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# COMPARATIVE STUDY OF JALOUKAVACHARANA AND MANJISHTADI KSHARA BASTHI IN THE MANAGEMENT OF SIRAJAGRANTHI

### Divyaa M S<sup>1</sup>, Manjunatha Bhat<sup>2</sup>

<sup>1</sup>PG Scholar, Department of PG Studies in Shalya Tantra, Alva's Ayurveda Medical College, Moodbidri, Karnataka, India

<sup>2</sup>HOD, Department of PG Studies in Shalya Tantra, Alva's Ayurveda Medical College, Moodbidri, Karnataka, India

Email: divyaapakalkuri@gmail.com

### **ABSTRACT**

**Background:** In the present era, everyone is more conscious about their beauty and even a small change in the skin texture or lustre is enough to create stress and tension in our mind, especially in ladies. Varicose vein of the lower limbs is one of such clinical condition that hampers the beauty of the legs. *Siravyadha, Basthi, Sahacharadi* taila as internal medication, *Upanaha* with *Vatahara dravyas* are given as treatment choices by *Acharya Vagbhata* for the treatment of *Sirajagranthi*. **Objective:** To study the efficacy of *Jaloukavacharana* and *Manjishtadi Kshara Basthi* in *Sirajagranthi* and compare their efficacy in *Siraja Granthi*. **Methodology:** 40 patients diagnosed as *Sirajagranthi* were selected strictly as per the pre-set inclusion and exclusion criteria and divided into Group A, who were treated with *Jaloukavacharana* and Group B, who were treated with *Manjishtadi Kshara Basthi*. The patients were assessed before treatment and after completing *treatment* i.e. on 8<sup>th</sup> day, 15<sup>th</sup> day, 22<sup>nd</sup> day *and 30<sup>th</sup>* day. **Result:** Both Group A and Group B showed highly significant results in all attributes of *Sirajagranthi*. While comparing both the Groups there is no statistically significant difference in *Shoola, Kandu, Shotha, Daha, Vaivarnya* of *Sirajagranthi* in between the groups. *Grathana* showed a significance difference of in comparing the two groups. **Conclusion:** In this clinical study, both Group A and Group B showed significant results in all attributes of *Sirajagranthi*.

Keywords: Sirajagranthi, Jaloukavacharana, Varicose Vein, Manjishtadi Kshara Basthi.

### INTRODUCTION

The occurrence of varicose veins has increased over the years due to the changes in life style. Varicose veins of the lower limbs are the penalty the human being has to pay for its erect posture<sup>1</sup>. A vein is called varicose when it is dilated and tortuous<sup>2</sup>. Varicose veins affect one out of two people at the age of 50 and above, and 15-25% of all adults<sup>3</sup>. Worldwide superficial venous diseases are more common in women as compared to men<sup>4</sup>.

In Ayurveda a similar condition is explained by Acharyas among the types of Granthi that is Siraja Granthi, Vata vitiated with Rakta causing

Sampeedana, Sankocha and Vishoshana of Sira.<sup>5</sup> Siravyadha, Basthi, Sahacharadi taila as internal medication, Upanaha with Vatahara dravyas are given as treatment choices by Acharya Vagbhata for the treatment of Sirajagranthi.<sup>6</sup>

As it is a *Granthi* and *Sonithaja vyadhi* the best treatment of choice is *Rakthamokshana*. It is explained that those who undergoes *Rakthamokshana* time to time, never suffers from *Twak dosha, Granthi, Sopha and Raktha* vitiated disorders. While explaining *Jaloukavacharana, Acharya Vagbhata* and *Acharya Susrutha* explained it as highly beneficial in case of *Avagada dosha* and in *Granthi*. Also it is described as most delicate method of bloodletting, prescribed particularly for the benefit of kings, wealthy persons, children, old, debilitated persons, women etc. 9

Basthi is described as half of the treatment. 10 When carried out properly, Basthi not only enhance the growth, Varna, Bala, but also lengthen the lifespan of the individual. 11 When Basthi reaches Pakvashaya it eliminates all Doshas located in the entire body right from foot to head just as the sun situated in the sky absorbs all the moisture from earth. 12 Acharya Vagbhata included Sramsa, Vyasa, Vyadha, Swapa, Sada, Ruk, Toda, Sankocha, Spandana etc in lakshanas of vitiated Vata. 13 In Sahasra Yogam Manjishtadi Gana is indicated in Vataja and Rakthaja vitiated condition.<sup>14</sup> Kshara Basthi Gunas are explained in Chakradatta, is very useful in Vata vitiated conditions like Soola, Udavartha, Gulma etc. 15 Many research works have been carried out regarding the treatment of Siraja Granthi. In the present era the patients of varicose veins are increasing day by day. So selecting an ideal treatment with minimum discomfort is required for the patient. Keeping the above point in mind, here an attempt was made to compare the effect of one parasurgical technique that is Jaloukavacharana and another Panchakarma procedure that is Manjishtadi Kshara Basthi. 16, 17

### **MATERIALS AND METHODS:**

Sample source: 40 patients diagnosed as Siraja-granthi were selected from the O.P.D & I.P.D of

Alva's Ayurveda Hospital, Moodbidri, other camps and referrals and were grouped into two Groups A & R

**Sample size:** 40 patients diagnosed as *Sirajagranthi* were divided into two equal groups- Group A and Group B for the study.

Study design: Comparative clinical study.

### **Selection Criteria:**

### Diagnostic criteria:

- Clinical features of *Sirajagranthi* (varicose vein) viz. *Sampeedana*, *Samkochana* and *Vishoshana* of *Siras* (dilated, elongated and tortuous veins)
- Brodie -Trendelenburg test.
- Multiple Tourniquet test.
- Perthes test.

### **Inclusion criteria**

- Patient aged between 16-70 years of either sex.
- Patient suffering from Primary varicose vein
- Patient with *Sirajagranthi* (Varicose vein) in lower limb only.
- Patient indicated for Jaloukavacharana and Kshara Basthi.

### **Exclusion criteria**

- Patient with Diabetes mellitus, anaemia and other systemic diseases.
- Patient with coagulopathy or bleeding diseases.
- Varicosity associated with complications.
- Congenital varicose vein.

### **INTERVENTIONS**

GROUP A: 1<sup>st</sup> day - Jaloukavacharana 8<sup>th</sup> day - Jaloukavacharana 15<sup>th</sup> day - Jaloukavacharana 22<sup>nd</sup> day - Jaloukavacharana 22<sup>nd</sup> day- 30<sup>th</sup> day- Observation period

GROUP B: 1-3 days: *Deepana* and *Pachana* with *Vaishwanara Choorna*.

4-11th day: Basthi in Yoga Basthi schedule.

12<sup>th</sup> -30<sup>th</sup> day: Observation period which includes *Parihara kala* also.

An assessment was done before treatment and on the 8<sup>th</sup> day, 15<sup>th</sup> day, 22<sup>nd</sup> day and 30<sup>th</sup> day for both the

groups.

**Study period:** Including observation and follow up - total 60 days.

### **Procedure**

Informed written consent of the patients was taken for both groups.

### Group A

Jaloukavacharana was done on 20 patients of Group A.

Site: Maximum tortuous area was selected for the procedure.

### Poorvakarma:

- 1. Preparation of patient for Jaloukavacharana.
- 2. Preparation of Jalouka.

Preparation of patient: Patient was made to lie down. The local area was cleaned with distilled water using sterile gauze.

### Preparation of Jalouka:

The leeches were anointed with the paste of Sarshapa choorna and Haridra choorna and placed in a

vessel containing water for a while, for refreshment and making it active.

Pradhana karma: Jalouka's were applied to the site of Siraja granthi after rubbing the area with sterile cotton swab for making the area rough. If the Jalouka's does not bite then a sterile needle prick was made on the area. When Jalouka's starts sucking blood it was covered with a wet cotton pad.

Paschat karma of the patient: The bitten area was applied with Shathadhoutha ghrita, loose Bandha were applied with sterilized cotton pad.

Paschat karma of Jalouka: When Jalouka's leaves the area, its body were anointed with Tandula choorna and mouth was smeared with Tila taila and Saindhava choorna. The Jalouka was held by tail with left thumb and index finger, with the right thumb and index finger Jalouka was massaged from tail to mouth and vomiting was done. After vomiting it was transferred to fresh water.

### Group B

Manjishtadi Kshara Basthi was done on patients of group B.

Table A: Course of Basthi: Yoga Basthi Pattern.

1 <sup>st</sup> day	2 <sup>nd</sup> day	3 <sup>rd</sup> day	4 <sup>th</sup> day	5 <sup>th</sup> day	6 <sup>th</sup> day	7 <sup>th</sup> day	8 <sup>th</sup> day
A	N	A	N	A	N	A	A

Note:-A-Anuvasana Basthi N- Nirooha Basthi

### Anuvasana Basthi

100 ml of *Brihat Saindavadi Taila* was administered as *Anuvasana Basthi*.

### Method of Preparation of Manjishtadi kshara

To prepare Manjishtadi Kshara Basthi, the contents of it were mixed in a particular fashion as mentioned in classics i.e. initially 80 ml Madhu and 5 gms of Saindhava Lavana were taken in a Khalva yantra and mixed homogenously, after that 60 ml of Moorchitha Tilataila were taken and is mixed to form uniform mixture. There after 40 gms of kalka made of Manjishta, Triphala, Guduchi, Vacha, Devadaru, Katuki, Nimba and Satahwa were added to the above mixture. It was followed by the mixing of 100

ml of Kwatha prepared with Kwatha Choorna's of Manjishta, Triphala, Guduchi, Vacha, Devadaru, Katuki, Nimba. Then 100 ml of Kanji was added to the mixture. Finally 100 ml of Gomutra was added and mixed thoroughly to form a homogenous mixture and tested for Suyojita Nirooha Lakshana's. Now the whole of the Basthi Dravya was filtered and it was administered after making it lukewarm indirectly by heating in the vessel of water. The particular pattern of mixing the Basthi Dravya is followed so that all the contents were mixed properly and finally a uniform mixture was obtained. The total quantity of Basthi Dravya was maintained in between 480ml – 500 ml.

### ASSESSMENT CRITERIA

Assessment of the condition was done based on a detail proforma adopting different methods of scoring of subjective and objective parameters and was analysed statistically.

### **Subjective parameters:**

- 1) Shoola (Pain)
- 2) Kandu (Itching sensation).
- 3) Daha (Burning sensation).

### **Objective parameters:**

- 1) Grathana (Hardening of Sira).
- 2) Shotha (Swelling).
- 3) Vaivarnya (Pigmentation).

### **DISCUSSION ON RESULTS**

### Effect on Shoola

In Group A, out of 20 patients statistically significant effect of *Jaloukavacharana* on *Shoola* at P<0.001. This may be probably due to the removal of stagnant vitiated blood which in turn reduces the intravascular pressure. Vitiated *Vata* in *Sira* causes *Siraakunchana* (dilatation of the veins) and stimulate release of substance P which gets collected in smooth muscle of blood vessels causing pain. After doing *Jaloukavacharana*, this is removed from the blood thus causing relief in pain. Anti-inflammatory and analgesic properties of leeches in many aspects are associated with the blockage of amidolytic and kininogenase activities of plasma kallikrein, resulting in prevention of pain or pain relief during leech sessions

In Group B, out of 20 patients, statistically significant effect of *Manjishtadi Kshara Basthi* on *Shoola* at P<0.001. This may be probably due to the *Vatahara* and *Vedanasthapana* properties of the *Basthi*.

### Effect on Kandu

In Group A, out of 20 patients, *Jaloukavacharana* on *Kandu* showed statistically significant results. *Jaloukavacharana* acts on *Kandu* by removing the stagnated blood that removes the *Sanga* from the *Srotas*. Since the stagnant blood is drained out, the breakage of RBC gets reduced which in turn reduce

the pigmentation and itching over the part.

In Group B, out of 20 patients, there was statistically significant effect of *Manjishtadi Kshara Basthi* on *Kandu* P<0.001. *Kandugna* and *Raktashodaka* properties of the drugs may helps to reduce *Kandu*.

### Effect of Grathana

A statistically significant effect of *Jaloukavacha-rana* on *Grathana*. This is may be probably due to the removal of stagnant blood which helps to flow the fresh blood in the veins.

### Effect on Shotha

Jaloukavacharana helps relive the intravascular pressure and helps subside the Shotha. Swelling is mainly due to venous outlet obstruction this increases venous capillary hydrostatic pressure and collection of tissue fluid and by doing Raktamokshana venous hydrostatic pressure and collected tissue fluid is reduced thus causing reduction in swelling.

The hyaluronidase present in the saliva of *Jalouka* by which tissue permeability will be restored. This promotes the elimination of tissue and circulatory hypoxia as well as local swelling. *Manjishtadi Kshara Basthi* showed reduction of *shotha* in *siraja granthi*. This may be due to *Shothahara* properties of drugs of *Manjishtadi Kshara Basthi*.

### Effect on Vaivarnya

In Jaloukavacharana due to removal of stagnated blood from the veins by that which helps reduce the pigmentation. Discoloration is mainly seen in the lower part of the leg brownish to black pigmentation was noticed, this is due to haemosiderin deposition from breakdown of R.B.C. which have come out of the thin walled veins. By doing Raktamokshana dead R.B.C. along with iron in the form of haemosidrin is removed. By doing Jaloukavacharana the subcutaneous deposition of the iron in the skin is also removed. This helps to reduce Vaivarnya. Varnya drugs like Manjishta, Nimba of Manjishtadi Kshara Basthi helps to reduce Vaivarnva.

### Effect on Daha

In Group A, out of 20 patients, the mean score of *Daha* before treatment was 1.2 was reduced to 0.25

on the 30<sup>th</sup> day after treatment. This revealed statistically significant effect of *Jaloukavacharana* on *Vaivarnya* P<0.001.

In Group B, out of 20 patients, the mean score of *Daha* before treatment was 1.1 was reduced to 0.25 on the 30<sup>th</sup> day after treatment. This revealed statistically significant effect of *Manjishtadi kshara Basthi* on *Daha* P<0.001.

## Discussion on comparative effect of the both Group

While comparing both the Groups there is no statistically significant difference in *Shoola, Kandu, Shotha, Daha, Vaivarnya* of *Sirajagranthi* in between the groups. (P value > 0.05)

*Grathana* showed a significance difference of p<0.01 in comparing the two groups

### Follow Up

The improvement in the disease condition noted during the study period persisted as such in both the groups in course of the follow up period except that-

• In Group A 3 patients showed mild increase of *Shoola* and *Shotha* due to the *Nidana sevana* especially prolonged standing as per the part of the occupation.

On comparing the both Groups A & B statistical evaluation reveals that the parameter Grathana showed statistically significant differences in the improvement ( $P \le 0.010$ ). The parameters *Shoola*, *Daha*, *Vaivarnya* Kandu and Shoola showed statistically insignificant difference. (As shown in the Table No 1, 2)

### CONCLUSION

Based on the review of literature and observations made in this clinical study, the following conclusions are drawn.

- Sirajagranthi is a common clinical condition affecting the lower limbs and the incidence being prevalent in this era owing to the busy life schedule.
- Incidence of varicose veins was more in people belonging to the occupation that involved prolonged standing and doing strenuous works.

- Jaloukavacharana is a simple cost effective OPD procedure which shown good effect on varicose veins.
- Manjistadi Kshara Basti is effective in the remission of the symptoms of Siraja Granthi as evidenced by statistically significant reduction in the symptom score of various subjective and objective parameters.
- Manjistadi Kshara Basti is a type of Niruha Basti having Tikshna guna and having Lekhana property as well as Vyadhihara for the disease Siraja Granthi.
- Jaloukavacharana showed immediate result in reducing the signs and symptoms of Sirajagranthi especially in symptoms like Shoola, Kandu, Vaivarnya, Shotha, Grathana and Daha.
- In this clinical study, both Group A and Group B showed significant results in all attributes of Sirajagranthi.
- But on comparison there is statistically no significant difference in Shoola, Kandu, vaivarnya, shotha, and daha of Sirajagranthi. Grathana showed a significance difference of p<0.01 in comparing the two groups.</p>

Therefore on the basis of the observations from the present study, it may be concluded that both *Jaloukavacharana* and *Manjishtadi kshara Basti* have significant effect in *Sirajagranthi*.

### REFERENCES

- K Rajagopal Shenoy, Manipal Manul of surgery, 2<sup>nd</sup> edition, CBS Publishers and distributors, 2014, page no 90.
- Dr. Somen Das, A Concise Text Book of Surgery, 4<sup>th</sup> edition, Calcutta, 2006, Page no: 202-210.
- 3. www.sirweb.com
- 4. www.medindia.net
- 5. Acharya Vagbhata, Ashtanga Hridaya Sanskrit text with commentaries Sarvanga Sundara Arunadatta and Ayurveda Rasayana tika of Hemadri annotated by Dr Anna moreswar kunte and Krishna Ramachandra Shastri edited by Pandit Hari Sadashiva Shastri published by Varanasi, Chaukambha

- Sanskrit series office, edition 2002, Uttara sthana, chapter 29, Sloka10-11, Page no:882
- 6. Acharya Vagbhata, Ashtanga Hridaya Sanskrit text with commentaries Sarvanga Sundara Arunadatta and Ayurveda Rasayana tika of Hemadri annotated by Anna Moreswar Kunte and Krishna Ramachandra Shastri edited by Pandit Hari Sadashiva Shastri published by Varanasi, Chaukambha Sanskrit series office, Edition 2002, Uttara sthana, chapter 30, Sloka no:7, Page no:884
- Acharya Susrutha: Susrutha Samhita with Nibandhasangraha Commentary of Dalhanacharya and Nyayachandrika Panchika of Gayadasa, edited by Yadavji Trikamji, Published by Chaukamba Orientalia, Varanasi, Reprint-2014, Sutra sthana ,14<sup>th</sup> chapter, Sloka no 34, Page no :65
- Acharya Susrutha, Susrutha Samhita with Nibandhasangraha Commentary of Dalhanacharya and Nyayachandrika Panchika of Gayadasa, Edited by Yadavji Trikamji, Published by Chaukamba Orientalia, Varanasi, Reprint-2014, Sareera sthana ,8<sup>th</sup> chapter, Sloka no: 26, Page no:383
- Acharya Susrutha, Susrutha Samhita with Nibandhasangraha Commentary of Dalhanacharya and Nyayachandrika Panchika of Gayadasa, edited by Yadavji Trikamji, Published by Chaukamba Orientalia, Varanasi, Reprint-2014, Sutra Sthana, 13<sup>th</sup> chapter, Sloka no: 3, Page no:55
- 10. Acharya Vagbhata, Ashtanga Hridaya Sanskrit text with commentaries Sarvanga Sundara Arunadatta and Ayurveda Rasayana tika of Hemadri annotated by Anna Moreswar Kunte and Krishna Ramachandra Shastri edited by Pandit Hari Sadashiva Shastri published by Varanasi, Chaukambha Sanskrit series office, Edition 2002, Sutra Stana, 19<sup>th</sup> chapter, sloka no:86, page no: 286

- 11. Acharya Susrutha: Susrutha Samhita with Nibandhasangraha Commentary of Dalhanacharya and Nyayachandrika Panchika of Gayadasa, edited by Yadavji Trikamji, Published by Chaukamba Orientalia, Varanasi, Reprint-2014, Chikitsa Stana ,35<sup>th</sup> chapter sloka no:4, Page no: 525
- AcharyaAgnivesha, CharakaSamhita with 'Ayurveda deepika' Commentary of Chakrapanidatta, Edited by Vaidya Y T Acharya, Chaukamba Orientation, Varanasi, Reprint 2007, UttarPradesh, Siddhi Sthana, 7<sup>th</sup> chapter, Sloka no: 64, Page no: 712
- 13. Acharya Vagbhata, Ashtanga Hridaya Sanskrit text with commentaries Sarvanga Sundara Arunadatta and Ayurveda Rasayana tika of Hemadri annotated by Anna Moreswar Kunte and Krishna Ramachandra Shastri edited by Pandit Hari Sadashiva Shastri published by Varanasi, Chaukambha Sanskrit series office, edition 2002,Sutra Sthana ,12<sup>th</sup> chapter,sloka no :49,50, Page number : 201
- Chakrapani Dutta, Chakradutta, annotated by Dr Indradeva Tripadi, Published by Varanasi, Chaukambha Sanskrit series office, Reprint 2005, Niruha Adhikara, sloka no:29-31, page no:255
- Sahasrayogam, Sujanapriya Vyakhya, Vidhyarambham Publishers ,Alapuzha, 28<sup>th</sup> Edition 2009, Kashaya Prakaranam ,Vataraktha Chikitsa ,Page no:85
- "Manjishtadi Kshara Basthi in the management of peripheral arterial disease a case study" Chougule Paresh, Rao Niranjan, Sreekanth U- IAMJ- International Ayurveda Medical Journal, ISSN 2320 5091, Volume 3; Issue 9, September 2015, Page no: 2935-2938
- Satish BG, Conceptual study of Vatarakta vis-a-vis T.A.O and clinical management with Manjistadi Kshara Basthi, (Unpublished Doctoral dissertation, RGUHS, Karnataka, 2003, Page no: 125.

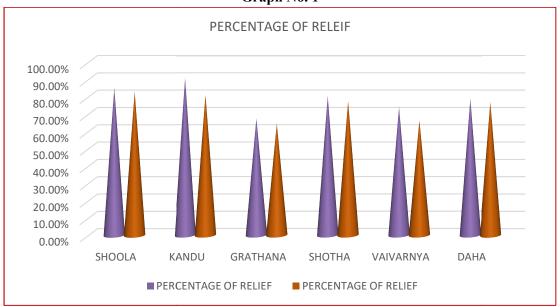
**Table 1:** Comparative Effect of Treatment Between Two Groups

Symptoms	BT-AT me	an	DIFFERENCE	STANDARD DEVIATION		T VALUE	P VALUE
	Group A	Group B	OF MEAN	Group A	Group B		
Shoola	2.05	2	0.05	0.689	0.649	0.237	>0.05
Kandu	1	1.1	-0.1	0.725	0.641	0.462	>0.05
Grathana	0.5	1.1	-0.6	0.513	0.641	3.269	< 0.01
Shotha	1.05	1.4	-0.35	0.605	0.681	1.719	>0.05
Vaivarnya	1.45	1.1	0.35	0.571	0.605	0.806	>0.05
Daha	0.95	0.85	0.1	0.6	0.72	0.2382	>0.05

Table 2: COMPARATIVE PERCENTAGE OF RELIEF BETWEEN GROUP A & GROUP B

SIGNS AND SYMPTOMS	MEAN DIFFERENCE		PERCENTAGE OF RELIEF	
	GROUP A	GROUP B	GROUP A	GROUP B
SHOOLA	2.05	2	85.41%	83.33%
KANDU	1	1.1	91.30%	81.48%
GRATHANA	0.5	1.1	67.74%	64.70%
SHOTHA	1.05	1.4	80.76%	77.77%
VAIVARNYA	1.3	1.45	74.35%	66.66%
DAHA	0.95	0.9	79.16%	72.27%

Graph No. 1



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