



## Research on Evaluation of the Efficacy of Modified Raktamokshana by Cupping Therapy in Katigata-Vata with Special Reference to Low Back Pain

1. Dr. Rushikesh Jagannath Andhare  
M.S-Shalya
2. Dr. Miteshkumar Dilipkumar  
Gujrathi. M.S-Shalya

Received 2<sup>nd</sup> Sep 2023,  
Accepted 19<sup>th</sup> Sep 2023,  
Online 9<sup>th</sup> Oct 2023

<sup>1</sup> Assistant Professor, Dept of Shalya tantra,  
Gramin Ayurved Mahavidyalaya Patur,  
Dist Akola, Maharashtra, India

<sup>2</sup> Assistant Professor, Dept of Shalya tantra,  
MUP's Ayurved College, Hospital and  
Research Center, Degaon, Risod Dt  
Washim, Maharashtra, India

**Abstract:** Every person will have back pain at some point in their lifetime as they become older. Everyone in today's generation is forced to lead a sedentary lifestyle, which can be blamed for the problem. Given the rising incidence of this condition, patients are subjected to a variety of therapeutic techniques, including NSAIDs, steroids, physiotherapy, and ultimately, surgical procedures, all of which have their own drawbacks, such as providing only temporary relief, having unpleasant side effects, being expensive, etc. Ayurvedic treatments require the application of snehana, swedana, basti karma, agni karma, and raktamokshana. Similar to how Vaatvyadhi views basti karma as Ardhachikitsa, Sushruta Samhita views Raktamokshana as Ardhachikitsa. Therefore, an effort has been made to establish the Raktamokshana method of cupping practice. Raktamokshana is the process of draining vitiated dosha along with the impure blood by making small punctures and using vacuum cups. It resembles the Ghati Yantra described in the Sushruta Samhita, one of the great classics. Twenty patients with katigatavata who received raktamokshana via the cupping method as part of a single-arm research. The patient complaints showed a noticeable improvement. Therefore, it may be said that the cupping method is an effective raktamokshana technique for Katigata-Vata patients.

**Key words:** Katigata Vata, Pain, Raktamokshana, Cupping Method.

### INTRODUCTION

In Ayurveda, vata dosha dushti and sthansanshray can be seen on a number of locations, including Sphika (the gluteal region), Kati-Prishtha (the thoraco-dorsal), Janu (the knee), Jangha (the thigh), and Pada (the foot). The patient's routine is greatly disrupted by the illness's agony even though it is not a life-threatening condition. Effective painkiller, steroid, cold pack, and physiotherapy treatments are all

momentarily gratifying. The patients eventually turn to Ayurveda for positive results. Vatavyadhis can be treated with Snehana, Swedana, Basti Chikitsa, Agni Karma, and Raktamokshana.

"Raktamokshana" is one of the methods cited by *Sushrutacharya*<sup>2</sup> for the treatment of '*ekangsthit vata dosha*' i.e. *katigata-vata*.<sup>4</sup>

“एकाङ्गं च मतिमाञ्छङ्गैश्चावस्थितं जयेत् ॥१॥”

He claims that by performing a Raktamokshana, the doshas and vitiated Rakta Dhatu are released, alleviating the main signs and symptoms of Katigata-Vata. Six procedures are listed to remove the tainted blood: Prachanna Karma (superficial pricks), Sira Vedhan (Venesection), Shrungavacharana (horn application), Alabuavacharana (pumpkin application), Jalaukavacharana (leech application), Ghati Yantra Avacharana (clay pot application),<sup>2</sup>. Since alabuavhcharan is a traditional technique, we can safely replace it with the cupping method because it keeps track of the blood lost and is therefore determined to be a controlled practice. It can be laborious to preserve pumpkin for such treatments today, but for Raktamokshana we used the cupping technique. In this study, Raktamokshana utilizing the Cupping Method was used to treat individuals with Katigata-Vata symptoms.

#### AIM –

Evaluation of the efficacy of *Raktamokshana* by method of cupping in *katigatavata* with special reference to Low backache.

#### OBJECTIVES

- To test the efficacy of *Raktamokshana* in *katigatavata*
- To discover a novel and modified form of treatment for Low back pain seen in all groups of population.
- To validate the age-old practice of Raktamokshana

#### STUDY DESIGN

It is a single arm open study wherein Twenty patients of *katigatavata* were randomly selected from the OPD and IPD of the *shalyatantra* department and were enrolled in the research study.

#### STUDY POPULATION

The research was performed in 20 patients who had complains of *Katigata-Vata* for treatment in the *Ayurvedic* hospital. *Raktamokshana* was performed in the Kati (low back) area with the use of 18 no. needle and cupping method in three settings (0, 7<sup>th</sup>, and 14<sup>th</sup> day). Signs and symptoms were given scores based on their severity.

Points	Experimental group
Number of patients	20
Treatment	Cupping method
Follow up	0, 7, 14 <sup>th</sup> day
Mode of Administration	Local application
Duration of treatment	2 weeks

Criteria for inclusion:

1. Both gender: men and women
2. Age ranges 30-70 years of age

3. Patients complaining of low back pain
4. Patients with normal muscle power.

Criteria for exclusion:

1. Surgical history of spine surgery
2. Patients with an accidental injury to the back
3. Patients with HIV, HBSAG, etc.
4. Patients on aspirin or other antiplatelet medications
5. Patients diagnosed with severe neuro-vascular disease
6. Patients who are not willing to report.

### **Raktamokshana**

As described in Samhita,

Vitiated blood is expelled out in 2 ways<sup>2</sup>

- Shastrakrut-Prachanna Karma (superficial pricks), Sira Vedhan (Venesection)
- Ashastrakrut/Anushastra- Jalauka (leech application), shrung (horn application), Alabu (pumpkin application), Ghatiyatra (clay pot application)

To cure the ailment, small superficial pricks are made on the most tender point and an illuminated wick is placed over the skin and the pumpkin is placed over it. The available oxygen was used up by the small flame and eventually vacuum was created thus letting out the vitiated doshas along with the Rakta dhatu.<sup>2</sup>

“तत्र प्रच्छिन्ने तनुवस्तिपटलावनद्धेन

शृङ्गेणशोणितमवसेचयेदाचूषणात्, सान्तर्दीपयाऽलाब्वा जलायुका वक्ष्यन्ते ॥८॥”

Similar mode of treatment is explained in the Chinese medicine and the Unani fraternity, called the ‘Hijama’. There are various forms of cupping e.g. dry and wet cupping, light-medium-strong cupping, moving cupping, needle cupping, hot needle cupping, empty/ flash cupping, full/bleeding cupping, herbal cupping and water cupping.

### **PROCEDURE OF RAKTAMOKSHANA**

#### ***Purva Karma***

- ✓ Explaining the whole procedure to the patient and mentally preparing him to undergo the process.
- ✓ Informed Written Consent is acquired.
- ✓ Materials Required: Variable sizes of cups, Pair of disposable gloves, Cotton/ Gauze, Blade no 11/ 24 no. needle

#### ***Pradhana Karma***

- ✓ The patient was given a prone position.
- ✓ Patients were asked to identify the highest tender point, so the bloodletting site was chosen and sanitized with betadine + spirit.
- ✓ A slight incision or a prick was made, and the cup was mounted above it.

- ✓ The blood flow was observed for 10-15 minutes.
- ✓ After sometime the cups were removed and the skin was cleaned without leaving any blood stain behind.

**Paschat karma:** medicated oil is applied.



### Criteria for evaluation

Parameter	Gradation				
	0	+	++	+++	++++
<b>Back pain</b>	No pain	Intermittent mild pain on lower back movement	Continuous mild pain radiating to hip region	Continuous severe pain radiating to hip region	Severe / non bearable pain with numbness
<b>Painful movement</b>	Complete movements without pain	Can do Complete movements with mild pain	Incomplete movements with moderate pain	Incomplete movements with severe pain	Restricted movements with severe pain
<b>Stiffness</b>	No stiffness	Mild stiffness along the lower back	Moderate stiffness along the lower back	Severe stiffness with incomplete lumbar movements	Severe stiffness with restricted movements
<b>Tingling numbness</b>	No numbness	Mild tingling sensation without numbness	Mild tingling sensation with intermittent numbness	Moderate tingling sensation with continuous numbness	Severe tingling numbness over entire lower limb
Mild upto 6hrs, Moderate upto 8-12 hrs, Severe upto 24 hrs continuous					

**OBSERVATIONS:**

Subjective symptoms presented to patients were examined before and after *Raktamokshana* was done using the Cupping Method. Rating of the subjective criteria

Patient No.	Backpain	Painful Movement	Stiffness	Tingling Numbness
1	3+ to 1+	2+ to 0	2+ to 1+	1+ to 0
2	3+ to 1+	3+ to 1+	1+ to +	2+ to 1+
3	1+ to 0	2+ to 0	0	1+ to 0
4	3+ to 1+	3+ to 1+	0	2+ to 1+
5	3+ to 1+	2+ to 1+	2+ to 1+	2+ to 1+
6	2+ to 0	2+ to 0	0	1+ to 0
7	3+ to 1+	3+ to 1+	1+ to 0	2+ to 1+
8	1+ to 0	2+ to 1+	1+ to 0	2+ to 1+
9	3+ to 1+	3+ to 1+	1+ to 0	2+ to 1+
10	3+ to 0	2+ to 0	2+ to 1+	1+ to 0
11	2+ to 0	2+ to 0	0	1+ to 0
12	2+ to 1+	3+ to 0	1+ to 0	2+ to 1+
13	3+ to 0	3+ to 1+	1+ to 0	2+ to 1+
14	2+ to 1+	2+ to 0	1+ to 0	2+ to 1+
15	3+ to 0	2+ to 1+	2+ to 1+	2+ to 1+
16	1+ to 0	2+ to 0	0	1+ to 0
17	1+ to 0	2+ to 0	0	1+ to 0
18	2+ to 0	2+ to 1+	0	2+ to 1+
19	1+ to 0	2+ to 1+	1+ to 0	2+ to 1+
20	3+ to 1+	3+ to 1+	2+ to 1+	2+ to 1+

Based on clinical study, the observations were noted using the criteria of assessment and result were recorded as per case record form and conclusion was drawn on the basis of the observed results.

**OVERALL PERCENTAGE RELIEF ON ALL SYMPTOMS**

Sr. No.	Features	Mean Score		Mean Difference	Percentage relief
		BT Score	AT Score		
1	Backpain	2.25	0.45	1.8	80%
2	Painful Movement	2.35	0.55	1.8	76.59%
3	Stiffness	0.9	0.3	0.6	66.66%
4	Tingling Numbness	1.65	0.65	1	60.60%

Marked reduction in severity of complains was seen in the patients after the use of cupping method for *Raktamokshana*, which was significant. 80% relief was seen in backpain, 76.59% relief was seen in painful movements, 67% relief was seen in Stiffness and 61% relief was seen in Tingling numbness.

**DISCUSSIONS**

Cupping therapy is a primordial mode of treatment that has been in use in the management of a broad range of conditions. There are many forms of cupping therapy; however, **dry and wet** cupping are the



two main types. Dry cupping drags the skin into the cup without scarifications, while in wet cupping the skin is lacerated so that blood is drawn into the cup.

Acharya Charaka has described *Basti Karma*, *Raktamokshana* and *Agni karma* in the management of *Katigata-Vata*. *Raktamokshana* is also accepted as half of the therapeutic measure in *Shalyatantra* like *Basti* in *Kayachikitsa*. In *Panchakarma Chikitsa*, the vitiated doshas are purified whereas in *Raktamokshanavitiated Rakta Dhatu* is removed. The susceptibility of *Rakta* towards impurity is so versatile that the Acharya Sushruta declared '*Rakta*' as fourth *Dosha*<sup>3</sup>. Acharya Sushruta has mentioned that if the vitiated vata dosha has localized to a particular site then raktamokshana can be carried out with the help of *shrunga avcharana*<sup>4</sup>.

By *Raktamokshana* we let out vitiated *Rakta Dhatu* along with vitiated *Doshas* thereby relieving symptoms of *Katigata-Vata*. Similarly, in the present study vitiated *Doshas* along with *Rakta Dhatu* were let out by pricking with needle on affected area, the vacuum created by the *Cupping method* helps the vitiated blood to ooze out which gives spontaneous relief from symptoms of *Katigata-Vata* due to release of *Doshas* with the blood from the body.

Probable mode of action of cupping therapy:<sup>17</sup>

- Concurring to a Chinese research article, cupping therapy operates through creating specific variations in local tissue structures, consequently to local negative pressure in the cups used which stretches the nerve and muscle triggering an increase in blood circulation. This practice of healing cup therapy is non-invasive in nature and functions on the Chinese hypothesis that ailments are caused when the "qi" or "chi" or the life force of the body is interrupted because of some ailment. Cupping therapy works to reinstate this equilibrium and provide pain management.
- Another theory suggests that, cupping may provide counter traction to locally thereby relieving spasm. Spasm is the increased muscle tone in a localized part. In the presence of spasm there is capillary constriction which lessens the blood flow that curbs the flow of nutrients and oxygen to the area and retention of waste products that produces more spasm. This spasm can be broken by gliding cupping/Massage cupping stimulates the sensory nerve endings and production of mild pain; massage blocks the pathways of this pain. The mechanical movement stretches the individual fibers of soft tissue and reduces their tension. Helps in the removal of metabolic waste products as these substances are noxious to the tissue and irritate the free nerve endings, this result in reduction of pain. All these factors together aid to reduce the spasm.
- Gate Control Theory: Hypothetically we can say that Gliding cupping may interfere with pain signals pathway to brain, a process called the "gate control theory", according to experts, Pain impulses run toward the spinal cord and then up the cord and into the brain. It's only when they reach the brain that these impulses, are perceived as pain. When rub with gliding cupping, it sends other impulses along the same nerves. When all these impulses try to reach the brain through nerves, the nerves get clogged with signals. The results: Most of them won't reach the brain and if the pain signals do not reach the brain, won't feel pain. Thus, gliding cupping works by 'closing the gate' that pain impulses have to pass through.
- Increasing blood circulation theory aids in removing the inflammatory products and toxins out by cupping therapy which will reduce inflammation and pain and subside patients complain
- One of the controversial views concerning cupping therapy is that it has only a placebo effect. This placebo theory about cupping therapy will remain alive until a reliable and valid mechanism is found out. But this clinical trial definitely showed symptomatic relief which has a further scope in implying this in clinical practice.

**CONCLUSION:**

After using *Cupping method* as a treatment modality in patients with *Katigata-Vata*, it can be concluded that the use of *Cupping method* imparts measurable reduction in the intensity of the major symptoms of *Katigata-Vata*. *Cupping method* is the simple and effective treatment in adjunct to other treatment modalities for Back pain

**Acknowledgement**

1. Yogesh Sharma, PG Scholar Shalya Tantra Dept.,

A.S.S Ayurved Mahavidyalaya, Nasik, Maharashtra, India 422003

Contact no: 8770867132, Email address: yogeshsharma281680@gmail.com

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अलाबु कटुकं रुक्षं तीक्ष्णं च परिकीर्तितम् । तस्माच्छलेष्मोपसृष्टे तु हितं तदवसेचने ॥७॥

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