

INTERNATIONAL AYURVEDIC MEDICAL JOURNAL







A COMPARATIVE CLINICAL STUDY OF VIRECHANA KARMA AND SHAMANA CHIKITSHA IN THE MANAGEMENT OF VICHARCHIKA WITH SPECIAL REFERENCE TO LICHEN SIMPLEX CHRONICUS

Shivani¹, Sukumar Ghosh², S. N. Chowdhary³, Shailendra Kumar Singh⁴

¹Assistant professor, Department of Kayachikitsa, Sardar Patel Institute of Ayurvedic Medical Sciences & Research Centre, Lucknow, Uttar Pradesh, India

²Professor & HOD, Department of Kayachikitsa, Institute of Post Graduate Ayurvedic Education & Research at Shyamadas Vaidya Shastra Pith, Kolkata, West Bengal, India

³Professor & HOD, Department of Dermatology, College of Medicine & Sagore Dutta Hospital, Kolkata

⁴Senior Ayurvedic Medical Officer, SAD Kona at Jagcha New PHC, Howrah, West Bengal, India

Corresponding Author: meetshivani08@gmail.com

2https://doi.org/10.46607/iamj0810012022

(Published Online: January 2022)

Open Access

© International Ayurvedic Medical Journal, India

Article Received: 01/01//2022 - Peer Reviewed: 06/01/2022 - Accepted for Publication 07/01/2022



ABSTRACT

The skin is the largest organ of the body and seat of the complexion which maintains beauty & personality. Skin diseases account for a great deal of misery, pain, suffering & economic loss. In *Ayurveda*, all skin diseases are described under the umbrella of *Kushtha* which are further divided into *mahakushtha* & *kshudrakushtha*. Vicharchika is regarded as one of the varieties of *kshudrakushtha*. It is a disease of *Kapha-pitta* dominancy. The present study was conducted at the Institute of Post-Graduate Ayurvedic Education & Research at Shyamadas Vaidya Shastra Pith Hospital on 60 patients of *Vicharchika* which was divided into two groups (30 Patients in each group). In Group-A, 30 patients were treated with *Shodhana Chikitsa* (*Virechana karma*) with *Trivrit Churna* in a dose of 10gms & *Shamana Chikitsa* with *Panchanimba Churna* & *Amalaki churna* (2.5 gms each) 5 gms twice daily after meal with Lukewarm water with local application of *Gandhak*-1 part, *Tankan*-1/4th part with *Chalmoogra taila* for 3 months. In Group-B, patients were treated with *Shamana Chikitsa* with *Panchanimba Churna* & *Amalaki churna* (2.5 gms each) 5 gms twice daily after meal with Lukewarm water with local application of *Gandhak*-1 part,

Tankan- 1/4th part with *Chalmoogra taila* for 3 months. The result was found to be highly significant in group-A patients. Drugs like *Panchanimba*, *Amalaki* plays an important role in subsiding the symptoms and *Virechana karma* is the key to overcoming this type of disease.

Keywords: Vicharchika, Lichen Simplex Chronicus, Virechana, Panchanimba, Amalaki.

INTRODUCTION

Now a days Skin diseases are becoming more common because of the lower threshold of seeking medical attention. *Vicharchika* is one of them. According to Ayurveda classics, *Vicharchika* is a type of *kshudrakushtha* with *kapha & pitta dosha*. The diseases present with features like *Kandu* (itching), *Pidaka* (Vesicular eruptions), *Shyavavarna* (hyperpigmentation), & *Shrava* (exudation).

The features have a resemblance with Lichen Simplex Chronicus according to western literature. It is a chronic inflammatory disease of the skin with triggering factors such as stress, environmental, immunological & metabolic toxins. The etiological study of eczema reveals the factors of psychosomatic nature of the disease with associated barrier dysfunction, genetic determination, allergy impaired innate immunity in the pathogenesis of the disease.

Now a days, modern medical science reaches the top of the hill with great advances particularly in dermatology with the availability of anti-fungal, anti-biotic, anti-histaminic & corticosteroids etc but still, a large number of therapeutic failure patients come to Ayurveda for safe & effective treatment. Ayurveda treats the disease by cleansing the vitiated dosha & dushya & there by maintaining the equilibrium state of dosha, dhatu & mala.

The study of evidence-based clinical practices of *Vicharchika* will lead to better management and identification of newer strategies & lines of treatment.

AIM & OBJECTIVE-

Modern medicines reduce the symptoms of *Vicharchika* by administration of steroids orally & locally both, but it has some adverse effects such as GI disturbances, renal abnormalities & skin atrophy. So here an effort was made to treat *Vicharchika*.

a) To find out a simple therapy that is effective and cheap for the disease.

- b) To assess the efficacy of *Virechana karma* with *shaman chikitsa* in respect to *shaman chikitsa* only in the management of *Vicharchika*.
- c) To evaluate potent, cheap, effective, easily available and safe remedies for this disease.

MATERIALS AND METHODS -

Ethical clearance- The present study has been approved by Institutional Clinical Ethical Committee, Institute of Post Graduate Ayurvedic Education and Research at Shyamadas Vaidya Shastra Pith, Kolkata (Memo no. SVP/542/2018).

Type of study- Randomized comparative clinical study.

Study Population- After a detailed history taking the clinical examination and pathological investigation, 60 patients were selected having the following selection criteria from the OPD and IPD of I.P.G.A.E. & R. at S.V.S.P Hospital Kolkata-700009 after taking written informed consent from the patient.

Period of Study- 18 months

Sample Size- 60 patients

Sample Design- After proper examination 60 patients suffering from Vicharchika were randomly selected & categorized into 2 groups, irrespective of their age, sex, religion, constitution etc. for ascertaining a comparative response.

Group 'A'

30 Patients were randomly selected for this group. They were undergone *Virechana karma* (purgation) with *trivrita churna* in a dose of 10 gm and *shaman chikitsa* (palliative therapy) with *Panchanimba* and *Amalaki* (2.5 gm each) 5 gm twice daily with lukewarm water after a meal with local application of *Gandhak*–1 part, *Tankan*–1/4 part with *chalmoogra taila* for 3 months.

Group 'B'

For this group 30 patient were randomly selected & treated with *Shamana chikitsa* (palliative therapy) with *Panchanimba* and *Amalaki* (2.5 gms each) 5 gm twice daily with lukewarm water after a meal with local application of *Gandhak* - 1 part, $Tankan - \frac{1}{4}$ part with *chalmoogra taila* for 3 months.

STUDY DESIGN -

Step –I Patients were selected from the OPD & IPD of I.P.G.A.E.& R. at S.V.S.P. Hospital,

Kolkata as per selection criteria.

Step –II Informed consent were taken from all the patients of the study.

Step –III Confirmation of the Diagnosis by clinical & laboratory findings.

Step –IV Patients were divided into two groups.

Step –V Monthly follow-up for 3 months.

Step –VI Assessment of the result through subjective, objective & photographic involvement.

Step –VII Finally Statistical analyses were done.

Exclusion criteria -

- a) Below the age group of 12 years & above 60 years.
- **b)** Having a history of diabetes mellitus.
- c) Having a history of Pregnancy & lactation.
- **d**) Having a history of severe exudation from the lesion.

- e) Having job oriented repeated friction.
- f) Having too old lesion.
- g) On corticosteroid therapy and unknown therapy.

Inclusion Criteria -

- a) A patient who has given the consent after explaining the study details to them.
- **b**) Patients are willing to give a photograph of a particular area.
- c) The patient has the symptoms of Vicharchika described in Ayurvedic text as well as Lichen Simplex Chronicus.
- **d)** Patients of both sexes between 12 -60 years.

Diagnostic Criteria

Patients were diagnosed based on classical signs & symptoms of Vicharchika mentioned in the Ayurvedic text.

Investigations-

- (i) Haematological test- Hb%, TC, DC, ESR.
- (ii) Biochemical test- FBS & PPBS.
- (ii) Skin Biopsy-For selected patients.

ASSESSMENT PARAMETER-

The patients were assessed based on the relief of signs & symptoms and a scoring pattern was adopted to assess the subjective parameters (pruritus, eruption, colour & lichenification) before & after treatment.

(i) SUBJECTIVE PARAMETERS-

Table 1: Showing an arbitrary scoring pattern of subjective parameters

Sl.No.	Parameters	Score-0	Score-1			Score-2	Score-3
1.	Kandu(itching)	No change	Mild			Moderate	Severe
2.	Pidaka (Vesicular eruptions),	No change	Mild			Moderate	Severe
3.	Shyava(hyperpigmentation)	No change	Mild			Moderate	Severe
4.	Shotha (Lichenification /	No thickening	Thickening	but	no	Thickening wit	h Severe
	Induration)		cracking			cracking	thickening

(ii) OBJECTIVE PARAMETER-

Based on haematological, Biochemical & photography before & after treatment.

STATISTICAL ANALYSIS- All the observations made on the aforesaid criteria were evaluated. The grouping was analyzed statistically in terms of mean difference (\bar{x}) , Standard deviation (SD) and Standard error (SE).

The Paired 't-test has been adopted for the assessment of the drug therapy which was interpreted manually in the form of level of significance.

- Insignificant- P > 0.05
- Significant- P < 0.05, P < 0.01
- Highly significant- P < 0.001

OBSERVATION & RESULT-

Demographic study -

Out of 60 patients, maximum patients i.e., 35% were in 41-50 years age groups, 60% were male, 66.67% were Muslims, 41.67% were businessmen, 60% belongs to urban area, 30% were uneducated, 70% were married, 41.67% were belonging to middle-income group, 60% had suffered for more than 2 years, 90% have no family history, 90% had an affinity towards non-veg food, 60% were of *Pitta-Kapha Prakriti*, 40% had *mandagni*, 36.67% were addicted to smoking.

Clinical study-

In this study, all the 60 patients i.e., 100% were complaining of *Kandu* (pruritus) followed by 45 patients i.e., 75% were complaining of *Vaivarnyata* (hyperpigmentation). The next higher incidence of complaint was *Sotha* (Lichenification/induration) in 15 patients i.e., 25% followed by 6 patients i.e., 10% have *Pidaka* (vesicle). Maximum no. of patients i.e., 60% were incidence of chronicity of illness > 2 years followed by 25% patients were found in > 1 year. 9 patients i.e., 15% were found in the 4 months-1 years. It can be revealed that 90% of patients do not have a family history of *Vicharchika* and the rest of 10% of patients have a family history.

Maximum of patients i.e., 90% were non-vegetarians followed by 10% patients were vegetarian. It was found that maximum no. of patients i.e., 60% were of *Pitta-kaphaja prakriti*, 30% patients were of *Kapha-vataja prakriti* & only 10% patients were of *Vata-pittaja prakriti*. Maximum no. of patients i.e.,60% had *madhyama koshtha* followed by next higher incidence i.e., 30% had *mridu koshtha*. Only 6 patients i.e.,10%

had *krura koshtha*. Out of 60 patients of *Vicharchika*, 24 patients i.e.,40% had *mandagni*, 15 patients i.e.,25% had *vishamagni* & *tikshnagni* and only 6 patients i.e., 10% had *samagni*.

It was found that the maximum no. of patients i.e., 36.67% were addicted to smoking, 30% of patients were alcohol addicted, 23.33% of patients had tea addiction. Only 10% of patients have a tobacco addiction. The psychological profile in the patients of *Vicharchika* where maximum no. of patients 12 i.e., 20% were worried followed by the next higher incidence of 6 patients i.e., 10% were depressed.

Laboratory profile-

In this present study, the Haemoglobin value was estimated in gm % on 60 patients of *Vicharchika*. 48 patients i.e., 80% showed the value of Haemoglobin >10 gm% and the remaining 12 patients i.e., 20% showed the value between 8-10 gm%.

A biochemical investigation of fasting blood sugar was carried out on 60 cases. 45 patients i.e.,70% of the FBS was in the range of 70-90 mg/dl followed by 15 patients i.e., 25% having the FBS was in the range of 90-110 mg/dl. Those patients who have positive blood sugar were barred from the study.

A biochemical investigation of postprandial blood sugar was carried out on 60 cases. 35 patients i.e., 58.33% the PPBS was in the range of 140-150 mg/dl followed by 125 patients i.e., 41.67% having the PPBS was in the range of 130-140 mg/dl. The blood sugar was carried out to exclude Diabetes mellitus as the disease may create troubles to patients in the normal course of treatment.

Effect of Therapy- (1) Effect of treatment in Group-A patients-

Table 2: Statistically showing the effectiveness of treatment in Group A patients of Vicharchika (Lichen Simplex Chronicus):

Criteria for lesion (n=30)	BT Mean	AT Mean	Relief in Percentage	SD (±)	SE (±)	't' value	'p' value
Kandu (itching)	1.83	0.66	63.38	0.71	0.20	5.63	< 0.001
Pidaka (Vesicle)	2.08	0.75	63.94	0.49	0.14	9.38	< 0.001
Vaivarnya	1.91	0.58	69.63	0.49	0.14	9.38	< 0.001
(Hyperpigmentation)							
Sotha (Lichenification/	1.75	0.50	71.42	0.75	0.22	5.74	< 0.001
Induration)							
Overall effect	1.83	0.83	54.54	0.74	0.21	4.69	< 0.001

n = No. of patients

SE = Standard Error

BT = Before treatment

't' = Paired 't' test

AT = After treatment

'P' Value = Significant level of Percentage

SD = Standard Deviation

It is evident from table-3 that among all the subjective findings of the patients of *Vicharchika* in the result of *Kandu, Pidaka, Vaivarnyata & sotha* were highly significant i.e., P< 0.001.

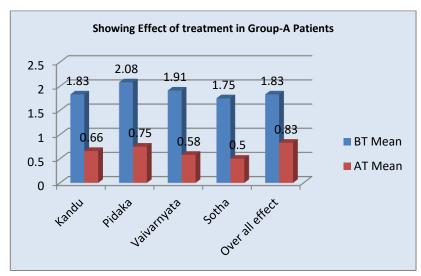


Fig 1: Showing Effect of treatment on Kandu, Pidaka, Vaivarnyata, Sotha in Group A Patients

(2) Effect of treatment in group-B patients-

Table 3: Statistically showing the effectiveness of treatment in Group B patients of Vicharchika (Lichen Simplex Chronicus):

Criteria for lesion (n=30)	BT	AT	Relief in	SD	SE	't' value	'p-value
	Mean	Mean	Percentage	(±)	(±)		
Kandu (itching)	1.75	0.50	71.00	0.75	0.22	5.74	< 0.001
Pidaka (Vesicle)	1.50	0.92	38.66	0.67	0.19	3.02	>0.01
Vaivarnya	0.58	0.33	42.85	0.45	0.13	1.91	< 0.02
(Hyperpigmentation)							
Sotha (Lichenification/	1.08	0.50	53.84	0.51	0.15	3.92	< 0.01
Induration)							
Overall effect	2.41	1.25	48.13	0.94	0.27	4.31	< 0.01

It is evident from table-3 that among all the subjective findings of patients of Vicharchika, the result of Kandu (itching) was highly significant i.e., P< 0.001. The

result of *Sotha* (Lichenification/induration) & *Vaivarnyata* (hyperpigmentation) was significant i.e., P < 0.01 & P < 0.02 respectively.

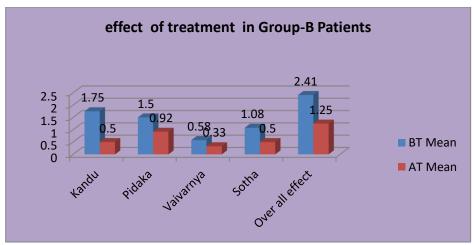


Fig 2: Showing Effect of treatment on Kandu, Pidaka, Vaivarnyata, Sotha in Group B Patients (3) Overall effect of therapy –

Table 4: Showing the overall effect of treatment-

Group	Uncha	Unchanged		Improved		Moderate relief		Marked relief		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	
Group A	2	6.67	20	66.67	3	10	5	16.66	30	100	
Group B	6	20	15	50	6	20	3	10	30	100	

In Group A- 2 patients i.e., 6.67% were reported unchanged, 20 patients i.e., 66.67% were reported improved, 3 patients i.e., 10% were reported moderate relief & 5 patients i.e., 16.66% were reported marked relief.

In Group B- 6 patients i.e., 20% were reported unchanged, 15 patients i.e., 50% were reported improved, 6 patients i.e., 20% were reported moderate relief & 3 patients i.e., 10% were reported marked relief. Now this is shown in Figure XXIII

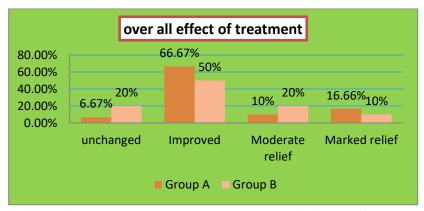


Fig 3: Showing overall effect of therapy in Group A Group B patient of Vicharchika (Lichen Simplex Chronicus)

DISCUSSION

Vicharchika has been mentioned in almost all Ayurvedic texts either in form of kshudrakushtha or kshudraroga. Various Acharyas mentioned Vicharchika with different doshika involvement such

as-according to *acharya Charaka*, it is a *Kapha* predominant disease & according to *acharya Sushruta*, it is a *Pitta* predominant disease. The specific *naidanika* factors such as *Ahara*, *Vihara*, & *Manasika* have been narrated elaborately. Regarding the

causative factors, *Ayurvedic* authors gave maximum emphasis to *viruddha Ahara and Vihara*. *Pitta dosha* specially *Bhrajaka pitta* exclusively associated with the pathogenesis of this disease.

The etiopathogenesis of *Vicharchika* is also similar to Lichen Simplex Chronicus i.e. *Viruddha Ahara-Vihara*, *Mithya Ahara Vihara* & other *nidana* may act as metabolic toxins or other irritants producing sensitization of the skin. *Vicharchika or* Lichen Simplex Chronicus may develop anywhere in the body (*Gatreshu*) either wet or dry with excessive itching, vesiculation, oozing & lichenification.

The symptomatology of *Vicharchika* closely resembles Lichen Simplex Chronicus i.e., *Sakandu* (Pruritus), *Pidaka* (Vesicles), *Shyava* (Hyperpigmentation/Discolouration), *Sotha* (Induration/Lichenification), *Bahusrava* (Excessive discharge), *Ruja* (Pain), *Rukshata* (Dryness), *Raji* (Marked lining/Criss-cross marking).

Sodhana, Shamana & Nidana Parivarjana, these 3 measures should be adopted for getting complete remission for the disease. The therapeutic protocol was given to the patients for 12 weeks.

Probable mode of action of the drug-

All the components of trial drugs (both oral & topical) contained *tikta* and *katu rasa* like *Nimba*, *Trivrit* & *Tuvaraka* etc. Some of them are *kashaya* like *Amalaki*. All have *katu vipaka* along with *Kushthaghna* & *Krimighna* property. Thus, all the components correct the derangement of *Bhrajaka pitta* and *kapha dosha*. An encouraging result has been found with both *Sodhana* & *Shamana Chikitsa* in this treatment of *Vicharchika*.

Discussion on Observation-

Maximum no. of cases i.e., 35% were belonging to 41-50 years. So, it appears that *Vicharchika* is a disease of the young and middle age group. *Acharya Vagbhatta & Sharangdhar* have presented an interesting scheme for the loss of different biological factors during the lifetime in different decades. In the 5th decade (between 41-50 years) there is a loss of structural and functional activity of skin (*twacha*).

In connection with Sex, it was found that males (60%) were more prone to suffer from *Vicharchika* than

females (40%). So, it can be interpreted that the disease is found in both sexes with more vulnerability towards the male. The maximum no. of patients i.e., 66.67% were Muslims So it indicates the domination of the Muslim religion on the population of the study area.

The maximum no. of patients. e 41.67% were a businessman. So, from this study, it can be explained that businessmen like carpenters, included in our study work with chemical dye or other allergens which may produce irritation & manifestation of eczema. It was observed that most of the patients i.e., 60% belongs to urban area. The urban area incidence was high because the study was carried out in a metro city based Ayurvedic hospital.

In the distribution of educational status, it was found that the maximum no. of patients i.e., 30% were uneducated. So, it can be said that uneducated persons suffer from this disease due to lack of education, unhygienic state and ignorance of a healthy lifestyle. In the present study, it was found that maximum no. of patients i.e., 70% were married. Married persons are exposed to stress and also more like to have suffered from metabolic disorders. So, it narrates the triggering factors of the occurrence of disease in a married person.

In this series, it was observed that maximum number of patients. i.e, 41.67% were belonging to the middle-income group. Since in our hospital, the maximum number of patients presenting to O.P.D belongs to the middle class. So, the fact is reflected in the data generated. A maximum number of patients i.e., 60% had suffered for more than 2 years which is considered chronic.

It was observed that a maximum number of patients i.e., 90% had an affinity towards a non-vegetarian diet. The non-vegetarian diet primarily consists of *Ushna*, *tikshna guna* & this incidence may aggravate metabolic toxins in the body which is the precipitating factors of this disease.

During the assessment of *Sharira prakriti* all the patients belonged to *Dwandaja prakriti*. Among them a maximum number of patients i.e., 60% were of *Pittakaphaj prakriti*. Since *Bhrajaka Pitta* and *Kapha* plays an important role in the pathogenesis of this disease.

So above data shows the importance of *pitta-kapha* in this disease. It can be revealed that a maximum number of patients i.e., 40% had *mandagni*. Since *mandagni* occurs due to *Kapha* dominancy, it can interpret that *Vicharchika* is a *Kapha* dominant disease.

In the connection of mental status, the maximum number of patients i.e., 20% were worried. As the disease is a chronic one and also bears a social and mental trauma to the patients. Hence a maximum number of patients were worried and depressed.

Discussion on Results-

The effect of treatment on a subjective profile was evaluated in terms of percentage of relief & mean value under different scoring pattern in both groups which are discussed below-

Effect of therapy on *the kandu*-The percentage of relief was 63.98 % in group A patients, whereas 71% in Group B. The result was highly significant i.e., P<0.001 in both Groups.

Effect of therapy on Pidaka- The percentage of relief was 63.94% in group A patients, whereas 38% in Group B. The result was highly significant i.e., P<O.O1 in group-A patients but group-B patients P>0.01. So, the effect of treatment on Pidaka in Group A is better than Group B.

Effect of therapy on Vaivarnya-The percentage of relief was 69.63% in group A patients, where as 42% in Group B. Group A patients showed highly significant results i.e., P < 0.001 whereas for Group B patients it was P < 0.02 i.e., a significant improvement. So, the effect of treatment on Vaivarnyata in Group A patients is better than Group B patients.

Effect of therapy on *Sotha*-The percentage of relief was 71.42% in group A patients, where as 53% in Group B. Both the group showed highly significant & significant results i.e., P<0.001 &0.01 respectively. Hence the effect of treatment on Sotha in Group A patients is better than Group B patients.

So, after treatment, it was found that group-A patients showed statistically more significant improvement than group B patients. Therefore, from the present study, it can be interpreted that *samsodhana karma* (*virechan karma*) & oral medication along with local

application applied, showed better results in the treatment of *vicharchika*.

CONCLUSION

Virechana karma by shyama trivrita churna along with oral administration of panchanimb churna & local application of chalmoogra taila with gandhak & tankan act significantly & showed the better result. Further, no adverse effect of the drug was seen. Hence it can be concluded that the above said therapy is effective in the management of vicharchika.

REFERENCES

- Pt. Shastri, Kashinath; The Charaka Samhita of Agnivesha of Charaka, Shree Chakrapanidatta virachita Ayurveda Dipika and with Vidyotini Hindi commentary, Part-II, Chikitsa Sthana, 7th Chapter, Verses 162-177, Chaukhambha Sanskrit Sansthan Varanasi, Edn. Reprint- 2012.
- Kaviraja Shastri, Ambikadutta; The Sushruta Samhita of Maharshi Sushruta, Text with Hindi translation with Ayurveda Tattva Sandipika, Chaukhambha Sanskrit Sansthan Varanasi, part I, Nidana Sthana, 5th Chapter, Edn. 11th 1997.
- Kaviraja Shastri, Ambikadutta; The Sushruta Samhita of Maharshi Sushruta, Text with Hindi translation with Ayurveda Tattva Sandipika, Chaukhambha Sanskrit Sansthan Varanasi, part-I, Chikitsa Sthana, Chapter-9th, Edn. 11th 1997.
- Prof. Srikant Murthy, K.R.; Vagbhatta's Ashtanga Hridayam, Text with English translation, Chaukhambha Krishnadas Academy, Varanasi, Vol-II, Nidana Sthana, Chapter 14th, Edn. Reprinted -2012.
- Prof. Srikant Murthy, K.R.; Vagbhatta's Ashtanga Hridayam, Text with English translation, Chaukhambha Krishnadas Academy, Varanasi, Vol-II, Chikitsa Sthana, Chapter 20th, Edn. Reprinted -2012.
- Dr Tripathi, Brahmanand; The Charak Samhita of Agnivesha, elaborated by Charak & Dridhabala, Edited with Charak Chandrika Hindi Commentary, Chaukhambha Surbharti Prakashan Varanasi, Vol-I, Sharir Sthana, 3rd Chapter, Verses-6, Reprint-2011.
- Pt. Shastri, Kashinath; The Charak Samhita of Agnivesha of Charak, Shree Chakrapanidatta Vircahita Ayurveda Dipika and with Vidyotini Hindi Commentary, Chaukhambha Sanskrit Sansthan

- Varanasi, Part-II, Chikitsa Sthana, 15th Chapter, Verses-17, Edn. Reprint-2013, Page-456
- Vaidya Acharya Trikamji, Yadavji; The Sushruta Samhita of Maharshi Sushruta with Sanskrit Translation of Nibandha samgraha of Sri Dalhanacharya & Nyayachandrika of Sri Gayadas acharya, Chaukhambha Sanskrit Sansthan Varanasi, Part-II, Sharira Sthana, 4th Chapter, Verses-4, Edn.Reprint-2012, Page-355
- Dr Tripathi, Brahmanand, Astanga Hridayam of Srimad vagbhata, edited with Nirmala Hindi Commentary, Chaukhambha Sanskrit Pratishthan, Delhi, Nidan Sthana, 14th Chapter, Verses-1-3, 11, 17, Edn. Reprint-2014, Page-527, 528, 529
- Prof. Srikant Murthy, K. R; Madhav Nidana (Roga Vinischaya) Of Madhavakar, Text with English Translation, Chaukhambha Orientalia Varanasi, Edn.Reprint-2011, Page-160
- 11. Prof. Srikanta Murthy, K.R.; Sarangdhar Samhita, A Treatise on Ayurveda by Sarangdhar, Chaukhambha Orientalia, PrathamKhanda, 5th Chapter, Verses-19-22, Edn-1997, Page-39.
- Dr Sitaram, Bulusu; Bhavaprakash of Bhavamishra, Chaukhambha Orientalia Varanasi, Vol-II, Pratha Khanda, 3rd Chapter, Verses-279-283, Edn. -2010, page-528.
- Bhisagratna Pt. Shri Mishra, Brahmashankar, Bhavaprakasha Sangraha of Shri Bhava Mishra, Chaukhambha Sanskrit Samsthan Varanasi, Part-II, Edn-1st 1980, Page-518.
- Dr. Tripathi, Indradeva; Cakradatta of Sri Cakrapanidatta, Chaukhambha Sanskrit Sansthan, Varanasi, 50th Chapter, Verse-57, Edn. - 3rd, 1997, Page-284.
- Acharya Sharma, Priyavrata & Dr Sharma, Guruprasad,
 Dhanvantari Nighantu, Chaukhambha Orientalia
 Varanasi, Edn-Reprint-2012, Page-55,21,59,109
- Dr. Shastri, J.L.N.; Dravya Guna Vijnana, Chaukhambha Orientalia Varanasi, Vol-II, Edn- 2016, Page- 220,222, 124,125, 363, 365,65.
- Lt. Colonel Kirtikar K.R. & Major Basu, B.D.; Indian Medicinal Plant, Periodical Experts Book Agency Delhi, Vol-I, 2nd Revised Edn-2012, Page-2220, 2221, 536, 537, 538, 224, 225.
- Database on Medicinal Plants Used in Ayurveda by P.C. Sharma, M.B. Yelne, Arun Joshi, Y.S. Prabhune, Kundun Khade, D.P. Sharma; Central Council for Research in Ayurveda & Siddha, New Delhi, Vol-III, Reprint-2005, Page-11.

- The Ayurvedic Pharmacopoeia of India, Government of India, Ministry of Health & Family Welfare, Department of ISM & H; Part-I, Vol-VIII, Edn-1st 2004, Page-214.
- Prof. Mishra, Siddhinandan; Bhaisajya Ratnavali of Kaviraj Govind Das Sen, Edited with 'Siddhiprada' Hindi Commentary, Chaukhambha Surbharati Prakashan Varanasi, Edn.2017, Chapter 54th, Verses-61, Page-866.
- Gray's Anatomy for Students, The Anatomical basis of clinical Practice, Edited by Richard L. Dratu, A. Wayne Vogl, Churchill Livingstone Elsevier, 4th Edition, Page-145.
- 22. Rook's Textbook of Dermatology, Edited by Christopher Griffiths, Jonathan Barker, Tanya Bleiker, Robert Chalmers, Daniel Creamer, Vol-II, 9thEdn, Page-86.13.
- 23. The practice of Dermatology, P.N Behl, A. Aggarwal, Govinda Srivastava, CDS publishers & distributors 9thEdn, Page-347-350, 148, 279.
- 24. Andrews Diseases of the skin, Clinical Dermatology, William D. James, Timothy G. Berger, Dirk M. Elston, 12thEdn.
- Davidson's Principle and Practice of Medicine, Edited by Brian R. Walker, Nikri R. College, An Imprint of Elsevier Ltd., 22ndEdn.
- Harrison's Principles of Internal Medicine, Vol-1, McGraw Hill, 18thEdn, Page-396.
- 27. Kumar & Clark's Clinical Medicine, Edited by Praveen Kumar, Michael Clark; Elsevier Ltd., 8thEdn.
- 28. N.C. Dey's Skin Diseases in the tropics; Allied agency, 1stEdn.

Source of Support: Nil Conflict of Interest: None Declared

How to cite this URL: Shivani et al: A Comparative Clinical Study Of Virechana Karma And Shamana Chikitsha In The Management Of Vicharchika With Special Reference To Lichen Simplex Chronicus. International Ayurvedic Medical Journal {online} 2021 {cited January 2022} Available from: HYPERLINK

http://www.iamj.in/posts/images/upload/42 50.pdf