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

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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 Sirajagranti. Objective: To study the efficacy of Jaloukavacharana and Manjishtadi Kshara Basthi in Sirajagranti and compare their efficacy in Siraja Granthi. Methodology: 40 patients diagnosed as Sirajagranti 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 8th day, 15th day, 22nd day and 30th day. Result: Both Group A and Group B showed highly significant results in all attributes of Sirajagranti. While comparing both the Groups there is no statistically significant difference in Shoola, Kandu, Shotha, Daha, Vaivarnya of Sirajagranti 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 Sirajagranti.

Keywords: Sirajagranti, 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 posture¹. A vein is called varicose when it is dilated and tortuous². Varicose veins affect one out of two people at the age of 50 and above, and 15-25% of all adults³. Worldwide superficial venous diseases are more common in women as compared to men⁴.

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.⁵ Siravyadha, Basthi, Sahacharadi taila as internal medication, Upanaha with Vatahara dravyas are given as treatment choices by Acharya Vagbhata for the treatment of Sirajagranthi.⁶ 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.⁷

Siravyadha, Basthi, Sahacharadi taila as internal medication, Upanaha with Vatahara dravyas are given as treatment choices by Acharya Vagbhata for the treatment of Sirajagranthi.⁶

Rakthamokshana is explained that those who undergoes Rakthamokshana time to time, never suffers from Twak dosha, Granthi, Sopha and Raktha vitiated disorders.⁷

While explaining Jaloukavacharana, Acharya Vagbhata and Acharya Susrutha explained it as highly beneficial in case of Avagada dosha and in Granthi.⁸ 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.¹⁴ 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 Sirajagranthi 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 & B.

**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. 4-11<sup>th</sup> 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.

<table>
<thead>
<tr>
<th>1st day</th>
<th>2nd day</th>
<th>3rd day</th>
<th>4th day</th>
<th>5th day</th>
<th>6th day</th>
<th>7th day</th>
<th>8th day</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>N</td>
<td>A</td>
<td>N</td>
<td>A</td>
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</tr>
</tbody>
</table>

**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 Basthi***

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, Devadarau, 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, Devadarau, 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, there was statistically significant effect of Manjishtadi Kshara Basthi on Shoola at P<0.001. This may be probably due to the removal of stagnant blood which helps to flow the fresh blood in the veins.

Effect of Grathana
A statistically significant effect of Jaloukavacharana 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 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.

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 Shothakara 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 Vaivarnya.

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 30th 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 30th 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 ($P \leq 0.010$). 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.

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**

3. www.sirweb.com
4. www.medindia.net
Table 1: Comparative Effect of Treatment Between Two Groups

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>BT-AT mean</th>
<th>DIFFERENCE OF MEAN</th>
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### Table 2: COMPARATIVE PERCENTAGE OF RELIEF BETWEEN GROUP A & GROUP B

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### Graph No. 1

![Graph](image)

Source of Support: Nil

Conflict Of Interest: None Declared