Role of Raktamokshana in the management of Vicharchika (Eczema)

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ABSTRACT

Vicharchika (Eczema) is one of the skin disorder described in all ancient texts of Ayurveda. Sushruta described it as the Raktaja Vyadhi and the choice of treatment is Raktamokshana. The present study was carried out by two modalities of the Raktamokshana (bloodletting) i.e. Jalukavacharan and Siravyadha. In the first group the Raktamokshana was done with the help of Jalauka where Vicharchika was localized. In second group the Raktamokshana with the help of Siravyadha was conducted where Vicharchika was not localised rather found all over the body. The data from the ancient text related to the Ayurvedic concepts of Vicharchika and Raktamokshana were elaborately described in the study. All the concepts related to the eczema along with treatment and adverse effects were described in detail from the modern texts. Observations on the clinical study were mentioned in the table and graphical form where as results of two groups were drawn separately. Discussion was made on the basis of observations and effect of Raktamokshana in Vicharchika.

Total 54 patients were treated, in which Raktamokshana was done by Jalauka in 34 patients and Siravyadha was done in 20 patients. Out of 34 patients treated with application of Jalauka, 28 patients (82.35%) were cured completely where as 6 patients (17.64%) were improved. Out of 20 patients treated by Siravyadha, 14 patients (70%) were cured and 6 patients (30%) improved. Overall result found that, Jalauka had 82.35% cure rate where as Siravyadha brings 70% cure rate. Finally it was found that in both groups the effect of Raktamokshana in Vicharchika was significant. Lastly it had been concluded that the Raktamokshana had very good effects in Vicharchika without any adverse effect and recurrence.

KEY WORDS: Bloodletting, Eczema, Jalauka, Raktamokshana, Siravyadha, Vicharchika

INTRODUCTION

Vicharchika is one of the skin diseases known as Kshudrakushta in Ayurveda. Right from the ancient medical history abundant references of Vicharchika are found in different Samhitas. Vicharchika had

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Professor & Head, Department of Shalya Tantra, Institute for Post Graduate Teaching & Research in Ayurveda (IPGT&RA) Gujarat Ayurveda University, Jamnagar Email- drcbhuyan@gmail.com been described by all the authors of Ayurveda i. e. Charaka Sushruta and Vagbhata.¹ ² ³ It is a disease with complaints of itching, scratching, pimples etc. and is Kashtasadhya Vyadhi (difficult to treat). It can be co-related with the eczema in modern science. In regard of treatment eczema itself is difficult to cure in which steroids are used that has lifelong adverse effect on the body and health. But in this context Sushruta had mentioned one of the Rakatja Vyadhi. Rakta is dealt as the fourth dosha and Raktamokshana is the treatment of choice for the Raktaj vyadhi. Raktamokshana is a para-surgical procedure in the Shalyatantra

in which Sushruta has mentioned different methods according to the patient, disease, site, depth of the disease and involvement of the dosha dushya⁴. The different methods of Raktamokshana are Ashastrakrita (Jalauka, Shringa, Alabu, ghati yantra) and Shastrakrita (Siravyadha and Pracchana). A wide description is available in Indian system of medicine regarding importance and utility of the Raktamokshana in the skin disorders in general as well as Vicharchika in particular. Sushruta emphasises the importance on Siravyadha method of the Raktamokshana as the half treatment in the Shalya speciality.⁵

Among different methods of the Raktamokshana two methods viz. Jalauka application and Siravyadha had been taken into consideration in this research study. The reason to study of these two methods was that, as Vicharchika has been considered due to obstruction in the channels of the circulating blood. Jaluaka keeps up sucking of an impure stagnant blood which provides free flow to circulating blood and that leads to cure the disease improving blood circulation. Jalauka can be applied in each external part of the body including the vital part (Marma) and also in aged, debilitated patients⁶. Even deep seated impure blood can be taken out easily with the help of Jalauka.⁷ Next in cases of sarvanga vicharchika when impure blood causes symptoms all over the body, Siravyadha cures such cases removing impure blood from sarvang shareer. There was a day when people used to bleed generally for the sake of good health. When other treatment measures (shodhan and shaman chikitsa) were ineffective for the Raktaj vyadhi and kshrudakushta; the best treatment is the Raktamokshana.8 Hence Clinical study was carried out on two modalities of the Raktamokshana as per Sushruta.9

AIMS & OBJECTIVES

1. To evaluate the efficacy of Raktamokshana in the management of Vicharchika.

MATERIAL & METHODS

Conceptual study

All literatures related to Vicharchika and Raktamokshana had been collected from the concern *Ayurvedic* texts and concepts related to eczema from modern medicine.

Drug review

None of the drug was used in the study as it is non pharmacological management but para-surgical procedure in the Indian System of Medicine (ISM).

Clinical study

Patients suffering from complaints of Vicharchika were collected from OPD & IPD of Department of Shalya Shalakya, I.P.G.T. & R. A. Hospital, Gujarat Ayurveda University, Jamnagar. Selected patients were registered and they were divided into two groups according to their sign and symptoms. After that pathological investigations i.e. TLC, DLC, RBC, Hb%, ESR, urine routine & stool examination were carried out.

Group I: Raktamokshana was done with the help of Jalauka in 34 patients where Vicharchika was completely localised.

Group II: Raktamokshana was done with the help of Siravyadha in 20 patients where Vicharchika was present on sarvanga.

These groups were subjected to the clinical observations and laboratory investigations throughout the treatment to assess the effect of Raktamokshana.

Selection criteria

Patients having complaints of Kandu, Srava, Vedana, Vyaivarnya, Pidaka, Visarpana, Daha, Rukshata, etc.were selected irrespective of age, sex, religion, education, etc.

Inclusion criteria

- 1. Localised Vicharchika
- 2. Sarvanga Vicharchika

Exclusion criteria

Known cases of skin malignancies, tuberculosis and STDs were excluded.

Duration of treatment

It was varying on the complete relief of sign and symptoms one to nine weeks. Raktamokshana was done alternate day in beginning up to the relief in subjective symptoms and followed by twice a week up to the relief in objective symptoms.

Process of Jalaukavacharan (Leech application)

Pre procedure

- * Prepare the patient mentally for Jalauka application.
- * Written informed consent of patient was taken.
- * Routine hematological investigations were done.
- * Clean the affected part and give mild fomentation.
- * The entire materials viz. Jalauka, turmeric powder Shatdhauta ghrita and dressing trolley was kept ready.
- * Saturation of Jalauka: selected numbers of leeches were kept in turmeric water (5gm turmeric powder in 100ml of fresh water in bowel) for 5 minutes.
- * Then took the leeches and kept in clean fresh water.
- * Those saturated active leeches became ready for application

Procedure

- * Patient was to sit or lay down comfortable as per site of application.
 - * Took Jalauka from the fresh water.
- * Applied at the site of lesion, if not stuck then tried next and if next also not bitten then kept the drop of milk at the site,¹⁰ or pricked for drop of blood.
- * When started sucking of blood by Jalauka then covered it with fine white wet cloth except the mouth and made wet continuously.
- * When leech started to suck blood then it looked like shape of a horse shoe keeping the elevation of neck portion.

* After sucking to its capacity it was automatically wear off.

Post procedure

A. Leech

- * Kept the weight of each leech before and after application.
- * Poured the turmeric powder on mouth of Jalauka to vomit the sucked blood.
- * If incomplete then squeeze the Jalauka to vomit and removed all the sucked blood.
- * Sent the removed blood to pathology for investigation.
- * Left the leeches into turmeric water for 5 min. and transferred to fresh water.
- * Kept the Jalauka in separate container for second setting of that particular patient.
- * Never applied used leech of one patient to another patient.

B. Patient

- * Dusting of raktastambhaka yoga was done in case of oozing.
- * Dressing at the bite site with shatadhauta ghrita was done.
- * Allowed to stay for one hour in recovery room for observation.

Process of Siravyadha (Venepuncture) Pre procedure

- * Prepared the patient mentally for Siravyadha.
- * Written informed consent of patient was taken.
- * Routine hematological investigations were done.
- * The entire materials viz. 16 no. wide bore needle, tourniquet, dressing materials were kept ready.

Procedure

- * Patient was laid down in supine position.
- * Vein nearer to affected site was elevated by using tourniquet.
- * Most of the cases were in the one leg or both legs lesions.

- * Punctured with 16 no. wide bore needle.
- * The tourniquet was released immediately after puncture of the vein.
 - * It was allowed to ooze for 5 minutes.
 - * Then needle was taken out.

Post procedure

- * Dressing was done with shatadhauta ghrita.
- * Patient observed for one an hour in recovery room for side effect like oozing, giddiness, etc.

Common Diet and Regimen for both groups

Diet

Generally all irritants, spiced, junk and constipated foods were strictly prohibited.

OBSERVATIONS

Table 1: Clinical Characters

Nourished foods were allowed like fresh fruits, vegetables, juices, etc.

Regimen

All local applications like various talcum powders, ointments and use of soaps were restricted. Only washing with Neem (*Azadirecta indica*) bark decoction was allowed in morning and evening.

Assessment of result

It was recorded on the basis of scoring pattern in relief of sign and symptoms i.e. kandu, pidaka, syava visarpana, rukashata, daha, praklina, swetabha, raktma, pakavati, atiruja and bahusrava of Vicharchika.

Assessment of discoloration (Vivarnata)

n= 54

Grade	Group A	%	Group B	%	Total	%
Grade - 0	04	20%	10	50%	14	35%
Grade -1	08	40%	08	40%	16	40%
Grade -2	08	40%	02	10%	10	25%
Grade-3						

Table 2: Sex

Grade	Group A	0/ /0	Group B	0/ /0	Total	0/
Grade - 0	18	90%	20	100%	38	95%
Grade -1	02	10%	00	•	02	5%

Table 3: Marital Status

Grade	Group A	%	Group B	%	Total	%
Grade - 0	05	25%	6	30%	11	27.5%
Grade -1	10	50%	12	60%	22	55%
Grade -2	05	25%	02	10%	07	17.5%
Grade-3				-	-	-

Table 4: Diet Consideration

Sr. no.	Diet	No. of patients	Percentage
1.	Vegetarian	30	55.55
2.	Non vegetarian	24	44.44

Table 5: Age (Sushruta)

Grade	Group A	%	Group B	%	Total	%
Grade - 0	10	50%	11	55 %	21	52.5%
Grade -1	06	30%	07	35%	13	32.5%
Grade -2	03	15%	ß	15%	06	15%
Grade-3						

Table 6: Prakriti

Grade	Group A	0/	Group B	0/ /0	Total	0/ /0
Grade - 0	11	55%	16	80%		67.5%
Grade -1	09	45%	04	20%	13	32.5%

Table 7: Chronicity

Grade	Group A	%	Group B	%	Total	%
Good Response	04	20%	10	50%	14	35%
Moderate	06	30%	06	30%	12	30%
Response						
Poor Response	10	50%	04	20%	14	35%

Table 8: Affected parts of body

	't' Test			
Parameters	Group A	Group B		
Pain	2.447	6.505		
Smell	7.015	10.37		
Discharge	4.250	5.219		
Size of the ulcer	1.964	2.758		
Granulation tissue	4.471	5.741		
Colour of Surrounding skin	1.436	3.378		

Table 9: Blood picture of Siravyadha

Para meter	classification b	ased on sex	between overweight and obese	
	F	P	F	P
Cholesterol	0.03	0.85	2.1	0.14
Triglycerides	3.42	0.06	0.00	0.95
LDL	0.21	0.64	0.37	0.54
HDL	0.03	0.85	1.6	0.2
BMI	3.3	0.06		
Fat mass	2.9	0.08	3.4	0.06
Fat free mass	5.5	0.02	2.8	0.09
Fat percentage	2.9	0.08	3.4	0.06

Table 10: Blood picture of Jalauka Avacharan

parameter	Admission	Discharge	difference	P value
Weight	74.2±11.32	69.2±9.94	5.0	0.00
Fat mass	29.28±9.29	27.61±9	1.6	0.00
Fat free mass	44.92±9.7	41.66±9.03	3.2	0.00
Fat %	38.94±10	38.69±10	0.24	0.66
Total body water	33.11±7.11	30.67±6.4	2.44	0.00
waist	36.96±3.43	35.26±3.56	1.69	0.00
hip	41.76±4.1	40.37±4.18	1.39	0.00
BMI	30.52±4.48	28.31±4.2	2.21	0.00
Impedance	501.42±82.4	566.46±85.2	-65.04	0.00
BMR	5825.68±981	5702±712	122.97	0.15
Cholesterol	198.72±45	175.39±33.7	23.3	0.00
triglycerides	181.41±62	133.79±34.7	47.62	0.00
HDL	43.62±4.99	44.09±4.6	-0.47	0.25
LDL	119.31±41.7	105.5±34.4	47.62	0.00
B.P (Systolic)	143.45±15.8	122.9±10	20.54	0.00
BP(diastolic)	91.58±10.2	81.74±14.7	9.84	0.00

Table 11: Days taken for complete cure

Age	Treated Group	Control Group	Total
25-35	5 (16.66%)	06 (20.00%)	11
35-45	13 (43.34%)	11 (36.66)	24
45-60	12 (40.00%)	13 (43.34)	25
Total	30 (100.00%)	30 (100.00%)	60

Table 12: Results

Sex	Treated Group	Control Group	Total
Male	21 (70.00%)	16 (53.34)	37
Female	9 (30.00%)	14 (46.66)	23
Total	30 (100.00 %)	30 (100.00%)	60

On the beginning day of registration and subsequently the day of leech application, every alternate day after sitting the extent of discoloration of Vicharchika was marked by the skin marking pencil. And the area of impression was transferred on the graph paper to calculate the square area of the discoloration to measure the average sucking area per leech.

Assessment of investigations

TLC, DLC, Hb% ESR, CT, BT Urine, stool investigations were done before and after treatment to assess the changes.

OBSERVATIONS

Observations showed that Kandu (itching) was found in all patients (54) where as vranavedana was found only in 6 patients

as shown in Table-1. Married male patients were found more in number. In diet consideration the vegetarian patients were found more in number due to region and religion. Maximum incidences were noted in the middle age group 21-30 years (Yauvana) and to next the old age 41-70 years (Hani) as per Sushruta classification.¹ As per Doshik involvement the pitta dominant patients were found more in number due to pitta and rakta dushti leads in rakataj vyadhi. Maximum patients had the chronicity of 1-6 months. Mostly affected part of the body with Vicharchika was legs in both groups. Effect of therapy in pathological changes was shown in Table-9 & 10 which showed that there was increase in Hb% in maximum number of patients where as maximum decrease was found in ESR count in both the groups. Complete cure of the disease was found in Jalauka group in 2nd week where as in Siravyadha it was in 1st week. Out of 34 patients 28 patients were got complete cured in Jalauka group where as 14 patients out of 20 patients were got complete cured in Siravyadha group as shown in the Table-12.

Regarding the chronicity out of 54 patients 19 patients were suffered with Vicharchika more than one year. Kandu symptom was observed commonly in all 54 patients. Minimum time taken for complete cure of disease was one week in both group where as maximum time was 5 weeks in Siravyadha and 9 weeks in Jalauka group respectively. Maximum capacity of Jalauka to suck blood was varied from 10-20 ml during first application which reduced in successive application. An average sucked blood volume by leech in first sitting was 10 ml minimum and 20 ml maximum. In one sitting total blood expelled from site of Vicharchika by leech application was up to 120 ml and maximum quantity of blood drained by means of the Siravyadha was 60 ml. From the close observation I was measured the sucking area of one moderate size leech would suck the blood approximately from 5 sq. cm the lesion area.

No recurrence was observed within 6 months of follow up period.

RESULTS AND DISCUSSION

The exact synonym was not found for Vicharchika in modern medicine. However, the disease which came very close and near was eczema or dermatitis on the basis of clinical manifestation. One leech could suck the blood from 30-90 min. while it started the sucking from 15 sec. to 10 min. after the application. Total six sittings of leech applications were required for 6x8 cm of area affected and three weeks had been taken for complete cure. Generally each leech after two applications became dull and inactive and therefore they were rejected afterwards. Furthermore every leech was given seven days interval for the rest in between the two applications. 34 cases were treated with application of Jalauka. Out of 34 cases 28 cases were cured where as 6 cases were improved in which syavata (blakish) and rukshata (dryness) remained. Out of 20 cases treated by Siravyadha 14 cases were cured and 6 improved.

In Jalauka group 7 patients took one week for complete cure while 2 patients had taken 9 weeks to cure, maximum patients were cured within second week of treatment. Similarly in Siravyadha 6 cases were cured within one week while 2 cases took 4 weeks for complete cure. In the study TLC and ESR significantly decreased whereas significant increase in hemoglobin (Hb%) was observed in both the groups. It might be due to stimulation of the bone marrow function. Siravyadha is superior in regard to the haemoglobin improvement as compared to Jalauka application. At beginning of the treatment it was found that TLC was decreased but later came to normal value. ESR came down significantly in both the methods. Effect on RBC, BT, and CT, urine and stool findings were statistically insignificant. The improvement in the colour of the site begins after the 2nd sitting.

Post Raktamokshana complication was observed only with Jalauka application. Out of 34 patients one female patient had oozing

from stuck site for three hours and one male patient had the skin rashes with redness at the site of Jalauka application. Both were treated with shatdhauta ghrita as local application and bandaging. Maximum follow up was six months and minimum was of two weeks duration after complete cure. None of the cured patient had recurrence after the treatment.

CONCLUSION

The study of Raktamokshana by Jalauka application as well as Siravyadha revealed that in Jalauka treated group had 82.35 % cured where as Siravyadha treated group brought 70% cured rate and the patients had more liking for Jalauka application.

An extra ordinary close observation of 80 patients of blood donor (average 5 times) revealed that they were free from skin disorders. So it was proved that people who undergone Raktamokshana regularly were free from the skin disorders.

REFERENCES

- Sushruta (2001): Sushruta Samhita. Ni. Sth. 5/ 13. Ayurved Tatva Sandipika Commentery, Ed. By Dr. Kaviraj Ambikadatta Shastri, Chaukhamba Sanskrita Sansthan, Varanasi. pg.-248.
- 2 Caraka (2009): Charak Samhita. Chi. Sth. 7/ 26. Chakrachandrika Hindi Ed. By Dr. Brahmananda Tripathi, Chaukhamba Sanskrita Prakahan, Varanasi. pg.-305.
- 3. Vagbhat (2005): Astang hradyam. Ni. Sth. 14/ 18.Vidyotii Commentery Ed. By Kaviraj Atridev Gupta, Chaukhambha Sanskrita Sansthan, Varanashi. pg.-272.

- Sushruta (2001): Sushruta Samhita. Sha. Sth. 9/25,26. Ayurved Tatva Sandipika Ed. By Dr. Kaviraj Ambikadatta Shastri, Chaukhamba Sanskrita Sansthan, Varanasi. pg.-68.
- Sushruta (1997): Sushruta Samhita. Sha. Sth 8/23., Dalhan, Nibandha sangraha Ed. By YadavajiTriakmji Acharya, Chaukhambha Orientalia, Varanasi. pg.-383.
- 6. Sushruta (1997): Sushruta Samhita. Su. Sth. 13/3. Dalhan, Nibandha sangraha Ed. By Yadavaji Triakmji Acharya, Chaukhambha Orientalia, Varanasi. pg.-55.
- 7. Sushruta (1997): Sushruta Samhita. Sha. Sth 8/26. Dalhan, Nibandha sangraha Ed. By Yadavaji Triakmji Acharya, Chaukhambha Orientalia, Varanasi. pg.- 383.
- 8. Caraka (2009): Charak Samhita. Su. Sth. 24/ 17. Chakrachandrika Hindi Ed. By Dr. Brahmananda Tripathi, Chaukhamba Sanskrita Prakahan, Varanasi. pg.-431.
- Sushruta (1997): Sushruta Samhita. Sha. Sth. 8/17. Dalhan, Nibandha sangraha Ed. By Yadavaji Triakmji Acharya, Chaukhambha Orientalia, Varanasi. pg.-383.
- Sushruta (1997): Sushruta Samhita. Su. Sth. 13/19. Dalhan, Nibandha sangraha Ed. By Yadavaji Triakmji Acharya, Chaukhambha Orientalia, Varanasi. pg.- 57.
- 11. Sushruta (2001): Sushruta Samhita. Su. Sth. 35/35. Ayurved Tatva Sandipika Ed. By Dr. Kaviraj Ambikadatta Shastri, Chaukhamba Sanskrita Sansthan, Varanasi. pg.-134.