoriasis happens in the epidermis, the main five layers of the skin. Psoriasis is a chronic inflammatory and proliferative disorder of the skin clinically manifested as well-circumscribed, erythematous papules and plaques covered with silvery scales typically located over the extensor surfaces and scalp. While specific systemic and

environmental factors are known to influence the disease, it is unpredictable in its course and usually pursue spontaneously with improvement and exacerbations of lesions without discernable cause. Immune system dysfunction in the background of a genetic predisposition is accepted to be at the center of the disease procedure.

In persons with psoriasis, the keratinocytes multiply very rapidly and travel from the basal layer to the surface in about 4 days. The skin can't shed these cells rapidly enough, so they develop, prompting thick, dry patches, or plaques. Shiny, flaky regions of dead skin develop on the outside of the plaques previously being shed. The underlying skin layer (dermis), which contains the nerves and blood and lymphatic vessels, becomes red and swollen.

Psoriasis can be chiefly divided into four types on the basis of its appearance namely- Plaque, Guttate, Erythrodermic and Pustular. Plaque psoriasis is characterized by well defined, non-inflammatory, lesions covered with uniform scales while guttate is characterized by multiple, small, oval, drop like lesions with scaling.

In Ayurveda almost all skin disorders brought under one term i.e Kushta. Under this one variety of Kshudra Kushta is Eka Kushta whose signs and symptoms co inside with that of Psoriasis. Kushta is Bahudoshavastajanya vyadhi, has tridosha involvement along with saptha dhatu as its dushya psoriasis may be put under the categories like Kitibha, Sidhma, Ek-kushta.

Aswedana, Mahavastu, Mastya Shakalopama are the feature mentioned by Acharyas for Ek-Kushta. Few supplementary explanations mentioned in Bhava prakasha gives us clear picture of its similarity with Psoriasis. Matsya Shakalopama explains scaly skin lesion. In Bhavaprakasha, the skin lesions in Ek-Kushta are Chakrakara (rounded) and Abhraka Patrasama i.e. silvery like mica. These clinical features are similar as that of psoriasis. Mahavastu refers to involvement of large area.

Ek kushta has more recurrences & relapses even till today. Having this background in mind the combination therapy of Manjistha, Haridra and Daruharidra is selected to prove its efficacy in the management of Ek Kushta (Psoriasis). The proposed study is performed with some herbal drugs and their effects were evaluated with the help of clinical study. Hence the present study entitled 'To Study the effect of combination therapy of Manjistha, Haridra and Daruharidra on Psoriasis (Ek Kushta)' has been undertaken with following aims & objectives -

1. To study the disease Ek Kushta in detail & its relation with Psoriasis.

Criteria For Selection Of Drug

No.	Name	Scientific name	Family	Parts used
1	Manjistha	<i>Rubia cordifolia</i>	Rubiaceae	Stem, Roots
2	Haridra	<i>Curcuma longa</i>	Zinziberaceae	Rhizome
3	Daruharidra	<i>Berberis aristata</i>	Berberidaceae	Stem

The drugs mentioned here are chiefly Varnya, Vishaghana, Pittashamak, Vrana Ropana, Krimighana, Kusthaghana and Kandughana in nature. Some of them are Jwarahara, Vishaghana, Sandhaniya, Stanya Shodhak, Pachana, Lekhaniya and Arshoghana. The combination of three drugs is having properties as anti-inflammatory, antioxidant, antiseptic and blood purification action. All these properties of drugs are considered to combat vitiation of Tridosha in Ek Kushta (Psoriasis). The form of preparation is based on the principle of drug application on different type of skin lesion and best treated with ointment or paste. Ointment

2. To assess the role of combination therapy of Manjistha, Haridra and Daruharidra in Ek Kushta (Psoriasis).

Source of Data

The patients attending the OPD & IPD of Himalayiya Ayurvedic College & Hospital, Doiwala, Dehradun were selected for research study.

METHOD OF COLLECTION OF DATA

- A clinical study of patients attending the OPD was made and patients fulfilling the criteria of diagnosis as per the patient case format were selected for the study.
- A clinical evaluation of patients was done by collection of data through information obtained by history, physical examinations and routine blood investigations.
- Review of literature was conducted from books, Authentic Research Journals, Websites and Digital Publications etc.

Inclusion Criteria

- Patients with classical features of Ek Kushta explained in classical texts.
- Patients of any financial status, both genders and every single ethnic cause.
- Patients with age group of 10-60 years.
- History of less than 6 months of disease.
- No history of autoimmune disease.
- Both fresh and treated cases were selected.

Exclusion Criteria

- Patients with uncontrolled metabolic and other systemic disorders.
- Psychiatric illness and pregnant women.
- Patients with secondary skin infection and open wounds.

promotes percutaneous absorption of incorporated drug, allowing an active pharmacological effect on the skin. It provides high concentration of drug at the site of application with minimal systemic absorption to avoid systemic adverse effects.

In short, the proposed newer combination of drugs acts by preventing the inflammatory process by wound healing property and binds the organic tissues with antiseptic-astringent property and maintains tone and turgidity of skin.

Also, the raw drugs are easily available and low cost compared to other therapy and keeping this view in mind, it is selected for study.

Collection and Authentication of Drugs

The raw drug Rhizome of Haridra were collected from cultivated area of our village Berni (Agarakhal), Manjistha stem and Daruharidra stem were collected from Hill area of Uttarakhand near Chamba Tehri Garhwal Range. The identity of the drugs was confirmed by the HOD of Dravya Guna department of Himalayiya Ayurvedic College and Hospital, Dehradun. These drugs were contrasted with voucher specimen and accessible literature in institute.

Method of Preparation of Lepa

According to Sushruta Samhita Aalepa is described as first line of treatment. It should be applied in opposite direction of root follicles direction i.e. towards upward direction. It is best method for twak Shodhana with Mansa and Rakta Shodhana and pacifies Daha, Kandu and Ruha.

Pharmacologically – Formulation of drug is in ointment form as is best for dry type of lesion. Ointment promotes per-cutaneous absorption of drug allowing an active pharmacological effect on the skin. When penetration of an active drug through epidermis into dermis is desired aqueous base used. Fine powder of the above three drugs were made and mix with petroleum jelly for local application.

Diagnostic Criteria

An elaborate patient case format incorporating the points of history taking and physical examination was prepared. It mainly emphasized on signs and symptoms of Ek Kustha (Psoriasis). Routine laboratory investigation (Hb%, TLC, DLC, ESR), Blood Sugar and Urine examination was made to rule out other pathological conditions.

Research Desgin

It is an observational clinical study. Patients was assigned in single group consisting of 30 patients excluding dropouts with pre, mid and post test study design.

Combination Therapy – Manjistha, Haridra and Daruharidra Lepa.

Total Duration - 6 Months.

Follow up - After 15 days.

Criteria for Assessment

The pratyatma lakshanas of Ek Kustha (Psoriasis) like Mandala, Mastyasakolapamam, Rukshata, Aswedana, Daha, Bahalatva, Srava, Unnati, Kandu and Psoriasis Area Severity Index were graded and assessed accordingly. Patients were examined for the change in the symptoms on every 15 days of treatment and then

results were analyzed before and after treatment by using paired 't' test.

Signs and Symptoms

Aswedanam (Anhydorsis)

- 0 – Normal sweating
- 1 – Mild sweating
- 2 – Mild sweating after exercise
- 3 – No sweating after exercise
- 4 – Aswedanam in lesion and uninvolved skin

Mahavastum

- 0 – No lesion on Mahavastum
- 1 – Lesions on partial hand, leg, neck, scalp and back
- 2 – Lesions on most part of hand, leg, neck, scalp, trunk and back
- 3 – Lesions on whole part of Mahasthanam
- 4 – Lesions on whole body.

Matsyashaklapamam (Scaling)

- 0 – No scaling
- 1 – Mild scaling by rubbing/itching
- 2 – Moderate scaling by rubbing/itching
- 3 – Severe scaling by rubbing/itching
- 4 – Scaling without rubbing/itching

Krushnac-aruna varna

- 0 – Normal coloration
- 1 – Near to normal which looks like normal colour to distant observe
- 2 – Reddish coloration
- 3 – Slight black reddish coloration
- 4 – Deep black reddish coloration

Srava (Discharge)

- 0 – No discharge
- 1 – Mild discharge
- 2 – Moderate discharge
- 3 – Severe discharge

Kandu (Itching)

- 0 – No Itching
- 1 – Mild/ occasional itching
- 2 – Moderate frequent itching
- 3 – Severe frequent itching which disturbs sleep and routine activities

Rukshata (Dryness)

- 0 – No line on scrubbing with nail
- 1 – Faint line on scrubbing with nail
- 2 – Lining and even words can be written on scrubbing with nail
- 3 – Excessive rukshata leading to kandu
- 4 – Rukshata leading to crack formation

Daha (Burning Sensation)

- 0 – No burning sensation
- 1 – Mild burning sensation
- 2 – Moderate burning sensation
- 3 – Severe burning sensation

Mandala (Erythema)

- 0 – Normal skin
- 1 – Faint or near to normal
- 2 – Blanching + Red colour
- 3 – No blanching + Red colour
- 4 – Red colour + Subcutaneous

Bahalatva (Epidermal thickening)

- 0 – No Bahalatva
- 1 – Mild thickening
- 2 – Moderate thickening
- 3 – Very thick
- 4 – Very thick with induration

DISCUSSION ON DISEASE

Ek-kustha is accepted as Psoriasis because the description & characteristic features of it are co-incising with description of Psoriasis than any other type of Kustha. In Kitibha the lesions are Sukshma & Sravi (exudation). But in Psoriasis the lesions are larger & dry. In Sidhma the lesion are mostly found in Urdhvakaya (Upper portion of body) but in Psoriasis the lesion are distributed all over the body. In Sidhma there is scaling which is like Raja (dust Particles) & Kandu also present but in Psoriasis there is scale formation & Kandu usually absent. Thus Kitibha & Sidhma are not correlated with Psoriasis.

Ekakustha is Vata-kapha dominant disease. Kushta is considering as Santarpanotta Bahudoshavastha Dhirghakalina mahagada. So it was consider as Kricchrasadhya to treat. Relapsing nature of Ekakustha is most common while suggest that, long term intensive therapy is necessary for eradication on the disease. Because of this reason repeated administration of all the Panchakarma, different varieties of Shamana Chikitsa & even Agada prayoga in certain stages of Kushta.

Characteristic features of Ekakushtha and Psoriasis are as follows

Ek-kustha Psoriasis

Aswedanam - The lesions of this disease are dry & rough
Mahavastum - Lesions are found all over the body. The Uninvolved skin is abnormal.

Matsyashakalopam - Well defined raised macules, papules & plaques of erythema found which are covered with Silvery scales.

Krishna - Aruna Varna- The lesions are raised & erythematous, thick non-indurated, lesion becomes black in colour.

Probable Mode of Action and Efficacy of Drug

1. **Manjistha** – Acharya Charaka classified Manjistha in Jwarahara, Varnya and Vishaghana mahakashaya group in Sadhavirechaniya Adhyaya. Acharya Sushruta described Manjistha in Priyangvadigana indicated for Pittashaman and having Sandhaniya action and acts as Vrana Ropana drugs.

2. **Haridra** – Haridra is described in Lekhaniya, Kusthaghana, Kandughana, Krimighana mahakashaya in nature and kept in Shirovirechan Dravya Kalpa Sangraha in Vimansthan. Sushruta described Haridra in Haridradi Gana indicated for Stanya Shodhak gana and in Mustadigana indicated for Kapha Sanshaman, Yonidosh, Stanyashodhak and for Pachana.

3. **Daruharidra** – Acharya Charaka classified Daruharidra in Lekhaniya, Kandughana and Arshoghana. According to Acharya Sushruta Daruharidra is classified in Haridradi gana, Mustadi gana, Lakshadi gana.

Probable Mode of Action of Lepa: The probable mode of action of Lepa can be described in two steps as follows:

Pilosebaceous uptake - When a Lepa is applied over the surface of skin opposite to the direction of hairs on it, through a proper base, the active principles of the ingredients of Lepa are released into that base. After that, this combination enters the Romkupa & further gets absorbed through the swedavahi srotas & siramukh. However, it should be kept in mind that the pilosebaceous uptake i.e. absorption of Lepa differs as per the site variation, skin condition & more important is the base through which it is applied.

Cutaneous Biotransformation - Thereafter it is subjected for Pachana by Brajakagni viz. the viable epidermis starts off the catabolic degradation of the absorbed material with the help of essential enzymes. In due course of the above transformation, some new metabolites might be forming which pacifies the provoked Doshas locally & thus breaks the pathogenesis cycle leading to the alleviation in the symptoms.

The contents of Lepa are the stem of Manjistha, rhizome of Haridra and dried stem of Daruharidra. All these have the properties like Laghu, Ruksha Guna, Tikta, Katu, Kashaya Rasa, Ushna Veerya and Katu Vipaka. This lepa is also having Sukshma property.

Ek-kustha is Kaphavata dominant disease. Upon topical application, the active principle of the Lepa reaches to the deeper tissues through Siramukha and Swedavahi srotas and stains it with its Sukshma and Tikshna property. Due to its Ushna, Tikshna and Sukshma properties it deblocks the obstruction in swedavahi srotas & allows the local toxins to flow out through the Sweda, thus clearing out the micro channels. The Ushna Virya of Lepa and Snigdha Guna of its vehicle cause pacification of Vata & Kapha which forms the samprapti thus alleviating the symptoms. In most of the patients Kandu was relieved significantly was due to the Kandughna property of Haridra and Daruharidra.

Demographic Data

❖ **Age** - Patients were classified according to different age groups. The observation reveals that about 53.33% patients belong to the age group between 46-55 years followed by 20% in 36-45 years, 16.67% in 26-35 years, 6.67% in 56-65 years and 3.33% patients in the age group of 15-25 years.

From this observation it is clear that *Ek Kustha (Psoriasis)*, a *Twak Vikar* can affect at any age. But most of the patients were from middle and old years of age group. The high occurrence in middle aged patients can be attributed to the inadequate dietary supplement, stressful life, infection, trauma, addiction to smoking and alcohol, actively exposed to sun, windy climate and poor absorption of food.

Though psoriasis is a disease that manifests in all the age groups, but it will be in its peak during the third or fourth decade of life. This is also reflected in present study.

- **Gender** - The observation reveals that about 70% patients were male and 30% were female. Psoriasis affects the males more and same is found in present Study.
- **Marital status** - Maximum number of patients i.e. 83.33% was married while only 16.67% patients were unmarried. In our country usually we prefer to get married at the age of 25 years and around. In this present study most of the patients are above 19 years of age. This can be the most material reason for such perception.
- **Religion** - Patients were classified according to different Religion. The observation reveals that about 80% patients belong to the Hindu followed by 13.33% patients were of Muslim and only 02% patient was from Sikh community. This may be because of the present study was conducted in Hindu dominant area.
- **Occupation** - Maximum number of patients 43.34% were manual labour, 23.33% were Housewives, 20% were doing deskwork and others doing field job were 13.33%. Manual labour and active group are with direct contact with sunlight and are frequently exposed to the other etiological factors.
- **Educational status** - Patients were classified according to Educational status. The observation reveals that about maximum 33.33% patients were graduate, 20% and 16.67% patients were taking education up to primary and higher secondary respectively. 30% patients were illiterate.

There is no relevant correlation with finding with any aspect of the disease. But the poor awareness about the food habits, hygiene, negligence towards the disease in its earlier stage and poor socio-economical condition are the probable explanation for high prevalence in illiterate or under educated population.

- **Economic status** - Maximum numbers of patients 43.34% were of middle class, 33.33% patients were

of middle-higher class, 20% patients of poor class and 3.33% patient was of higher class. As poor people tend to have imbalanced diet they are prone to diseases. Diet maintains the healthy status of all the tissues, in particular blood and nervous tissue.

The middle class persons always face maximum strain physically and mentally to maintain their living standards. While in higher class good quality of food and early diagnosis of the disease and their treatment are the causes for its low prevalence. This study was conducted in general Ayurvedic hospital and this shows the socio economic condition of the patients attending the OPD and IPD of this Hospital.

- **Diet** - The observation reveals that about 73.33% patients were taking mixed type of diet and 26.67% patients were taking only vegetarian diet. Thus present study shows importance of non-vegetarian food as triggering factor for psoriasis.
- **Addiction** - 30% patients each were addict to tobacco chewing and 20% patients were addict to betel nut chewing and smoking. Tea/coffee addiction was found in 10% of patients and alcohol addicted patients were 16.67%. 23.33% patients were found of no addiction. It is indicative of the extent of vascular, neuronal changes and their impact over healthy tissue.
- **Family history** - This observation reveals that about 23.33% patients were having positive family history of disease and 76.67% patients were having no family history of the disease.

Modern medical science accept strong genetic predisposition in the disease. In Ayurveda, Acharya Sushruta has described Kustha as Adibala Pravrita Vyadhi.

- **Chronicity of Disease** - Maximum numbers of patients 56.67% were suffering by Ek Kustha (Psoriasis) from 3 to 6 months. 23.33% patients and 20% patients were having disease from 1 to 3 months and up to 1 month respectively.
- **Precipitating factors** - Maximum numbers of patients 36.67% had stress as trigger. 23.33%, 16.67% and 13.33% patients had infection, food and seasonal factors as triggering factor respectively. 10% patients were giving positive history of taking drugs. In winter there will be dominancy of Kapha and Vata which causes increase pattern of Vata Kapha Pradhana Vyadhi like psoriasis.
- **Agni** - Maximum numbers of patients i.e. 50% were having Vishamagni and 40% patients were having Mandagni. 10% patients were found of having Tikshnagni.
- **Kostha** - The observation reveals that about 53.34% patients were having Madhyam Kostha. 23.33% patients both were having Mridu Kostha and Krura Kostha respectively.
- **Doshaj Prakriti** - Vata-pittaj Prakriti patients were 43.33%, Vata-kaphaj prakriti patients were 30% and

Pittakaphaj Prakriti patients were 26.67%. No patient of Ekantik Prakriti and Sama Prakriti was found in this study.

Here in this study all the Patients had Dvadwa Prakriti especially Vata Pitta and Vata Kapha & Pittakaphaj Prakriti. It is because that dual constituent Prakritis are abundant and it is also described in ancient Ayurvedic texts.

❖ **Manas Prakriti** - In the present research work, majority of patients 53.33% were having Rajasika Prakriti and 46.67% were having Tamasika Prakriti. No patient was found having Satvika Prakriti.

❖ **Involvement of Area** - The body is divided into four sections. The four areas are: the Legs, which have 40% of a person's skin; the Body (trunk area: stomach, chest, back, etc.) at 30%; the Arms (20%); and the Head (10%).

Maximum numbers of patients i.e. 40% had involved area between 30%-50%, while 33.34% had involved area between 50%-70%. 13.33% patients had 10%-30% and 70%-90% body involvement respectively.

Evaluating Disease Data

❖ **Nidan** - This observation reveals that Asatyma Ahar was found in maximum number of patients followed by Manasik Nidan as causative factors for Ek-kustha (Psoriasis).

Aharaja Hetus are chief responsible factors in the production of the Kushta (skin diseases). Among them Virudha & Mithya Ahara are the main dietary factors. The Mithya Vihara is also the chief causative factor of many diseases but it has been considered as main cause for the Kushta. Numerous patients report an increase in the psoriasis seriousness with psychological stress.

❖ **Prodormal symptoms** - This study reveals that Kandu was found in 100% patients as prodormal symptoms of Ek-kustha. Kharatvam was found in 93.33%, Vaivarnyam was found in 90%, Kothonnati and Roukshyam were found in 80%, Gauravam was found in 70% and Usmayanam was found in 60% of patient, Raaga was found in 56.57% and Rakta krishnatvam was found in 53.33% of patients as prodormal symptoms.

The other prodormal symptoms like Aswedanam, Atiswedanam, Parushyam, Atislakshnata, Nishtoda, Suptata, Pariharsha, Lomaharsha, Svayathu, Shrama, Klama, Kayachhidresu upadeha and pipasa were present in 26.67%, 36.67%, 46.67%, 33.33%, 13.33, 26.67%, 20%, 10%, 6.67%, both 30%, 26.67% and 36.67% of patients respectively.

❖ **Sign & symptoms** - This study reveals that Kandu (Itching) and Mandala (Erythema) were found in all 100% patients. Aswedanam (Anhydrosis), Mahavastum, Matsya Shakalopama (Scaling), Krushnac-aruna varna, Sraava (Discharge), Rukshata (Dryness) Daha (Burning sensation) and Bahaltva (Epidermal thickening) were found in 40%, 30%, 83.33%, 50%, 20%, 80%, 20% and 63.33% patients as signs and symptoms of Ardita.

In Ek-kustha, both Vata and Kapha are predominant dosas. Vata causing sankocha and Kapha causing sangha. Even during the Baspasweda due to this Vata and kapha association achievement of perspiration was difficult. Scaling is chief complaint in Ek-kustha.

RESULT OF THE THERAPY

Relief percentage in symptoms of Ek-kustha (Psoriasis) - The total symptom score and percentage of each symptom of all patients were evaluated. The relief percentage in individual symptoms of Ek-kustha revealed a better therapeutic efficacy of combination therapy of Manjistha, Haridra and Daruharidra.

Symptoms	Symptom Score		Relief Percentage
	BT	AT	
Aswedanam (Anhydrosis)	22	07	68.18
Mahavastum	16	06	68.75
Matsyashaklopamam (Scaling)	71	20	73.23
Krushnac-aruna varna	39	13	66.67
Srava (Discharge)	9	3	66.67
Kandu (Itching)	78	22	71.79
Rukshata (Dryness)	75	26	66.67
Daha (Burning sensation)	8	3	62.50
Mandala (Erythema)	80	20	75.00
Bahaltva (Epidermal thickening)	54	16	72.22

Statistical Analysis

• The total effect of therapy on symptoms of each patient was evaluated before and after completion of the treatment. The initial mean score of 30 patients for Aswedanam was 0.73 which were reduced to 0.23 after treatment. The total effect of treatment

provided statistical significant ($P < 0.01$) result with 't' value of 2.48.

• In symptom Matsyashaklopamam, the mean before treatment was 2.37 which was reduced to 0.67, exhibiting highly significant ($P < 0.001$) improvement with 't' value of 6.49.

- In symptom Krushnac-aruna varna, the mean before treatment was 1.30 which was reduced to 0.43, exhibiting highly significant ($P < 0.001$) improvement with 't' value of 3.26.
- In Kandu, the mean before treatment was 2.60 which was reduced to 0.73 after treatment. The total effect of treatment provided statistical significant ($P < 0.001$) result with 't' value of 14.18.
- The initial mean score for Rukshata was 2.50 which were reduced to 0.87 after treatment. The treatment provided statistical significant ($P < 0.001$) result with 't' value of 5.72 after completion of the treatment.
- The initial mean score for Mandal was 2.67 which were reduced to 0.67 after treatment. The treatment provided statistical significant ($P < 0.001$) result with 't' value of 12.21 after completion of the treatment.
- In symptom Bahaltva the mean before treatment was 1.80 which was reduced to 0.53 after treatment. The total effect of treatment provided statistical significant ($P < 0.001$) result with 't' value of 4.17.
- In symptoms Mahavastum, Sraava and Daha the effect of treatment was statistically not significant.

Assessment of Overall Effects of Therapy – The overall effects of therapies provided moderate response in 73.34% of the patients, 13.33% were showed marked relief, 3.33% patient has mild improvement and 10% of the patients were completely cured after completion of treatment.

CONCLUSION

Psoriasis is considered to be inherited as an autosomal dominant character with irregular penetration. It is found in order than one member of the family in 10 –30% of the cases. The exact cause of the disease is not known but many precipitating factors like environmental, immunological, genetic and psychological have been found. Eka Kushta being a Kshudra Kushta has Vata Kapha dominance but involvement of Tridosha is evident from its signs & symptoms. Relapsing nature is most common in Psoriasis, which suggests that it needs long term treatment to serve this purpose well. All the drugs chosen for the study are chiefly Varnya, Vishaghana, Pittashamak, Vrana Ropana, Krimighana, Kusthaghana and Kandughana in nature. So by their virtue, they help in treatment of Ek-kushta. These drugs are easily available, cheaper and with no side and adverse effect. The combination of drugs acts by preventing the inflammatory process by wound healing property and binds the organic tissues with antiseptic-astringent property and maintains tone and turgidity of skin. 76.67% of the patients were having negative family history, which is contrary towards prevailing social misbelieving. Asatyma Ahar-vihar and Manasik nidana are common causative factors for Ek-kushta. Treatment responses of all parameters were highly significant which show that Lepa efficacies in treating Ek-Kushta.

REFERENCES

1. Agnivesha. Charaka Samhita, Agnivesha's treatise refined and annotated by charaka and redacted by Drudabala, with Ayurveda deepika commentary by chakrapani varanasi, chaukamba sanskrittha samsthana; reprint, 2004.
2. Agnivesha. Charaka Samhita, revised by Maharshi Charaka and Dradhabala with Ayurveda Deepika and Jalpakalpataru Commenteries, Varanasi, Chowkhambha Orientalia, 2005.
3. Bhadauria S. et al. – Dermatophytoses in Jaipur: Study of Incidence, Clinical features and Causal Agents, Ind. J. Micro, 2001; 41.
4. Bhavamishra. Bhava Prakasha with English Translation by Prof.KRSrikanta Murthy, 3rd edition, Varanasi, Choukhamba Krishna Das Academy, 2005.
5. Chakrapanidatta. Chakradatta with vaidhya prabha Hindi commentary by Dr indradev Tripathi, edited by Prof Ramanath Dwividy, 1st edition Varanasi, Chaukhamba Sanskrit Sansthan, 1992.
6. Govind Das. Bhaishajya Ratnavali with Vidhyotini Hindi Commentary by Shri Ambikadatta Shastri 18th edition, Varanasi, Chaukamba Sanskrit Bhavan, 2005.
7. J.L.N.Shastri. Dravya Guna Vijnanya Vol 2 Varanasi, Chowkhambha Orientalia, 2005.
8. Kirtikar & Basu. – Indian Medicinal Plants, 1984; I(IV): 2nd Ed.
9. Madhavakara. Madhava Nidanam with Madhu Kosha Sanskrit commentary by Shri. Vijayarakshita and Shrikanta Datta, with the Vidyotini Hindi commentary, edited by Yadunandana Upadhaya, Varanasi, Chaukhambha Sanskrit Sansthan, Part II, reprint, 2003.
10. Nadkarni K.M. – Indian Plants & Drugs., Asiatic Publishing House, Delhi, 2001.
11. Ramji Gupta. Text Book of Dermatology, 1st edition, New Delhi: Jay Pee brothers Medicdal Publishers, 2002.
12. Shastri R. D., Bhaishajya Ratnavali with Vidyotini Hindi commentary Edition, 1991.
13. Satoksar R.S., Bhandarkar S.D. & Nirmala N. Grege. Pharmacology & Pharmacotherapeutics, 19th Edition Mumbai; Popular Prakashan Pvt. Ltd, 2005.
14. Sharangadhara. Sharangadhara Samhita with Adhamalla's Deepika and Kashiram's Gudarthha Deepika commentary, Varanasi, Krishnadas Academy, reprint, 2000.
15. Sharma P.V. – Dravya guna vigyana, Vol. I & II, Chaukhambha Surabharati Academy, Varanasi.
16. Sushruta, Sushruta Samhita, the Nibandha Sangraha commentary by Dalhanacharya and the Nyayachandrika Panjika of Sri. Gayadasacharya on Nidana Sthana, edited by Vaidya Jadavji Trikamji Acharya and Narayanarama Acharya, Kavyatirtha, Varanasi:ChaukambhaSura bharati; reprint, 2003.
17. The Kashyapa samhita or Vrddha jivaka tantra by vrddha jivaka revised by vatsya translation and

commentary by Prof.P.V.Tewari, Varanasi, Choukambha visvabharati, 1996.

18. Vaghata or Vriddha Vagbhata. Ashtanga Samgraha – with the Shashilekha Sanskrit commentary by Indu, 1st ed. Varanasi: Chowkamba Sanskrit Series Office, 2006.
19. Vagbhata - Ashtanga Hridaya with commentaries of Sarvanga Sundari of Arundatta and Ayurveda Rasayana of Hemadri; Krishnadas Academy, Varanasi- Repr, 1982.
20. Vangasena.Vangasena Samhita – with hindi commentry from Dr. Rajiv Kumara Roy, edited by Dr. Rajiv Kumara Roy, 1st ed. Varanasi: Prachya Prakashan, 2000.