



EFFICACY OF LEECH APPLICATION IN THE MANAGEMENT OF ECZEMA WITH SPECIAL REFFERENCE TO VICHARCHIKA

Dr. Dhanokar Chandrakant A.^{1*}, Dr. Kanani Vipul P.², Dr. Kulkarni Ashutosh S.³ and Dr. Mankar Dilip K.⁴

¹Asst. Prof. Dept. of Shalyatantra RTAM, Akola.

²Prof. and Hod Dept. of Nidan RTAM, Akola.

³Proof. and HOD Dept. of Shalyatantra RTAM, Akola.

⁴Asso. Prof. Dept. of Shalyatantra RTAM, Akola.

***Corresponding Author: Dr. Dhanokar Chandrakant A.**

Asst. Prof. Dept. of Shalyatantra RTAM, Akola.

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ABSTRACT

Eczema accounts for large proportion of skin diseases (30% prevalence rate). Eczema after its occurrence (acute) invariably becomes chronic in spite of treatment. Treatment in Modern medicine consists of antihistamines, oral & topical steroids, emollients, steroid injections, phototherapy by UV light. Remission & exacerbations are frequently seen in patients of eczema receiving modern treatment. Though much research work is done in understanding the disease & its treatment, still there is no successful treatment in modern system of medicine for complete cure. Ayurveda definitely have long lasting solution for this ailment. In the present clinical study it was concluded that leech application is effective with tab. Arogyavardhini vati & tab. Manjishtha Ghana vati in the management of eczema.

KEYWORDS: Eczema, Leech, Arogyavardhini vati, Manjishtha Ghana vati.

INTRODUCTION

Skin is the important protective structure covering entire body. It acts as a protective barrier between external & internal environment. Its texture, colour, plays an important role in making personality of an individual. It comes in direct contact with air, sunlight, harmful substances, various allergens which may cause harm to the skin & may result in various skin diseases along with these factors there are some endogenous factors in the body which also causes skin diseases.

Eczema is one of such skin disease which is very common. It accounts for large proportion of skin diseases (about 30% among the skin diseases) [1]. Though it is not life threatening but affect quality of life & sometimes due to chronicity may cause disability in day to day work. It is difficult to trace out the exact cause as it is associated with occupation, clothes, diet, cosmetics or other articles that the patient is exposed during his routine activity. Eczema after its occurrence (acute) invariably becomes chronic in spite of treatment. The chronic course of eczema is marked by its remission & exacerbation. It is basically characterised by skin discolouration, itching, redness swelling, papules, vesicles (very rarely large blisters), oozing, cracking & scaling in acute phase. In chronic phase features of acute phase are seen but redness, swelling, papules, vesicles, oozing are not marked. Lichenification (dry thickened

skin), fissures, scratch marks & pigmentation of skin is markedly.

Seen.^[2] Treatment in modern medicine consists of antihistamines, oral & topical steroids, emollients steroid injections, phototherapy by UV light. Oral steroids can be given for limited period. It has immunosuppressive effect, can cause nephrotoxicity. Though steroids gives good result, long term use is not advocated due to its side effect. Long term use of topical steroid is very frequently done. It gives good result but results in thinning of skin, scarring & fissuring. Most important is recurrence after stopping the treatment (Whatever may be the root oral or topical). Remission & exacerbations are frequently seen in patients of eczema receiving modern treatment. Phototherapy is newer approach but can cause skin cancer. Photo therapy may end up in white skin.^[3] Though much research work is done in understanding the disease & its treatment, still there is no successful treatment in modern system of medicine for complete cure. Ayurveda definitely have complete solution for this ailment. In maximum cases due to recurrence in patients treated with modern medicine disease becomes chronic & patients report late in chronic state to ayurvedic physician. In classical ayurvedic text a very brief description regarding skin diseases is given in Kushta roga. Acharya charaka has described 18 types Kushta (skin diseases) among them 7 are regarded as Maha

kushta (major skin disease) & 11 as a kshudra kushta.^[1] vicharchika is mentioned under kshudra kushta.^[4]

Looking at the symptoms of eczema, it can be correlated with vicharchika according to ayurveda. Vicharchika is also characterised by skin discolouration, itching & fissuring of skin.^[5] Various effective treatment modalities are described in ayurveda for management of eczema which includes body purification procedures (shodhan treatment), various medicinal formulation, and topical application of various medicinal formulations. According to ayurveda eczema is raktapradoshaj vicar (Disease occurring due to impurities of blood). According to acharya Sushruta blood letting (Raktamokshana) is half of the all treatment modalities available in shalyatantra.⁶

Lots of patients of various skin diseases comes to our daily opd of kayachikitsa & Rog nidan & are referred for raktamokshana (bloodletting) to the department of Shalya at Ayurved hospital station road Akola (R.T.ayurved college, Akola Maharashtra attached hospital). Patients suffering from vicharchika are successfully treated at our institute. Considering the huge no. of patients of eczema being treated at our institute & importance of blood letting as described by Sushruta in raktapradoshaj vikara like eczema it was decided to study the efficacy of leech application (one of the way of blood letting) on statistical background. So the topic entitled 'The efficacy of Leech application in the management of vicharchika with special reference to eczema' was finalised & research work was carried out as a joint venture of Shalya dept, Rognidan & Kayachikitsa dept.

AIMS AND OBJECTIVES

- 1) To evaluate the efficacy of leech application in the management of eczema.
- 2) To establish correlation between eczema & Vicharchika.
- 3) To study the effect of combination therapy of Arogyavardhini vati & Manjishtha Ghana vati in the management of eczema.

METHODS AND MATERIALS

40 Patients complaining of classical symptoms of eczema were selected from opd & ipd of ayurveda hospital station road Akola & were randomly divided in two groups.

Viz. GROUP A: Patients treated with Arogyavardhini vati 250 mg bid & Manjishtha Ghana vati.250 mg bid with lukewarm water.

Group B: Patients treated with leech application along with Arogyavardhini vati & Manjishtha Ghana vati.

INCLUSION CRITERIA

1. All patients of age group 16 to 70 irrespective of sex, occupation with symptoms of eczema were selected (As leech application is indicated for this age group).^[8]

Exclusion criteria

1. Patients having Eczema along with other skin diseases.
2. Pregnancy & lactation.
3. Patients having HIV, HbsAg infection, malignancy & blood clotting disorder.
4. Eczema all over body or multiple patches of eczema.

Patients of both the groups included in the study were given following instructions regarding aahar & vihar (diet & routine work)

1. Maintain good hygiene.
2. Advised to take regular bath with lukewarm water using Gram flour or Multani mud, thereby avoiding all form of detergents & shampoo.
3. Wear clean comfortable fitting clothings (avoid tight fitting clothings).
4. Avoid sleeping in day time & awaking for late night hours.
5. To take simple, light & bland diet.
6. Avoid oily, spicy, salty, sour products particularly pickle, curd, bakery products, papad, non veg etc.

Group A patients were given Arogyavardhini vati 250 mg bid & Manjishtha Ghana vati 250 mg bid with lukewarm water for the period of 30 days.

Group B patients were subjected to same medication along with leech application. Depending on the size of the lesion one or two leeches were applied directly on the lesion. Four settings of leech application ones a week was done. Procedure for leech application was done under following stages

Poor karma (preoperative): On the day of application medium sized leeches were selected & kept in turmeric water for 10-15 min to make them active so as to suck blood properly. Then leeches were kept in fresh water.

Pradhan karma (operative): Patient was asked not to apply anything at lesion on the day of leech application. Lesion was cleaned with water & dried with cotton. Activated leech (no. of leech depending on size of lesion) was applied on lesion as soon as it catches its mouth sucker become elevated like horse shoe. It was covered with wet cotton. After regular interval cold water was sprinkled on cotton to keep it wet. Leech was allowed to detach from lesion by itself spontaneously so that it sucks maximum quantity of blood or was removed by applying turmeric powder if patient complains of itching & pain to very much extent (not needed at all during study, every patient was comfortable during the procedure however very few complained of mild pricking pain initially & mild itching).

Paschat karma (post operative): - After detaching leech wound was cleaned with water. Oozing of blood was allowed for some time then wound was dressed with turmeric powder as an antiseptic & tight bandage was applied. In some cases where more oozing was noted

lodhra & nagkeshar powder was applied as a haemostatic major & patient was send home with assurance that the bleeding will stop by itself. Leeches which detached from lesion were kept in a bowl & turmeric powder was poured on its mouth so that it will vomit the whole blood .Then leeches were again kept in turmeric water for some time to make them active again. Used leeches were kept in a plastic bottle separately which was labelled by the name of respective patient so that the same leech for the same patient will be used in next sitting.⁹ Assessment criteria: - All patients were examined weekly & assessment of the result was done by subjective & objective parameters based on clinical observation by grading method.

Grading parameters

Subjective criteria

1) Itching (Kandu)

Absent	:	grade 0
Mild (not disturbing daily activity)	:	grade 1
Moderate (disturbing daily activities)	:	grade 2
Severe (disturbing daily activities & sleep):	:	grade 3

Objective criteria

1) Vesicle (pidaka)

Absent:	grade 0
Present:	grade 1

2) Discharge (strata)

Absent:	grade 0
Mild (lesion just becomes moist 1 to 2 times in a day):	grade 1.

Moderate (oozes so that patient has to cover it with cotton): grade 2.

Severe (profuse discharge so that patient has to change pad 3-4 times): grade 3.

3) Discoloration (shyavata)

Absent	:	grade 0
Mild (brownish red)	:	grade 1
Moderate (blackish red)	:	grade 2
Severe (black)	:	grade 3

4) Dryness (rookshata)

Absent	:	grade 0
Mild (dry with rough skin)	:	grade 1
Moderate (dry with scaling)	:	grade 2
Severe (dry with cracking)	:	grade 3

5) Cracking (raji)

Absent:	grade 0
Present:	grade 1

6) Pain (ruja)

Absent:	grade 0
Present:	grade 1

7) Burning sensation (Daha)

Absent:	grade 0
Present:	grade 1

Assessment of overall outcome of 2 groups after treatment

Marked improvement:	≥75 % relief in symptoms
Moderate improvement:	25 % to 74 % relief in symptoms
Mild improvement:	relief up to 24% in symptoms

OBSERVATIONS AND RESULTS

Comparative evaluation of effect of treatment on itching in two groups

Table No: 1

ITCHING	BT	15 th day	30 th day	45 th day	% of change
Group A					
Absent	0 (0%)	0 (0) %	8 (40 %)	17 (85 %)	85.0 %
Mild	0 (0 %)	6 (30 %)	11 (55 %)	3 (15 %)	15.0%
Moderate	2% (10%)	14 (70%)	1 (5%)	0 (0%)	- 10%
Severe	18 (90%)	0(0%)	0 (0%)	0 (0%)	- 90%
Group B					
Absent	0(0%)	2(10%)	14(70%)	20(100%)	100.0%
Mild	0(0)%	8(40%)	6(30%)	0(0%)	0.0%
Moderate	0(0%)	10(50%)	0(0%)	0(0%)	0.0%
Severe	20(100%)	0(0%)	0(0%)	0(0%)	-100.0%
P value	0.487	0.292	0.111	0.231	-

From above table it is clear that in Group A max.18 (90%) no of patient were having severe itching 2(10%) were having moderate itching before treatment, on 45th day after treatment 17(85%) patients got complete relief 3(15%) patients got mild relief whereas in Group B max.20 (100%) patients were having severe itching before treatment & on 45th day all 20(100%) patient got complete relief after treatment.

Comparative evaluation of effect of treatment on vesicle in two groups**Table No. 2**

VESICLE	BT	15 th Day	30 th Day	45 th Day	% change
Group A					
No	3(15%)	10(50%)	16(80%)	19(95%)	80.0%
Yes	17(85%)	10(50%)	4(20%)	1(5%)	-80.0%
Group B					
No	1(5%)	12(60%)	19(95%)	20(100%)	95.0%
Yes	19(95%)	8(40%)	1(5%)	0(0%)	-95.0%
P value	0.605	0.751	0.342	1.000	-

From above table it is clear that in Group A 17 (85%) patients presented with vesicle & 3 (15%) patients were not having vesicles before treatment .on 45th day after treatment 95% patients got complete relief & 1 (5%) patient didn't relieved from vesicle. In Group B 19(95%) patients presented With vesicles 7 1 (5%) was not having vesicle before treatment .on 45th day after treatment all patients (100%) got relieved from vesicle.

Comparative evaluation of effect of treatment on discharge in two groups**Table No: 3**

DISCHARGE	BT	15 th day	30 th day	45 th day	%change
Group A					
Absent	12(60%)	13(65%)	17(85%)	19(95%)	35.0%
Mild	1(5%)	3(15%)	3(15%)	1(5%)	0.0%
Moderate	2(10%)	4(20%)	0(0%)	0(0%)	-10.0%
Severe	5(25%)	0(0%)	0(0%)	0(0%)	-25%
Group B					
Absent	11(55%)	11(55%)	13(65%)	20(100%)	45.0%
Mild	0(0%)	3(15%)	7(35%)	0(0%)	0.0%
Moderate	3(15%)	6(30%)	0(0%)	0(0%)	0.0%
Severe	6(30%)	0(0%)	0(0%)	0(0%)	-30.0%
P value	1.000	0.901	0.273	1.000	-

From above table it is clear that in Group A max.5(25%) patients presented with severe discharge ,2(10%) patients with moderate discharge & 1(5%) patient presented with mild discharge before treatment .on 45th day after treatment 19 (95%) patient got complete relief in discharge while 1(5%) patient still persisted with mild discharge. In Group B max.6 (30%) patients presented with severe discharge, 3(15%) with moderate discharge .on 45th day all 20(100%) patients got complete relief from discharge.

Comparative evaluation of effect of treatment on discoloration in two groups**Table No: 4**

DISCOLORATION	BT	15 th day	30 th day	45 th day	%change
Group A					
Normal skin colour	0(0%)	0 (0%)	0(0%)	0(0%)	0.0%
Brownish red discoloration	0(0%)	0(0%)	5(25%)	12(60%)	60.0%
Blackish discoloration	19(95%)	13(65%)	0(0%)	0(0%)	-95.0%
Group B					
Normal skin colour	0(0%)	0(0%)	1(5%)	3(15%)	15.0%
Brownish red discoloration	0(0%)	0(0%)	6(30%)	15(75%)	75.0%
Blackish red discoloration	0(0%)	9(45%)	9(45%)	2(10%)	10.0%
Blackish discoloration	20(100%)	11(55%)	4(20%)	0(0%)	-100.0%
P value	1.000	0.748	0.072+	0.023*	-

In Group a 19(95%) patients presented with blackish discoloration before treatment & 1(5%) patient with blackish red discoloration before treatment. On 45th day after treatment 8(40%) patient showed blackish red discoloration & ^[12] (60%) patients showed brownish discoloration. No complete relief was observed in Group A regarding discoloration. In Group B max.20(100%) patients presented with blackish discoloration before treatment, on 45th day after treatment 2(10%) patients showed blackish red discoloration & 15(75%) patients showed brownish discoloration & 3patients(15%) patients showed near normal skin colour.

Comparative evaluation of effect of treatment on dryness in two groups**Table No: 5**

DRYNESS	BT	15 th day	30 th day	45 th day	% change
Group A					
Absent	9(45%)	9(45%)	10(50%)	14(70%)	25.0%
Mild	0(0%)	2(10%)	10(50%)	6(30%)	30.0%
Moderate	5(25%)	9(45%)	0(0%)	0(0%)	-25%
Sever	6(30%)	0(0%)	0(0%)	0(0%)	-30%
Group B					
Absent	7(35%)	9(45%)	15(75%)	19(95%)	60.0%
Mild	3(15%)	5(25%)	4(20%)	1(5%)	-10.0%
Moderate	3(15%)	5(25%)	1(5%)	0(0%)	-15.0%
Severe	7(35%)	1(5%)	0(0%)	0(0%)	-35.0%
P value	0.325	0.310	0.096+	0.091+	-

It is clear from the above table that, in Group A max. Of 6(30%) patients presented with severe dryness, 5(25%) presented with moderate dryness before treatment. On 45th day after treatment^[6] patient showed mild dryness while remaining all patients showed complete relief in dryness. While in Group B 7(35%) patients showed severe dryness, 3(15%) showed moderate dryness & 3(15%) showed mild dryness before treatment. On 45th day after treatment 19(95%) patients showed complete relief in dryness & 1(5%) showed mild dryness.

Comparative evaluation of effect of treatment on Cracking (Raji) in two groups**Table No: 6.**

CRACKING	BT	15 th day	30 th day	45 th day	% change
Group A					
NO	9(45%)	13(65%)	17(85%)	18(90%)	45.0%
YES	11(55%)	7(35%)	3(15%)	2(10%)	-45.0%
Group B					
NO	5(25%)	12(60%)	20(100%)	20(100%)	75.0%
YES	15(75%)	8(40%)	0(0%)	0(0%)	-75%
P value	0.185	0.744	0.231	0.487	-

Above table shows that in Group a 11(55%) patients showed cracking before treatment on 45th day after treatment 7(35%) showed complete relief while 2(10%) patients still showed cracking. In Group B 15(75%) patients showed cracking before treatment only after 30th day of treatment all relieved from cracking.

Comparative evaluation of effect of treatment on Pain (Ruja) in two groups**Table No: 7**

PAIN	BT	15 th day	30 th day	45 th day	% change
Group A					
NO	9(45%)	14(70%)	20(100%)	20(100%)	55.0%
YES	11(55%)	6(30%)	0(0%)	0(0%)	-55.0%
Group B					
NO	6(30%)	15(75%)	20(100%)	20(100%)	70.0%
YES	14(70%)	5(25%)	0(0%)	0(0%)	-70.0%
P value	0.327	0.723	1.000	1.000	

Above table shows that in Group A 11(55%) patients presented with pain before treatment on 30th day after treatment all relieved from pain, while in Group B 14(70%) patients presented with pain before treatment & after treatment on 30th day all relieved from pain.

Comparative evaluation of effect of treatment on Burning (DAHA) in two groups**Table No: 8**

BURNING	BT	15 th day	30 th day	45 th day	% change
Group A					
NO	10(50%)	12(60%)	20(100%)	20(100%)	50.0%
YES	10(50%)	8(40%)	0(0%)	0(0%)	-50.0%
Group B					
NO	10(50%)	13(65%)	20(100%)	20(100%)	50.0%
YES	10(50%)	7(35%)	0(0%)	0(0%)	-50.0%
P value	1.000	0,744	-	-	-

Above table shows that in Group A 10(50%) patients presented with burning before treatment & on 30th day after treatment all relieved from burning .while in Group B also same is the proportion of patient & its relief in burning as that of Group A.

Comparative evaluation of Itching (KANDU) in two group (Mean±SD)

Itching	Group A	Group B	P value
BT	2.90±0.31	3.00±0.00	0.154
15 th day	1.70±0.47	1.40±0.68	0.113
30 th day	0.65±0.59	0.30±0.47	0.044*
45 th day	0.15±0.37	0.00±0.00	0.075+

Comparative evaluation of Discharge (STRAVA) in two groups studied (Mean±SD)

Discharge	Group A	Group B	P value
BT	1.20±1.40	1.00±1.34	0.647
15 th day	0.75±0.91	0.55±0.83	0.471
30 th day	0.35±0.49	0.15±0.37	0.152
45 th day	0.00±	0.05±0.22	0.324

Comparative evaluation of Discolouration (SHYAVATA) in two groups studied ((Mean±SD)

Discolouration	Group A	Group B	P value
BT	3.25±0.55	3.60±0.50	0.042*
15 th day	2.65±0.49	2.55±0.51	0.531
30 th day	1.75±0.44	1.80±0.83	0.815
45 th	1.40±0.50	0.95±0.51	0.008**

Comparative evaluation of Dryness (Rookshata) in two groups studied (Mean±SD)

Dryness	Group A	Group B	P value
BT	1.40±1.35	1.50±1.32	0.814
15 th day	1.00±0.97	0.90±0.97	0.746
30 th day	0.50±0.51	0.30±0.57	0.251
45 th day	0.30±0.47	0.05±0.22	0.038*

Comparative evaluation of overall outcome in two groups studied

Overall outcome	Group A	Group B
Marked response	10(50.0%)	17(85.0%)
Moderate response	9(45.0%)	3(15.0%)
Mild response	1(5.0%)	0
Total	20(100.0%)	20(100.0%)

Marked response was observed in 17 patients out of 20 patients i.e.85% in Group B after treatment whereas 10patients out of 20 i.e. 50% showed marked response in Group A after treatment. Marked outcome is significantly more in Group B with p=0.041*, Follow up of all 40 patients involved in study was taken for 6 months after successful completion of treatment.

DISCUSSION

It is clear from the observation tables that Group B patients (i.e. patients treated with leech application along with tab.Arogyavardhini vati & Manjishta ghan vati) got excellent result than Group A patients (i.e. patients

treated with tab Arogyavardhini vati & Manjishta ghan vati). According to ayurveda Vicharchika is a Kshudrakushtha it occurs due to vitiation of all three doshas resulting in vitiation of tvacha, Rakta, lasika & mamsa. Though vicharchika is vat-kaphapradhan kushtha in all kushtha's vitiation of three dosha and four dushya is seen. Kushtha is also mentioned in rakta pradoshaja vikara (i.e. disease originating due to impurities in blood) & is caused by virudha aahar –vihar(i.e. eating wrong combination food which are opposite in properties, & wrong behavioural habit which causes vitiation of pitta & other two humors i.e. vata & kapha that results in raktadushti i.e. impurities of blood) 10. Shodhan treatment (body purification treatment i.e. panchakarma) along with shaman treatment (medicinal treatment) is indicated for management of vicharchika in ayurveda. Raktamokshana (blood letting) is one of the most useful treatment for rakta pradoshaj diseases like eczema. In ayurveda in surgery branch blood letting is said to be half of the all treatment modalities. Jalaukavacharan (leech application) is one of the methods of blood letting useful for eliminating impure blood from a particular localised part of body. Leeches sucks impure blood from the localised part wherever applied & thus gives relief in the symptoms.

Saliva of leech contains Eglins & Bdllines which has anti-inflammatory action .It also contains hyaluronidase an enzyme, histamine like substances causing vasodilatation, hirudin an anticoagulant substance & an anaesthetic substance.^[5] Anti-inflammatory action of leech causes reduction in erythema & oozing. This also helps in controlling itching. hylauronidase helps in keratolysis which in turn reduces thickness of skin. It also has an antibiotic property & helps in reduction of oozing & infection. Leech application increases microcirculation to localised part & helps in controlling acanthosis & itching which reduces scratching there by helping in reducing lichenification of skin which is seen in chronic eczema.^[11]

The substances in saliva of leech reach epidermis & dermis by the action of enzyme hylauronidase. It has been proved by laser Doppler flowmetry that there is a significant increase in superficial skin perfusion following leech application especially 16 mm around the biting zone. Thus this is the possible mode of action of leeches when applied over the eczematous lesion.

Arogyavardhini is a classical herbomineral preparation mentioned in Rasaratnasamuchyaya in context of Kushta (skin disorder).^[12] According to Rasaratnasamuchaya, Bhaishajyaratnavali & Bharatbhaishajyaratnakar it possesses Kustaghna property (i.e. can alleviate all types of skin disorder). It provides total health & makes body free from all types of diseases by balancing the three Doshas (three humours belied in ayurveda vata, pitta & kapha).^[13] It contains minerals like Parad (purified mercury), Gandhak (purified Sulfur) loha, Abhrak & tamra bhasma (purified ash from iron, Mica & copper).

These helps in pacifying Kapha dosha which is mainly responsible for kandu.

It also contains triphala i.e. haritaki (*terminalia chebula*), bibhitak (*terminalia bellirica*), & Amalaki (*embilica officinalis*). Triphala pacifies tridosha particularly good for pitta dosha, shilajit (*Asphaltum*) & Guggulu (*commiphora mukul*) helps in reducing cleda (unctuousness), Kapha, vata & meda (fats). this helps in reduction in itching.

Chitrakmool(*plumbago zylenica*) also reduces kapha, guggulu, shilajit & chitrakmool exhibits anti-inflammatory action. Arogyavardhini also contains Kutaki (*Picrorrhiza krura*). Triphala & kutaki exerts laxative action thereby pacifying Pitta dosha .Virechana is said to be one of the shodhan (purification) procedure in skin diseases particularly for pitta dosha. Nimba leaves (*Azardirecta indica*) extract in it is also pacifies pitta dosha. Thus arogya vardhini vati has Dipan (improving agni), pachan (digestive), medohar – lekhan (reducing fat), shothahar (anti- inflammatory), raktashodhak (blood purification) property. It improves digestion, It brings about aam pachan (proper digestion of improperly digested food juice), stimulates liver function. As a result good aahar rasa is formed which in turn results in formation of good quality blood & other dhatu. Thus Arogyavardhini vati can be used in any skin ailment effectively .It is a very good blood purifier as per ayurveda. Apart from skin diseases it is also a very good remedy in liver diseases like hepatitis, fatty liver. It is also useful in obesity, fever etc.

Manjishta Ghana vati is prepared from decoction of manjishtha (*Rubia cordifolia*) .It is said to be having raktaprasadak (depigmentation) property. it is useful in hyperpigmentation. It contains purpurin, munjistin glycosides.^[14] These compounds impart antibacterial, expectorant, & diuretic property. Studies have shown that Manjishtha extract reduces hyperproliferation of epidermal skin cells & modulates the aberrant keratinocyte-diferanciating activity commonly seen in psoriasis. It is helpful in reducing shyavata (discoloration) seen in eczema. It brings about detoxification of blood.^[15]

Thus Group B patients treated by leech application along with oral medication Arogyavardhini & Manjishtha Ghan vati got benefit of both leech & medicine showed significantly good improvement in all the symptoms of eczema than Group A patients treated by oral medication i.e. Arogyavardhini & Majishta Ghana vati. There was total relief in itching, discharge, pain burning, vesicle but in discolouration complete relief was not found in both the group however discolouration was significantly lowered down in Group B (marked response but not complete relief. complete relief was observed only in 3 patients where the lesion got near total same skin colour).This may be due to chronicity of disease & lacking of local application. As the study was aimed to

study the efficacy of leech application with oral medication only.

CONCLUSION

1) leech application is effective in the management of eczema .It gives significant relief in the symptoms of eczema along with Arogyavardhini & Manjishtha Ghana vati.

3) Leech application is safe, cost effective, and easy to do efficient treatment in the management of Eczema.

4) There were no noticeable side effects observed during the treatment & follow up.

5) Vicharchika can be considered as eczema in modern context.

6) Merely a shaman treatment (i.e. oral treatment with Arogyavardhini vati & manjishtha Ghana vati) doesn't give considerable relief in chronic cases.

7) As local application is lacking in the present study which should be tried for better result particularly in reducing discoloration.

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