



Research Article

JALAUKAVACHARANA AND WET CUPPING IN MANAGEMENT OF SCIATIC NERVE COMPRESSION- A COMPARATIVE CLINICAL STUDY

Nuwansiri LSB^{1*}, Abeysooriya SR², Wickramarachchi WJ³

¹Demonstrator, ³Senior Lecturer, Department of Cikitsa, Gampaha Wickramarachchi Ayurveda Institute, University of Kelaniya, Yakkala, SriLanka.

²Temporary Lecturer, Department of Dravyaguna, Gampaha Wickramarachchi Ayurveda Institute, University of Kelaniya, Yakkala, SriLanka.

KEYWORDS: Sciatica, *Gudrasi*, *Jalaukavacharana*, Wet cupping.

ABSTRACT

The classically Sciatic pain is distribute in pathway of Sciatic nerve. Herniated intervertebral disc is believed to cause most cases around 90%. Other lesions affecting the integrity of the lumbosacral nerve roots (L4-S3) or the sciatic nerve including lumbar canal or foramina, stenosis, tumors, cysts, hemorrhages, abscess, fractures and some more uncommon conditions may produce same clinical picture. The characteristic conditions of sciatica is most related to *Gudrasi* that mentioned in Ayurveda. *Gudrasi Cikitsa* under goes *Vatavyadi Cikitsa*. *Chakradatta* that mentioned bloodletting is effective for *Vatavyadi*. *Jalaukavacharana* is one of common method using for bloodletting in Ayurveda. Wet cupping is also procedure of bloodletting related with *Alabu* mentioned in Ayurveda. A comparative clinical study was designed with Group A of 20 patients being treated by *Jalaukavacharana* along and Group B of 20 patents with wet cupping along. The data analyzed individually with Sciatica Bothersomeness Index (SBI) and Sciatica Frequency index (SFI) and Compared using contingency coefficient and two way ANOVA. The results shows significant different between the groups with P value less than 0.001. There was highly significant with wetcupping group (B) dominating over *Jalaukavacharana* group (A). Though both *Jalaukavacharana* and Wet cupping provided relief, Wet cupping provided an acute and sustain relief.

*Address for correspondence

Nuwansiri LSB

Demonstrator, Department of
Cikitsa, Gampaha Wickramarachchi
Ayurveda Institute, University of
Kelaniya, Yakkala, SriLanka.

Email:

buddhikanuwansiri1987@gmail.com

Ph: 0094769019854

INTRODUCTION

Sciatic Nerve is largest nerve in the body originate in L4 - S3. The classically Sciatic pain is distribute in pathway of Sciatic nerve. Herniated intervertebral disc is believed to cause most cases around 90%. Other lesions affecting the integrity of the lumbosacral nerve roots (L4-S3) or the sciatic nerve including lumbar canal or foramina, stenosis, tumors, cysts, hemorrhages, abscess, fractures and some more uncommon conditions may produce same clinical picture. The characteristic conditions of sciatica is most related to *Gudrasi* that mentioned in Ayurveda^[1]. *Rakthamookshana* is fifth *Karma* of *Pancha karma* therapy has been counted by Sushrutha and Vagbhata. *Jalaukavacharana* is one Method of *Rakthamookshana*. In this method using Leeches to apply on the skin and Leech suck the

Blood as its capacity. Twelve varieties of *Jalauka* are described. Six of them are poisonous and six are nonpoisonous. Nonpoisonous variety used for therapy.

Cupping therapy has been used for thousands of years in traditional Chinese medicine for the treatments of several chronic conditions^[2]. Dry cupping and Wet cupping are the two main type of Cupping. The Cupping mechanism constitutes creating a vacuum on the skin with the ensuring negative pressure resulting in capillary rupture. This method is known as retained or Dry cupping^[3]. The skin of the local area becomes flushed and may show petechiae and ecchymosis or bruising. Wet cupping creates a mild suction by leaving a cup in place for about 3 minutes. Then

removes the cup and uses a small scalpel to make light, tiny cuts on skin and second suction to draw out a small quantity of blood.

Methodology

Total 40 patients assigned into 2 groups. Namely A (*Jalaukavacharana*) and B (Wet cupping) consisting of 20 patients in each group. Data were collected and a comparative study was conducted.

Inclusion criteria

- Patients either sex between the ages 20- 70.
- Both fresh and treated cases were selected.
- Patients with Lower back pain and pain, Numbness, Tingling effect radiating along the lower limbs.

Diagnostic criteria

- SLRT (Straight Leg Rising Test) positive.
- Lasegue's sign positive
- Radiological confirmation whenever necessary (X ray, MRI).

Excluding Criteria

- Patients suffering with bleeding disorders.
- Patients suffering with systemic disorders.

Take the details with Sciatic Brothersomeness Index (SBI), Sciatic Frequency index (SFI) before the treatment.

Intervention

Group A

Jalaukavacharana for 3 or more sittings applied at the site of pain or Tenderness or Numbness areas (Ashi points) in Lumbar Sacral region and posterior aspect of the lower limbs.

Group B

Wet cupping for 3 or more sittings applied at the site of Ashi points in Lumbar Sacral area and posterior aspect of the lower limbs.



Jalaukavacharana



Wet cupping

Take details in Sciatic Brothersomeness Index (SBI), Sciatic Frequency index before the treatment and After treatment. According to SBI, each symptom is rated on a scale from 0 to 6

- 0- Not brother some
- 3- Somewhat brothersome
- 6- Extremely brother some.

Patients were instructed to rate the severity of symptoms that occurred during the past week.

Take the detail according to the SFI.

- Not at all 0
- Very rarely 1
- A few times 2
- About half time 3
- Usually 4
- Almost always 5
- Always 6

These two scales scoring for below symptoms

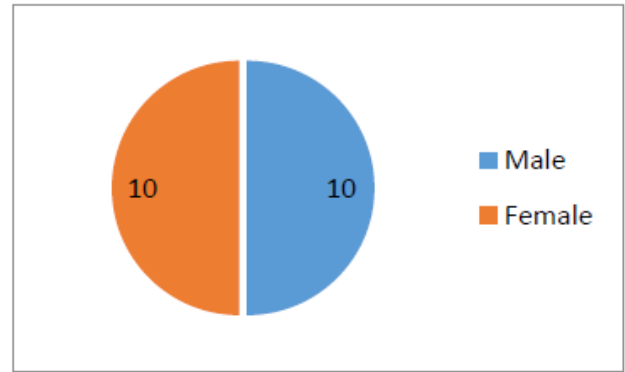
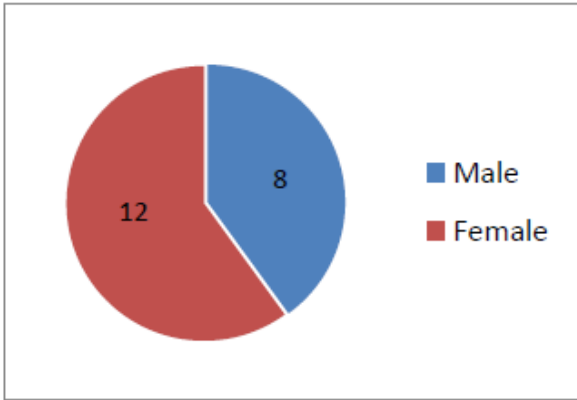
- Leg pain
- Numbness or tingling in the foot or groins
- Weakness in leg or foot

Grading System for Overall Improvement was done basis of following criteria

- Slight improvement -Reduction in score 0 -16
- Moderate improvement- Reduction in score 16- 32
- Marked Improvement- Reduction in score 32- 48
- Complete Remission- score reduced 0

Results

Gender Group A



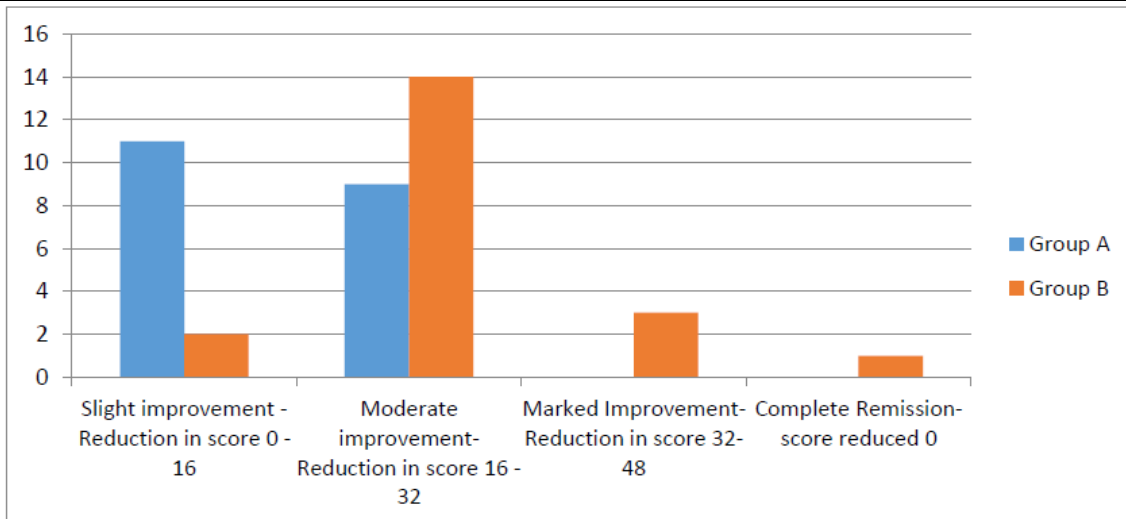
Gender Group B

Categorization of Patients according to the Age

Group	Age Group	Number of patients
A	20 -30	2
	30- 40	3
	40 -50	10
	50 -60	3
	60 -70	2
B	20 -30	3
	30 -40	4
	40 -50	5
	50 -60	5
	60 -70	3

Overall Improvement

Grading	Group A	Group B	Total
Slight improvement -Reduction in score 0 -16	11	2	13
Moderate improvement- Reduction in score 16 -32	9	14	23
Marked Improvement- Reduction in score 32- 48	0	3	3
Complete Remission- score reduced 0	0	1	1
Total	20	20	40



P Value-using contingency coefficient and two way ANOVA

Group A

Scale	Symptom	P Value (n=20)
SBI	Leg pain	<0.01
	Numbness or tingling in the foot or groins	<0.01
	Weakness in leg or foot	0.23
	Back or leg pain while sitting	<0.01
SFI	Leg pain	<0.01
	Numbness or tingling in the foot or groins	<0.01
	Weakness in leg or foot	0.21
	Back or leg pain while sitting	<0.01

Group B

Scale	Symptom	P Value (n=20)
SBI	Leg pain	<0.001
	Numbness or tingling in the foot or groins	<0.01
	Weakness in leg or foot	0.07
	Back or leg pain while sitting	<0.01
SFI	Leg pain	<0.01
	Numbness or tingling in the foot or groins	<0.01
	Weakness in leg or foot	0.028
	Back or leg pain while sitting	<0.01

DISCUSSION

- Maximum number of patients was among 40-50 age group.
- Predominant Gender is Female.
- Most of case were before treated (33) and few cases were fresh (7).
- There was significant improvement in both groups. But according to SBI and SFI better improvement in Group B than Group A.
- Leg pain, Numbness or tingling in the foot or groins, back or leg pain while sitting are common reducible symptoms in both Groups.
- Group B shows highly significant improvement for pain reduction.

Cupping has multiple therapeutic functions which include warming the channels to remove cold, promoting Qi and blood circulation, relieving swelling, accelerating healing, adjusting body temperature and alleviating pain.

The *Jalauka* used for the treatment has probably more than one mode of action^[4]. It can be

discussed under headings of due to blood sucking action and due to secretory action.

- Apyrace- Inhibit platelets of blood clotting cells.
- Destabilase - Dissolve blood clots and inhibits platelets
- Hyaluronidase - Selectively breaks up tissue to allow the other chemicals in saliva, Aseptic action.
- Eglin - Inhibit inflammation.
- Bdelin - Inhibit the natural defense mechanism.
- Lipase - Enzyme that dissolve fat.
- Hirudin - Inhibit the action of thrombokinas.
- Vasodilators- keep the blood vessel dilated

CONCLUSION

There was highly significant with Wet Cupping group (B) dominating over *Jalaukavacharana* group (A). Though both *Jalavkavacharana* and Wet cupping provided relief, But Wet Cupping provided an significant relief pertaining to pain.

REFERENCES

1. Vd Yavaji Acharya, Suśruta Samhitā, Dalhana and Gayadasa commentary 6th edition, Chaukhambha oriaentalia, Varanasi, India, 1954, 44-48.
2. Cao H, Han M, Li X, Clinical research evidence of cupping therapy in China. A systemic literature review, BMC complement Altern Med 2010, p.10,70.
3. Kim KH, Kim H, Hwangbo Anemia and skin pigmentation after excessive cupping therapy by an unqualified therapist in Korea. a case report. Acupunct Med 2012, 30,227.
4. Michal S, Effect of leech therapy in painful osteoarthritis of the Knee, a pilot study, Annals of rheumatic disease the eularjournal' 2001, 60.

Cite this article as:

Nuwansiri LSB, Abeysooriya SR, Wickramarachchi WJ. Jalaukavacharana and Wet Cupping in Management of Sciatic Nerve Compression- A Comparative Clinical Study. AYUSHDHARA, 2016;4(3):1170-1174.

Disclaimer: AYUSHDHARA is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. AYUSHDHARA cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of AYUSHDHARA editor or editorial board members.

