



Case Study

APPLICATION OF LEECH (*JALAUKA*) THERAPY ON THE MANAGEMENT OF *VATARAKTA* (GOUT)

Bera Pabitra Kumar

Assistant Professor, Shree Baba Mastnath Ayurved College, Rohtak, Haryana, India.

KEYWORDS: *Vatarakta*, Gout, Leech therapy, Pain.

ABSTRACT

Vatarakta is one type of *Vatavyadhi* caused due to *Vata* and *Rakta*. Here *Vata* and *Rakta* both are aggravated and vitiated by their own etiological factors and ultimately *Vayu* gets aggravated by vitiated *Rakta*. This complete process is known as *Vatarakta*. This disease can be compared with Gout in Modern. It is the commonest inflammatory joint disorder in which mainly small joints become swollen, tender, painful and stiff. Leech is one of the best treatment for *Vatarakta*. In this Study 10 cases of *Vatarakta* were selected from the OPD of Shree Baba Mastnath Ayurvedic College, Haryana and treated with leech therapy. Clinical criteria for assessment of result were *Sandhishula* (Joint pain), *Sandhishopha* (joint swelling), *Tvakvaivarnya* (erythema), and *Daha* (burning sensation). Leech application without any medicine were applied to the patient. Leech was applied over the most tendered and painful site in each case for 20-25 minutes. Same procedure repeated after one week for total period of 4 weeks. By applying leech in *Vatarakta* significant result were obtained in *Sandhishula* 60.8% improvement. In *Sandhishopha* significant 61.5 % result were obtained. Highly significant results were obtained in *Tvakvaivarnya* 63.38% and *Sandhidaha* 66.6%. No recurrence and no complications were found during the therapy. Further study in large sample should be carried out to establish the role of said therapy in particular type of disease.

*Address for correspondence

Dr Bera Pabitra Kumar

Assistant Professor,

Shree Baba Mastnath Ayurved

College, Rohtak, Haryana, India.

Email: drpkbera1984@gmail.com

INTRODUCTION

Vatarakta is great Medical problem throughout World. It is a great enemy in the society, because it distress the life of human being. In *Vatarakta*, both *Vata* and *Rakta* are aggravated and vitiated by their own etiological factors and ultimately *Vayu* gets obstructed by Vitiated *Rakta*⁽¹⁾. The chief Complain of the patient is severe *Sandhi Shula* (Joint pain) onset on *Hasta Pada Mulagata Sandhi* and then migrates to the other *Sandhi* in a way similar to *Akhuvisha* (Rat poison)⁽²⁾. It produces various Sign and Symptoms like *Ruka* (Excruciating pain), *Swayathu* (Swelling), *Daha* (Burning Sensation), *Shyaba Rakta Varna* (Blackish red in colour), *Sparsha Asahatwa* (Touch intolerance). The sign symptoms of *Vatarakta* reveals that it is a vascular disease in which several form of grave disorder like Burgers disease, Raynods phenomena, etc, may be included. The sign symptoms of gouty arthritis can be compared with *Uttanvatarakta*. So in many of modern Ayurvedic books, gouty arthritis has been considered as *Vatarakta*. Gout is a metabolic disease that most often affects middle aged to elderly men and post menopausal women. It is typically characterized by episodic acute and chronic arthritis caused by deposition of MSU crystals in joints and connective tissue⁽³⁾. The reason behind this is faulty dietary habits, lack of physical activities, faulty sitting, sleeping position, obesity, endocrinal and genetic functions. This disorders have been considered as a disorder in which residual disabilities remain for prolong

time or life time. It leads to tremendous financial burden to our society and quality of life is affected so badly.

According to modern treatment Anti inflammatory drugs, Gluco Corticoids, are administered to treat Gouty arthritis symptomatically which have many adverse effect particularly in Renal insufficiency and Gastro intestinal disorders, making the disease chronic after prolong usage. Therefore there is definite need to explore more efficacious and radical cure to this illness. Keeping all these views in mind, a Study was planned to evaluate the therapeutic effect of leech therapy (*Jalauka* treatment) in the case of *Vatarakta* (Gout). So many clinical studies on this same topic has been carried out and published in different journals⁽⁴⁾. but I tried to relieve acute condition of this disease without any medicine.

Purpose of the Study:

To prove the efficacy of leech therapy in *Vatarakta*.

Material and Methods

Study area : OPD of Shree Baba Mastnath Ayurved College, Asthalbohar, Rohtak, Haryana.

Sample Size : 10 Patients

Inclusion criteria

1. Patients age between 18- 50 Years
2. Patient not having any other Systemic Diseases
3. Bleeding time and Clotting time within normal limit

4. Patient having Haemoglobin 10 gm% or above.
5. Patient not on any Anticoagulant Drug
6. Serum Uric acid level less than or equal to 7 mg/dl

- Leech holding forceps
- Needle

Exclusion Criteria

1. Patient age below 18 & above 50 years
2. Patient with Haemoglobin less than 10 gm%
3. Patient having Uric acid level more than 7 mg / dl.
4. Patient with H/O Trauma.

Clinical Criteria

Subjective

Sandhishula (Join it pain)

No Pain	:	0
Occasionally pain	:	1
Moderate pain	:	2
Severe pain	:	3

Sandhi Shopha (joint swelling)

No oedema	:	0
Occasional oedema	:	1

Sandhivaivarna (joint erythema)

No erythema	:	0
Mild erythema	:	1
Moderate erythema	:	2
Severe erythema	:	3

Objective parameters

Investigations like Hb%, ESR, Uric acid

Treatment plan : Leech application was done each and every patient with 7 days interval for a period of 30 days. Total 4 sitting were performed. After leech application *Shatadhoutaghrita* was applied. No allopathy and herbal medicine was given during treatment.

Study Period: One month

Diagnostic criteria:

Subjective criteria: *Sandhishula, Sandhishopha, Tvakvaivarnya, and Daha.*

Objective criteria: haemoglobin, ESR, And uric acid were assessed

Dropout : Nil

Materials required for application of leech

- *Jalauka* or non poisonous leech 3-5 in number
- *Haridra* powder (*Curcuma longa*)
- Rock salt
- *Madhuyasthi* powder
- *Shatadhoutaghrita*
- Kidney tray
- Gloves
- Table

Method of Leech application

Active leeches should be take and applied on the most painful, affected part with the help of fingers. To make the leech more active medium sized Kidney tray with water is taken and mixed with about one spoon of *Haridra* powder.⁽⁵⁾

Mechanism of Action

The main pathology of this disease is *Marga Avarodh*. Leech removes *Srotodusti* as it first sucks the vitiated blood resulting pacification of *Vata*. Once *Vatadosa* in balance and vitiation is removed then pain and other symptoms will automatically relieved.

Case Study

10 patients of aged between 32- 48 years out of which 4 were female were selected randomly from the OPD of Shree Baba Mastnath Ayurvedic College, Haryana with complains of severe pain, tenderness, Redness, Swelling at the base of Great Toe. The patient were examined thoroughly and investigated Hb%, ESR, BT, CT, Uric acid level.

Leech application procedure:

- Supine position
- Most painful and tender body part were selected
- Leech applied over the affected part by picking up with the help of thumb and index finger with gauz piece.
- Leech starts to suck the blood
- If fails to attach itself to the skin then other leech is applied or puncture is made with a needle on the site to make it bleed and leech is reapplied

Observation of patient

The development of itching as well as pain at the site of sucking signifies that now leech has started sucking the pure blood. Therefore leech has to be removed by dusting the rock salt or *Haridra* powder.

Care of wound

As the saliva of leech contains hirudin, an anticoagulant, even after leech gets separated from the site, bleeding continues for a prolonged period. Therefore as soon as leech get separated, *Shatadhoutaghrita* and *Madhuyasthi* powder were applied over wound site.

Observation and result

All 10 patients completed the trial successfully. All received data were statistically analysed. Results obtained in subjective criteria are as follows :

Sub. Criteria	Mean BT	Mean AT	Difference of Mean	Percentage of relief	SD	SE	t value	P value
<i>Sandhishula</i>	2.3	0.9	1.4	60.8 %	0.69	0.22	6.12	<0.001
<i>Sandhishopha</i>	2.6	1	1.6	61.5%	0.51	0.16	6	<0.01
<i>Tvakvaivarna</i>	2.6	0.9	1.7	65.3%	0.82	0.26	7.05	<0.001
<i>Daha</i>	2.6	0.8	1.6	66.6%	0.63	0.16	6.9	<0.001

Objective parameters

Investigation	Mean BT	Mean AT	Difference of mean	Percentage of relief	SD	SE	t value	P value
Hb	11.3	10.5	0.8	6.15	0.94	0.30	1.863	<0.005
ESR	34	15.1	18.9	55	11.5	3.6	4.975	<0.01
Uric acid	13.6	13	0.6	4.4	5.42	1.71	0.25	<0.05

DISCUSSION

Vatarakta is a disease in which both *Vata* and *Rakta* are vitiated. *Raktamokshana* is included in *Shodhanachikitsa* by Acharya Sushruta and Acharya Vagbhatta looking into the importance of *Rakta* in the manifestation of disease. Application of leeches removes not only blood from the body but also injects biologically active substances which help to manage various ailments. According to Ayurvedic view, disease are occurred by vitiation of *Dosa* can get accumulated in *Srotas*, cause blockages and may lead to diseases. *Jalaukacharana* is one of the oldest method used in purification of the body by removing deeply seated toxins and pacifying *Vatadosa*.

As *Jalauka* lives in cold water and *Madhurasatmak*, so it is used in *Pitta vyadhi*. The proportion of *Pitta* and *Rakta* are very similar. So it can be used in *Raktadusti*.

As per modern view, secretion of salivary glands of non poisonous leech contain more than 100 bio active substance and has anti oedematous, bacteriostatic, analgesic and resolving action. It eliminates micro-circulation disorder, restores damaged vascular permeability of tissues and organ⁽⁶⁾.

By applying leech in *Vatarakta* significant results were obtained in *Sandhishula* with 60.8% improvement. In *Sandhishopa* significant 61.5% result were observed. Highly significant result were obtained in erythema and *Sandhidaha* 65.38% and 66.6% respectively. But Hb% and serum uric acid level show non-significant result. Highly significant results were obtain in ESR which is one of the inflammatory marker. Here leech has potent histamine like powerful vasodilator agent present in saliva which acts as an anti inflammatory and therefore reducing pain.

CONCLUSION

It can be concluded from current research project that.

1. Based on symptomatology Gouty arthritis can be compared with *Vatarakta*.
2. Leech therapy can be ideal management in acute gouty arthritis.
3. Study has not shown any side effect.

REFERENCES

1. Agnivesha, charak samhita, edited by vd. Harish Chandra Singhkushwaha, 2nd part, Varanasi, Chaukhamba Orientalia, reprint 2012, Chikitsasthana 29th chapter, shloka no 10-11, page no.773.
2. Sushruta, Sushruta samhita, edited by, Dr. Anantram Sharma, vol-1, Varanasi, Chaukhamba Surabharati Prakashan, Nidansthana 1st chapter, shloka no 48, page no.463.
3. Longo et al, Harrisons principles of internal medicine, vol 2, McGraw hill publication, 18th edition chapter 333. Page no 2837.
4. Mishra Devendra Prasad, Jalaukaacharan for the management of pain in Dustavrana (non healing ulcer), International Ayurvedic Medical journal, feb 2015, vol 3, issue 2 page 417 to 422 and ERHS Ediriweera, A review on leech application in Ayurveda and Srilankan traditional medicine, Jan, 2014, vol 2 issue 1, page 62 to 77.
5. Sushruta, Sushruta samhita, edited by Dr Anantram Sharma, vol-1, Varanasi, Chaukhamba Surabharati Prakashan, Sutrasthana, 13 chapter, shloka no 23, page no 98.
6. Dante.K.M (2007), Alternate treatment of wounds: Leeches Maggots and Bees, Medscape general surgery 01-05. Available at <http://www.medscape.com/view/article/563656>.

Cite this article as:

Bera Pabitra Kumar Application of Leech (Jalauka) Therapy on the Management of Vatarakta (Gout). AYUSHDHARA, 2016;3(5):842-844.

Source of support: Nil, Conflict of interest: None Declared