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CLINICAL EVALUATION OF VIRECHAN THERAPY AND HARIDRADI VATI AND OIL FOR THE MANAGEMENT OF KITIBH KUSHTHA (PSORIASIS)

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ABSTRACT

It is generally an accepted concept in medicine that the skin can develop signs of internal disease. In reality, concise differential diagnosis and the identification of these disorders are actually difficult for the nondermatologist because he or she is not well-versed in the recognition of cutaneous lesions or their spectrum of presentations. The skin is the largest organ of our body. It is one of the five 'Gyanendriyas' as described in Ayurvedic texts, which is responsible for 'Sparsha Gyan' or touch sensation. Therefore, it plays a major role in physical and mental well being of any individual. In Ayurveda, all the skin disease has been described under the umbrella of Kushtha. They are further classified into Mahakushtha and Kshudrakushtha. According to Charaka Kitibh is Vat-Kapha predominant and according to Sushruta, it is Pitta predominant Kshudrakushtha. Kitibh Kushtha may be correlated to Psoriasis due to their more or less similar clinical presentations. Therefore, in this clinical trial we have planned to study the clinical effect of Virechan therapy (for elimination of Pitta) and Haridradi Vati and oil (for Samshaman of Vat-Kapha) in Kitibh Kushtha. Kitibh Kushtha is characterized by patches which are blackish brown in colour, rough and coarse in nature, exudative, round, thick along with severe itching. Psoriasis is one of the most common dermatologic diseases affecting up to 2.5% of the world's population. It is a non-infectious chronic inflammatory skin disorder clinically characterised by pink-red, silvery scale, sharply demarcated lesions on the skin surface especially over elbows, knees, scalp and presacral areas. Present clinical study comprises of randomly selected eighteen registered cases of Psoriasis (Kitibh Kushtha) from OPD and IPD of Kayachikitsa, Sir Sundarlal Hospital, B.H.U., Varanasi, have been treated with Virechan therapy and Haridradi Vati and oil (containing Haridra, Bakuchi, Guduchi and Gomutra) to assess the clinical efficacy of Virechan and these Ayurvedic remedies. Significant changes in Subjective and objective criteria were observed. However, no significant changes observed in respect to haematological, biochemical, urine examination and stool examination.

Keywords: Kushtha, Kshudrakushtha, Kitibh Kushtha, Psoriasis, Virechan, PASI score

INTRODUCTION

Kushtha means the disease which despises the skin. They are further classified into Mahakushtha and Kshudrakushtha¹. According to Charaka Kitibh is Vata-Kapha² predominant and according to Sushruta it is Pitta³ predominant Kshudrakushtha. Kitibh Kushtha is characterized by patches which are blackish brown in colour, rough and coarse in nature, exudative, round, thick along with severe itching²⁷. The most common papulosquamous diseases—Psoriasis, tinea, pityriasis rosea, and lichen planus are primary cutaneous disorders. Emerging comorbidities in Psoriasis include cardiovascular disease and metabolic syndrome. It is a non-infectious chronic inflammatory skin disorder clinically characterised by pink-red, silvery scale, sharply demarcated lesions on the skin surface especially over elbows, knees, scalp and presacral areas²⁸. Psoriasis appears to be largely a disorder of keratinisation. Males and females are equally predisposed and all age groups are affected⁴. Psoriasis tends to run in families and is precipitated by climate, Streptococcal infections, etc.⁵. The exact aetiology of Psoriasis is still unknown, but it is believed to have a genetic component⁶. Psychological stress is emphasized as one of the major triggering factor in the exacerbation of the disease⁷. Psoriasis is mentally

agonising disease and has an impact on quality of life of patients⁸. Here it is important to remember the statement of Acharya Charaka regarding the relation of Tvacha and Manas, Tvacha is described as "Cheta Samvayi"⁹ i.e. the Tvacha (skin) has an eternal relation with Manas (psyche or mind). Frequent Samshodhan¹⁰ and Masat Masat Sransanam¹¹ is the principle of management for the Kushtha. Therefore, in this clinical trial we have planned to study the clinical effect of Virechan therapy once in a month for consecutive 3 months. Psoriasis is notoriously chronic and is well known for its course of remission and relapses¹². Acharya Kashyap described remission and exacerbation of Kitibh Kushtha (Punaha Punaha Utpatadhyante Kitibhni)¹³. Acharya Charaka has highlighted the role of Samshodhan therapy by stating that the disease treated by it will never recur whereas the disease treated with Samshamana therapy may recur in due course of time¹⁴.

Properties of Virechan drugs

There are five important properties of Virechan drugs namely Ushna, Tikshna, Sukshma, Vyavayi and Vikasi. These properties play a major role in their mode of action. Acharya Sushruta mentioned "Sara" property instead of Vyavayi. Although the western system of medicine has

unravelling substantially the pathogenesis of disease involved in the Psoriasis and designed numerous therapeutic drugs with a wide range of action to arrest the disease process in several ways. However, the efficacy of drugs is compromised due to various side effects during course of treatment. Hence it is need of the hour to find out safe, cheap and effective management for Psoriasis and it can be achieved by Ayurvedic treatment^{15and16}.

Aims and objectives

Clinical evaluation of Virechan therapy and Haridradi Vati and oil for the management of Kitibh Kushtha (Psoriasis).

MATERIALS AND METHODS

The patients were selected and registered after their fulfilment of diagnostic criteria of Kitibh Kushtha (Psoriasis). The patients were thoroughly questioned and examined on the basis of Proforma which include both subjective and objective criteria's. Ethical clearance and informed consent were obtained before conducting the clinical trial. (Dean/2008-09/427 on 18/03/09)

Selection of drugs

Drugs were selected based on their Kushthagna¹⁷ properties. Identification was done by Prof KN Dwivedi, Dept. of Dravyaguna, IMS, BHU, Varanasi, India.

Table 1: Selected drugs with their botanical names and families.

Sanskrit name	Botanical name	Family
Haridra	<i>Curcuma longa</i> Linn.	Zingiberaceae
Bakuchi	<i>Psoralea corylifolia</i> Linn.	Papilionaceae
Guduchi	<i>Tinospora cordifolia</i> Willd.	Menispermaceae
Gomutra	Cow urine (English name)	

Selected drugs have anti-inflammatory, anti oxidant and immunomodulating properties¹⁸⁻²¹ which is the mainstay in the treatment of Psoriasis.

Preparation of drugs

Preparation of Vati

The raw drugs were collected from Ayurvedic pharmacy, B.H.U., Varanasi, India and all were identified by the subject experts. Haridra and Bakuchi have been dried and made into powder form. Then powder of Haridra and Bakuchi have been triturated seven times with Guduchi Swaras and Gomutra each alternatively (since trituration increases properties²²) and made into a Vati of 500 mg each.

Preparation of Oil

Ingredients - Haridra (Rhizome), Bakuchi (Seeds), Guduchi (swaras) and Gomutra (cow urine)

(a) Preparation of kalka

The Rhizome of Haridra and Bakuchi seeds were taken into the khalva yantra and prepared a fine paste.

(b) Preparation of kwatha

Haridradi kwath (Haridra and Bakuchi) was prepared as per the principles of kwath²³. After cooling, the liquid portion is filtered and the same is used for sneha kalpana.

(c) Process of formation of oil-

Kalka, til oil and kwatha are taken in proportion of one, four and sixteen parts respectively. The Guduchi swaras and Gomutra have been added 16 parts. First of all kalka and til oil were mixed together and heated gently, then slowly kwath, gomutra and swaras have been added. This mixture was boiled in mild fire and stirred continuously until the preparation of proper oil as per guidelines of taila kalpana²⁴ described in Ayurvedic texts and it was tested by the subject experts.

Virechan Karma

Virechan karma is one of the Samshodhana regimen, and used for the elimination of vitiated Doshas from the body, through adhomaraga (anal passage). There are two views regarding Virechan karma, the first one is that the Virechan karma is the specific therapy for elimination of vitiated Pitta Dosha and the second one is that it also intended to eliminate the vitiated Pitta and Kapha both from the Amashaya. This therapy must always be preceded by snehana and swedana.

Procedure of Virechan Karma

- Collection of required medicines –Icchabhedi rasa (Dabur Company) was prescribed and advised the patient to purchase from market

- Preparation of a patient

Deepan/Pachan with Chitrakadi Vati/ Hingwashtaka Churna was continued for 2-3 days to enhance the functions of Agni

Abhyantar Snehan with Panchtikta Ghrita for 3-7 days depending on status of koshtha

Bahya Snehana and Swedan for 02 days

- Patient Examination - Patient was examined to know his/her strength and disease along with assessment of koshtha.
- Determination of Doshage- Depending on the koshtha, strength of patient and strength of disease dose was prescribed i.e. 1-3 tab (125 mg to 375 mg).
- Time of administration-morning between 8am -10am
- Administration of the medicines

By considering all precautions and cautions medicines were administered to the patient accompanied by auspicious recitation in the early morning on empty stomach.

Observation and follow up

As soon as patient gets vegas he has been advised to pass the motion without applying pressure. Proper assessment of Virechan was done by observing the signs and symptoms, no. of vegas, quantity and content which comes at the end of last vega²⁵. Finally, advised the patient to follow strict samsarjana krama.

Treatment was continued for 3 months at one month interval.

Table 2: Samsarjan Krama (Post Virechan Karma dietetic regimen)²⁶

Number of days	Time (Ahar kaal)	Pravara Suddhi	Madhyama Suddhi	Avara Suddhi
1 st	Morning Evening	Nothing Peya	Nothing Peya	Nothing Peya
2 nd	Morning Evening	Peya Peya	Peya Vilepi	Vilepi Yusha
3 rd	Morning Evening	Vilepi Vilepi	Vilepi Akrita Yusha	Mamsarasa Normal Diet
4 th	Morning Evening	Vilepi Akrita Yusha	Krita Yusha Akrita Mamsarasa	Normal Diet
5 th	Morning Evening	Krita Yusha Krita Yusha	Krita Mamsarasa Normal Diet	Normal Diet
6 th	Morning Evening	Akrita Mamsarasa Krita Mamsarasa	Normal Diet	Normal Diet
7 th	Morning Evening	Krita Mamsarasa Normal Diet	Normal Diet	Normal Diet

Selection of patients

A total of eighteen cases of uncomplicated Psoriasis patients visiting O.P.D. and I.P.D. of Kayachikitsa were selected for the present clinical study from the S.S. Hospital, Banaras Hindu University, Varanasi during the period of May, 2009 to October 2010, out of which fifteen patients were completed the 3 month follow up at one month interval .

Inclusion criteria

- Patients aged between 15 to 60 years.
- Diagnosed cases of Psoriasis based on symptoms and signs suggestive of Psoriasis (Kitibh Kushtha)
- Patients willing to participate in this trial.

Exclusion criteria

- Patients having age less than fifteen years and more than sixty years
- Complicated cases of Psoriasis like pustular Psoriasis, Psoriasis with arthritis or any other such type of complication.
- Severely ill patients with weight loss.
- Patients having cardiac disease, renal disease and endocrine disorders were excluded from the study to avoid overlapping of symptomatology.
- Pregnant and lactating woman.

Termination criteria

- Progressive worsening of disease and development of complication during trial.
- Patients who do not complete the trial duration with follow up.
- Death of the patients due to any cause.

Investigation

- Haematological and biochemical examination – Hb%, TLC, DLC, ESR, blood sugar, serum creatinine, blood urea, liver function test and ASO titre
- Urine examination -
Routine
Microscopic
- Stool examination
Ova, Cyst, Occult blood
- Immunological test
HLAB₂₇

Parameters for assessment of Psoriasis

- Symptomatic improvement
- Estimation of Psoriasis area severity index (PASI) Score
- Photographs taken at regular intervals
- Side / toxic effects of the drug, if any

Criteria for assessment of symptoms

The PASI score does not take account for the symptoms such as itching, discoloration, dryness and burning sensation. Intensity of these symptoms were estimated on other parameters as mentioned below -

Grade 0 - No symptom

Grade 1 - Mild

Grade 2 - Moderate

Grade 3 - Severe

PASI score

It has been employed in numerous clinical trials to assess the difference between before and after treatment. The four main anatomical sites were assessed. The head (h), upper extremities (u), trunk (t) and lower extremities (l) roughly corresponding to 10, 20, 30 and 40% of body surface area (BSA), respectively.

PASI (Psoriasis area severity index) Score is calculated as follows –

$$\text{PASI} = 0.1 (E_h + S_h + I_h) A_h + 0.2 (E_u + S_u + I_u) A_u + 0.3 (E_t + S_t + I_t) A_t + 0.4 (E_l + S_l + I_l) A_l$$

Where, E = Erythema, S=Scaling, I=Induration and A=Area

E, S and I are assessed according to a '4' point scale where 0 = No symptoms

1 = Slight

2 = Moderate

3 = Marked

4 = Very marked

'A' is assessed as 6 point scale indicating the extent of lesion at a given anatomic site:

1 = <10%

2 = 10-29%

3 = 30-49%

4 = 50-69%

5 = 70-89%

6 = 90-100%

OBSERVATION AND RESULT

Selected patients were subjected to Virechan therapy followed by oral intake of Haridradi Vati and external application of Haridradi oil to assess its efficacy. Assessment was done based on subjective and objective

criteria's. Significant changes in Subjective and objective criteria were observed and the same was shown in following tables. However, no significant changes observed in respect to haematological, biochemical, urine examination and stool examination.

Table 3: Clinical effect of Virechan therapy and Haridradi Vati and oil on different symptoms

Symptoms	Mean BT	Mean AT	Mean diff.	% relief	Z value	p value
Itching	0.83	0.11	0.72	86.74	3.60	0.000
Discoloration	1.00	0.61	0.39	39.00	2.64	0.008
Dryness	0.78	0.00	0.78	100.00	3.74	0.000
Burning sensation	0.17	0.01	0.16	94.10	1.73	0.083

BT: Before Treatment AT: After Treatment

Table 4: Clinical effect of Virechan therapy and Haridradi Vati and oil on PASI score

PASI score	Mean BT	Mean AT	Mean diff.	% relief	Z value	p value
Head						
Erythema	1.28	0.33	0.94	73.43	3.002	0.00
Scaling	1.78	0.00	1.78	100.00	3.06	0.002
Induration	0.83	0.06	0.78	93.97	2.88	0.004
Area	2.33	1.00	1.33	57.08	2.73	0.006
Upper limb						
Erythema	0.56	0.22	0.33	58.92	2.12	0.034
Scaling	0.89	0.00	0.89	100.00	2.41	0.016
Induration	0.50	0.00	0.50	100.00	2.46	0.014
Area	0.94	0.44	0.50	53.19	1.63	0.102
Trunk						
Erythema	1.00	0.44	0.56	56.00	2.45	0.014
Scaling	1.33	0.00	1.33	100.00	2.71	0.007
Induration	0.78	0.06	0.72	92.30	2.75	0.006
Area	1.89	1.33	0.56	29.62	2.12	0.034
Lower limb						
Erythema	0.83	0.33	0.50	60.24	2.53	0.011
Scaling	1.06	0.06	1.00	94.33	2.53	0.011
Induration	0.50	0.06	0.44	88.00	2.53	0.011
Area	1.06	0.61	0.44	41.50	1.84	0.066

Z = Wilcoxon Signed Ranks test

DISCUSSION

Psoriasis is a major skin problem worldwide. It is non infectious chronic inflammatory disease of unknown aetiology. Kitibh Kushtha may be correlated to Psoriasis due to their more or less similar clinical presentations. Kitibh Kushtha is characterized by patches which are blackish brown in colour, rough and coarse in nature, exudative, round, thick along with severe itching. The most common papulosquamous diseases Psoriasis, tinea, pityriasis rosea, and lichen planus are primary cutaneous disorders. Emerging comorbidities in Psoriasis include cardiovascular disease and metabolic syndrome. It is a non-infectious chronic inflammatory skin disorder clinically characterised by pink-red, silvery scale, sharply demarcated lesions on the skin surface especially over elbows, knees, scalp and presacral areas. Kitibh Kushtha and Psoriasis both are characterised by acute exacerbation and relapse. But scaling, a major symptom of Psoriasis is not described in Kitibh Kushtha by any Acharya.

Probable mode of action of Virechan therapy

Virechana drugs having the properties like Ushna, Tikshna, Suksma, Vyavayi, Vikasi may act via the efficacy of their penetrability and infiltrative properties which reaches “Hridaya” and then enter the dhamani. From dhamani it spreads to macro and micro channels of the body and trickling the Doshas by its ushna guna and it

decapitates the Doshas by its tikshna guna, which helps to bring the Doshas from shakha to kosktha. Due to prithvi and jala mahabhuta dominance it causes downward movement of Doshas from the kosktha and leads to the expulsion of unwanted toxin from the body, likely to be considered with etiopathogenesis. It is also regarded as the best treatment for raktaja vikara. It enhances the functions of Jatharagni and increases the immune status. Pacification of vata and pitta dosha by Virechan helps to recover from Kitibh Kushtha (Psoriasis).

Probable mode of action of Haridradi Vati and oil

All the content drugs of the Haridradi Vati and oil (Haridra, Bakuchi, Guduchi and Gomutra) are tikta rasa pradhan. Tikta rasa causes Ama Pachan and pacify the Pitta. All the drugs have Vat-Kapha nasak property. In term of modern concept these drugs possess anti-inflammatory and immunomodulating properties which is the mainstay for the treatment of Psoriasis. Having Rasayan property Haridradi Vati also help to reduce stress in the patients of Psoriasis.

In this clinical trial Samshodhan Chikitsa was planned in the form of Virechan and Samshaman Chikitsa in the form of Haridradi Vati and oil. Virechan was performed at every month for consecutive three months. Haridradi Vati also prescribed for three months with regular monthly follow ups, because Psoriasis is a major skin

problem and require intensive and long therapy for its treatment.

CONCLUSION

Kitibh Kushtha is characterized by patches which are blackish brown in colour, rough and coarse in nature, exudative, round, thick along with severe itching. The most common papulosquamous diseases Psoriasis, tinea, pityriasis rosea, and lichen planus are primary cutaneous disorders. Emerging comorbidities in Psoriasis include cardiovascular disease and metabolic syndrome. It is a non-infectious chronic inflammatory skin disorder clinically characterised by pink-red, silvery scale, sharply demarcated lesions on the skin surface especially over elbows, knees, scalp and presacral areas. A clinical trial carried out by Virechan therapy and Haridradi Vati and oil showed that these are safe, causes significant improvement in symptoms and reduction in PASI score. Virechan therapy and Haridradi Vati and oil do not cause any untoward effects as appreciated with the PUVA therapy and other medicines of Modern science. Significant changes in subjective criteria were observed. However, no significant changes observed in respect to haematological, biochemical, urine and stool examination. The data from present study also suggest immunomodulating property of Haridradi Vati. The study shows clinical importance of Virechan therapy and Haridradi Vati and oil on different symptoms and PASI score of Psoriasis. Both Samshodhan and Samshaman Chikitsa have their own role in the management of this disease depending upon aggravation of Doshas.

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