

CLASSICAL REVIEW OF JALUKAVCHARANA

¹*Dr. Parul Gautam, ²Dr. Monika Das and ³Dr. Akhilesh Shrivastav

¹MD Scholar, Dept. of Panchakarma, ²Guide and Associate Professor, Dept. of Panchakarma,

³Co-guide, Vice Principal HOD and Professor, Dept. of Rasshastra and Bhaisajya Kalpana.

Shubhdeep Ayurveda Medical College & Hospital, Indore (M.P.)

Article Received on
07 March 2023,

Revised on 28 March 2023,
Accepted on 19 April 2023

DOI: 10.20959/wjpr20237-27970

***Corresponding Author**

Dr. Parul Gautam

MD Scholar, Dept. of
Panchakarma, Shubhdeep
Ayurveda Medical College
& Hospital, Indore (M.P.)

ABSTRACT

Leech therapy is a precious gift of Ayurveda to the Modern medical science. Leech therapy is an ancient technique of blood-letting. Acharya Sushruta mentioned full Chapter on Jalaukavacharana in Sushruta Samhita. Jalauka (Leeches) are used for impure blood letting. The two types of treatment that are advised in Ayurveda are:-1). Shaman chikitsa and 2). Shodhana chikitsa. Shamana chikitsa means Internal medicine and Shodhana chikitsa means Elimination therapy. In Ayurveda, Panchkarma is one of the tools to treat many disorders. Acharya Sushruta included Raktmokshana in Panchakarma. The first description about the Jalauka (Leech) is mentioned in Sushruta Samita. The term "Jalauka" (Leech) means, a creature whose life depends on

water. Jalauka is the only Shodhana treatment that can be done on Children, Ladies, weak, old, rich and fearful person. It is mainly indicated for Vitiated Pittaja and Raktaja doshas. Due to its sophisticated nature. The knowledge of Jalaukavacharana is as old as the Ayurveda. It is described in Rigved, kaushik sutra, VinayPi-tak, CharakSamhita and Sushruta Samhita. Sushruta give a detailed description of the Leech and Leech therapy. Sushruta describe the method of application of leech in details dividing it into three parts namely Purvakarama, Pradhankarama and Pachchatkarama.

KEYWORDS: Jalaukaavcharana, Panchakarma, Raktaja roga, Leech, Svisha, Nirvisha Jalauka, Blood letting.

INTRODUCTION

Raktamokshana (blood letting) is Shodhana procedure included in Panchakarma. It is described by Acharya Sushruta. Various methods by which Raktamokshana can be done are

Shring, Jalauka, Alabu and Siravedh. Out of them Jalaukaavcharana (Leech therapy) is easy and safest method. It is called the "Paramsukumarupaya".

Jalauwakacharan is an ancient procedure in which the methods of bloodletting with the aid of leeches are explained as the father of surgery by Acharya Sushruta. Three doshas, vata, pitta & kapha, according to Ayurveda, Three are responsible for (vitiating) role all over. The manifestation of disease by these three doshas, but according to Sushruta, the fourth dosha is Rakta, this Rakta Dosha is the product of skin condition (kushta), joint condition (sandhigat), there is a need for the removal of vitiated Rakta Dosha, called Raktmokshana or Raktvistravana, to release the blood.

A creature having its habitat and life as water is Jalauka. A creature whose life (Ayu) or whose longevity is depends upon water, whereas the derivative meaning of the term Jalauka is based upon the fact of their dwelling ("oka" – dwelling place) in water (Jalam). Jalauka is having various names which are – Jalayuka, Jalaua, Jaluka, Jalaluka, Jaalalauka, Jalita, Jaloka, Jalauga, Jalatani.

Raktamokshana can be done by Jalauka in those who are rich, weak, fearful, sophisticated, old & in the case of ladies and children. This is mildest in all the methods used for bloodletting, for which it is called the best Paramsukumarupaya.

In Ayurveda medicines are indicated for both purposes prevention & cure there are two types of treatment, advised in Ayurveda -

1. Shamana (internal medicine)
2. Shodhana (internal purification)

Leech therapy (Jalaukavacharana) takes a pride of place in the list of Panchakarma like Shodhana Chikitsa from the sunrise of medical history.

Acharya Sushruta has described Jalauka under the heading of Anushastra (Para sharp instrument).

According to Ayurvedic texture, only one sort of Leech is found as medicinal use, which exists in water. Jalaukavacharana is claimed to be the supreme therapy because of its high effectiveness in curing blood-related disorders. It is much safe and less complicated natural

process, therefore, indicated even for the king, rich, old, fearful, weak, women and the people of tender nature.

History

1. The knowledge of Jalaukavacharana is as old as the Ayurveda.
2. Reference regarding the eradication of the disease form "Usniha" (arteries) is mentioned in Rigveda. This process mostly resembles Raktamokshana.
3. The method of application of leech for blood-letting is mentioned in Kaushika Sutra which is a sutragrantha of Atharvaveda.
4. Acharya Charaka has enumerated Raktajaroga and their treatment by Shonitavasechana., and various means of Raktamokshanais also mentioned
5. Acharya Sushruta has dealt in detail with Raktamokshana and its type. He described a special chapter for Jalaukavacharana. The types of Jalauka, their habitat, etc. have been described the first time in detail in this chapter.

Classification of Jalauka

Jalauka

The word Jalauka is a compound word with two components- Jala + Ayu., ie the animal having water as its life The term Jalauka can be divided into Jala +oka which means water dwelling animal.

Jalaukaavcharana (Leech therapy) is a procedure for blood letting widely used now a days. This therapy is used in disorders related to Raktaja and Pittaja. Acharya Sushruta has classified Jalauka into two main categories.

- 1) Savish Jalauka (Poisonous leech).
- 2) Nirvish Jalauka (Non Poisonous leech).

There are Six Savish Jalauka and Six Nirvish Jalauka.

a) Savish Jalauka

- 1) Krishna :- Large headed, black in color (similar to that of powder of " Anjana").
- 2) Karbura :- Grey, broad like "Varmimatasaya" (Fish). Abdomen is segmented.
- 3) Algarda :- Hairy, with prominent sides, black mouth.
- 4) Indraudha :- Have linear marks and thus appear in varied colors like that of Rainbow.
- 5) Samudrika :- Blackish yellow in color and are spotted and possess the feature of a Flower.

- 6) Gochandana :- Lower part is divided into two halves like scrotum of bull and have very small mouth.

b) Nirvish Jalauka

- 1) Kapila :- Have their sides colored like Manashila (Real gar) and their dorsal surface are slimy and coloured like Moonga (Green gram).
- 2) Pingala :- Reddish brown with round body and moves quickly.
- 3) Shankumukhi :- Brown in color like (Liver), have pointed mouth and sucks the blood quickly.
- 4) Mushika :- Unpleasant odour and resembles the shape of mice and brown in color.
- 5) Pundrika Mukhi :-Broad mouth like lotus and greenish colour like Mudga.
- 6) Savarika :- 18 Angula long and used to treat cattle, reddish pink color like lotus petal.

For the treatment purpose Savish Jalauka are contraindicated as it leads to Jwara (fever), Daha (burning sensation), Vamana, kandu, Bhrama, Shotha (swelling).

Nirvish Jalauka are used for treatment.

Habitat and Origin of Leeches

Yavana, Pandya, Pautan are the areas where non- poisonous leeches are found. Leeches found in clear water with plants like Utpala, Kumud, Pundrika are non- poisonous in nature. On the other hand, Leeches originating from putrefying Urine and faeces of poisonous insects and that lives in contaminated water possess Poisonous property.

Anatomy. Leech attaining a size of 10 - 15 cm in length but a fully grown or mature specimen may be 30 -35 cm in length. A small sucker contains the mouth at its anterior end and a large at it's posterior end. All Leeches have 34 body segments. Leech has a soft, smooth, slimy Worm form elongatedand dorso ventrally flattened body. It is very flexible and can be Stretched, Contracted and Dilated. It's secretion from skin is mucus in nature and abundant quantity of mucus will be secreted from its skin. The color of dorsal surface is bright with green shade dorsally and orange red ventrally with longitudinal lines. Whole body is divided into 6 regions.

Importance of Leech therapy

Both Acharya Sushruta and Vaghbata included leech under Para Surgical procedure. Acharya Sharangdhara says in case of emergency, Leech can be applied even in Contraindicated person for Raktamokshana.

Leech unfit for use

Leeches which are ugly in appearance, slow in movement, sucks very little blood, very thick and that are poisonous in nature should be rejected.

Ayurveda Review

Synonyms- Jalauka, Jalauka, Jalauka, Jalaragi, Jalayuki, Jalika, Jalsika, Jalajantuka, Veni, Jalalaka, Jalookasa, Jalookasa, Jalawkasi, RaktaPayani, Rakta Sandamshika, Teekshna, Vamini, Jalahjivani, Raktapata, JalaSarpini, JalaSoochi, Vedine, Jalatanou, Jalauka, Jalapatmika, Jalika and Jalaluka

Leech Therapy in Ayurveda Leech therapy known as “Jalaukavacharan” in Ayurveda is created by the addition of leech therapy Jalauka and Avacharana are two words. The etymological definitions of the two phrases are accompanied by

Length of Jalouka

Maximum length of Jalouka 18 Anguli has been registered, large Jalouka can only be used in animals such as horses, elephants, etc. for blood letting. Anguli Pramana Jalouka is recommended for humans 4, 5 and 6. Geographical distribution of Jalauka in ancient days. The Nirvisha Jalouka was available in Yavana (Turkashana, currently taken as Turkish) at the time of the Sushrutasa era, Pandya (southern region of the country Deccan), Sahya (hill station near the bank of the Narmada river), Poutana (Mathura).

INDICATIONS AND CONTRAINDICATION**Indication**

Leeches are sheet in nature so commonly used in pit-taj and raktaj disorders. Leeches first suck the impure blood then the pure so when the patient feels pricking pain and itching over the bite place leech should be removed. Vidradhi (Abscess), Gulma, Acute venous congestion (Abdominal swelling), Arsha (Piles), Kushtha (Skin disease), Vatarakta (Gout), Krostrukashirsha (Infective arthritis), Osteoarthritis Arthritis Kantharoga (Goiter), Netraroga (Eyediseases), Granthi (Nodular swelling), Arbuda (Cancer), Shlipada (Filaria), Vidarika (Crack), Vi-shadamshtra (Insectbite), Visharpa (Erysipelas), Siro-roga (Diseases of scalp), hemorrhoid., Lipodermato-sclerosis, Vicharchika.

Contraindications

- Sarvangashotha (Generalized edema)

- Udarroga (abdominal diseases)
- Shosa (Tuberculosis)
- Ksheena (Emaciation)
- Garbhini (Pregnancy)
- Pandu (Anemia).

Procedure of Leech application (Jalaukaavcharana vidhi)

The leech application procedure is carried out in three steps.

- 1) Poorvakarma (Pre - operative)
- 2) Pradhana karma (Operative)
- 3) Paachata karma (Post-operative)

Poorva karma (Pre-operative):- It includes following steps.

a) Collection and preservation of Leeches b) Shodhana of Leeches c) Preparation of Patient.

a) Collection and preservation of Leeches

In Sushruta samhita, collection of Leech is described in detail. In order to collect the Leeches, the fresh meat of dead animals, milk must be applied on thigh of human and then place the thigh in water for some time, Jalauka will attract and attach with the thigh. Then drop out the thigh from the water and remove the attached leeches with the help of "Saindhava Lavana" and collect them in a fresh pot filled with fresh water. Powder of moss, aquatic tubers should be given for feeding. On every 3rd day water should be changed and after every Seven days pot should be changed.

b) Shodhana of Leech

Medicinal Leeches should be carefully identified and properly purified before using for blood letting therapy. A paste is prepared by mixing Mustard, Water and Turmeric (Rajani, Haridra). This paste is applied on body of leech. Then leech should be kept in a Vessel filled with water for about 48 minutes, until they get rid of their exhaustion. Leeches should be kept in pure water after purification. By purification, the appetite of Leech increases and enhance the desire of sucking blood and locomotion.

c) Preparation of Patient

Patient general health is examined. Snehana and Swedana therapy should be done on previous day, depending upon the patient's condition.

Pradhan karma (operative)

Patient should be kept in comfortable position, so that affected part exposes comfortably. If affected part is woundless then scrap that part with Mritika (soil) or Gomaya Churana in order to make the part (Virukshana). The purified leeches are applied to the affected site. Physicians has to watch whether the applied leech sucks the blood or not. If the Leech didn't suck the blood then a drop of milk or blood is applied at the site or scratch the site with the help of scalpel for oozing of blood, to persuade the leeches to suck blood. If the leech doesn't suck blood even by above methods then another leech should be applied on the area. When the leech start sucking the blood, it sucks impure blood first. It elevates it's neck that resemble with the shape of a Horse Shoe. Depending upon the necessity 5 - 8 leeches are applied at a time. Once the leech take hold, then cover it with wet gauze. If the Patient feels pricking pain and itching at the site where Leech is applied, it indicates that they are sucking unaffected (healthy) blood. Then remove the Leech by pouring Saindhav Lavana (Rock salt) at it's mouth.

Observation of leech during blood sucking

The leech body appears during the sucking of blood following signs

- a. In the central portion of the body, incremental distension.
- b. The sense of scratching and burning at the bite spot.
- c. Pulsation can be noticeable on the body of the leech.

Leech Removal: After 30-70 minutes, the leech is extracted by itself or by adding turmeric powder to the leech. Mouth of the leech.

Precaution during Leech Application

1. Bleeding and the patient's clotting time should be normal.
2. Gentle leech handling.
3. With wet cotton, cover the leech.

Paschat karma (Post-Operative)

After completion of therapy, the attention should paid towards Patients wound and leeches.

- a) **Patient care:-** After detachment of leech, there is a triangular wound created by mouth of leech. Blood pours out from the wound. Blood is allowed to flow from wound for few minutes. The bleeding from the wound should be controlled by applying tight bandage with the use of Yashtimadhu or Turmeric powder.

b) Care of Leeches:-Leeches that are applied to the area undergoes the Vamana process(Emesis). So that the same leech can be applied further to a patient after a period of seven days. For the vamana procedure of leech, apply Saindhav lavana on its mouth and pour Rice water on leech body. Pressing of leech from Caudal to Front end is required for proper emesis. The leech vomits all the blood. If the leech are empty stomach after Vomiting, they move freely in water in search of food. If the leech sinks in water and doesn't move, the Physician should understand that the removal of sucked blood from Leech is incomplete and steps should be taken to expel the remaining blood by making the leech to vomit again. An incurable disease named "Indramada" develop in leeches if the sucked blood didn't expel properly. After purification of leeches, these leeches are kept in separate Jar or container with water in it. A tag is attached to the container with the date on which Leech is used. Same leech can be applied further to a Patient after a period of Seven days.

CONCLUSION

Leech or Jalaukavacharan therapy is an ancient technique of ayurvedic blood letting that has the enormous ability to treat conditions of inflammatory, ischemic and infectious diseases. Saliva leech contains a variety of bioactive components that have antiinflammatory, anticoagulant, anaesthetic, vasodilator, anaesthetic, antibiotic and antioxidant properties that function in various conditions of illness via multiple mechanisms.

In Ayurveda, Shodhana Chikitsa has given more importance than Shamana Chikitsa because it removes the disease from its root, but it is contraindicated in garbhani, virdha, balak and sukumar except for Jalaukaavcharan. It is mainly indicated in the case of raktaja and Pittaja originated disease. No doubt this the procedure is time-consuming, but it is with the least invasive procedure than other surgical procedures with excellent results.

REFERENCES

1. Sushruut Samhita: SutraSthana 13/9 Hindi commentary by Kaviraja Ambika DuttShastri, 11th Edition 1997, Chaukhambha Sanskrit sansthan, Varanasi.
2. Sushruuta Samhita: Sutra Sthana 13/3 Hindi commen-tary by Kaviraja Ambika Dutt Shastri, 11th Edition 1997, Chaukhambha Sanskrit sansthan, Varanasi.
3. Sushruuta Samhita: Sutra Sthana 13/8 Hindi commen-tary by Kaviraja Ambika DuttShastri, 11th Edition 1997, Chaukhambha Sanskrit sansthan, Varanasi.

4. Sushruuta Samhita: Sutra Sthana 13/15-16, 35/4 Hindi commentary by KavirajaAmbikaDuttShastri, 11th Edition 1997, Chaukhambha Sanskrit sansthan, Varanasi.
5. Charaka Samhita (Hindi) Sutra sthana 24 chapter by Dr. Gorakha Natha Chaturvedi, vol - 2, Edited by – Ra-jeswaradattasastri, chaukhambhaBharti Academy, 2004.
6. Charaka Samhita (Hindi) Chikitsa 7/52 by Dr. Gorakha Natha Chaturvedi, vol -2, Edited by – Rajeswaradat-tasastri, chaukhambha Bharti Academy, 2004.
7. Charaka Samhita (Hindi) Charakchikitsa 28 chapter by Dr. Gorakha Natha Chaturvedi, vol -2, Edited by – Ra-jeswaradattasastri, chaukhambhaBharti Academy, 2004.
8. Astanga Hridaya (Hindi) Sutra Sthana 26/36 by Ka-virajaAtrideva Gupta, Edited by Vaidaya Yadunandana Upadhyaya, Publisher- Chaukhambha Sanskrit Sansthan 3rd Edition, 2005.
9. Astanga Hridaya (Hindi) by Kaviraja Atrideva Gupta, Sutra Sthana 26/35 Edited by Vaidaya Yadunandana Upadhyaya, Publisher- Chaukhambha Sanskrit Sasthan 3rd Edition, 2005.
10. Asthanga Samgrah Sutra Sthana 35/4 Hindi Commen-tary by Ravi Dutta Shastri Chaukhambha Sanskrit Sasthan.
11. Asthanga Samgrah Sutra Sthana 26/36 Hindi Com-mentary by Ravi DuttaShastri Chaukhambha Sanskrit Sasthan.