

JALAUKAVACHARAN (LEECH THERAPY): A CONCEPTUAL STUDYN. V. Borse¹, Mali Sandip Matu²¹ Professor, Shalyatantra Dept., Tilak Ayurved Mahavidyalaya, Pune, Maharashtra, India² Assistant Professor, Shalyatantra Dept, Sumatibhai Shah Ayurved Mahavidyalaya, Hadapsar, Pune, Maharashtra, India**ABSTRACT**

Raktamokshana therapy is one of the panchkarmas of Ayurveda and is performed to eliminate the toxins from the bloodstream. Jalauka(Leeches) are worms with suckers on each end. These are of two types savisha and nirvisha. Blood vitiated by pitta should be removed from the body by using Jalauka (Leeches) because they are cold and born in water. Jalaukavacharan has shown drastic result in psoriasis, eczema, osteoarthritis, cellulitis etc.

KEYWORDS: Jalauka, hirudin, Raktamokshana.

INTRODUCTION- Ayurveda, the great medical science of India is now practiced worldwide. But when the challenges of resistant causes are alarming day by day Ayurveda is the only hope. According to Acharya Sushruta the *panchkarmas* are *Vamana* (Emetic), *Virechana* (Purgative), *Basti* (Enema), *Nasya* (Instilling medicines through nose) and *Raktamokshana* (blood-letting). Among these five that involved with the removal of vitiated blood due to *vata pitta* and *kapha* is called *Raktamokshana* (Bloodletting). According to *doshas* it is classified as 1. *Vata dosha*-using *Shrung* (Horns of bull), 2. *Pitta dosha*- using *Jalauka* (Leeches), 3. *Kapha dosha*-using *Ghatyantra*. *Jalauka* (Leeches) are worms with suckers on each end. These are of size from a half inch to ten inches long. Color is brown or black. There are two species of therapeutic medicinal leeches- *hirudo-medicinalis* and *hirudo-mychaelsenii*. This is a segmented worm of phylum- Annelida. It has two suckers, one at each end, caudal (back end) and rostral (front end). Front end with three sharp jaws that leaves a `Y` shaped bite. During feeding it can suck around 5

to 15 ml. of blood. Saliva contains several bio-active substances including anticoagulants, anesthetics, vasodilators and prostaglandins. Hirudin a potent anticoagulant inhibits conversion of fibrinogen to fibrin, thus prevents blood clotting.

Nirukti: Since *jala* (water) is their life or they are accustomed/habituated to water they are called *Jalauka* ⁽¹⁾.

Types ^(2,3): They are of two types. 1. *Savisha* (Poisonous), 2. *Nirvisha* (Nonpoisonous).

1 Savisha (Poisonous):

1. *Krishna* (Black): They have the color similar to that of powder of *Anjana* (Antimony) with big head.
2. *Karbura* (Grey): They are broad like *varmimatsya* (a kind of fish). Their abdomen is segmented and bulging.
3. *Alagarda*: They are hairy with big flanks and black mouth.
4. *Indrayudha*: They have stripes on their back.
5. *Samudraka*: They are slightly blackish yellow; have marks resembling many flowers on their body.
6. *Gochandana*: Their lower part divided into two halves like the scrotum of bull

with very small mouth. If bitten by these six kinds of leeches, there will be profuse swelling, itching, fainting, fever, burning sensation, vomiting, toxicity and debility. Then *Mahagada* (Antipoisonous recipe) should be used in the form of drink, external application, nasal medication etc. Bite by *Indrayudha* leech is incurable.

2. *Nirvisha* (Non-poisonous):

1. *Kapila*: They have flanks as though coloured with *Manashila* (slightly red). Their back is unctuous coily and has the color of *Mudga* (Green gram).
2. *Pingala*: They are slightly red, have round body, brown color and move quickly.
3. *Shankumukhi*: They have color like the liver (brown) and suck blood quickly due to their long and penetrating mouth.
4. *Mushika*: They are similar to mice in shape and color and have unpleasant odor.
5. *Pundarikamukhi*: They have color like *Mudga* (Green gram). Mouth resembling the lotus (broad like lotus flower).
6. *Savarika*: They are unctuous (oily), have the color of lotus petal (slightly red) and are eighteen *angula* (36 cms.) long. These *Nirvisha* leeches are found in provinces like *Yawana* (Arab countries), *Pandya* (South India), *Sahya* (Central India) and *Pautma* (region around Mathura in Uttar Pradesh).

Characteristics⁽⁴⁾:

1. *Nirvisha*:

1. They have large body.
2. They are strong.
3. They drink blood quickly.
4. They are voracious.
5. They are born from putrefied (decayed), *Padma* (Lotus), *Utpala* (White lotus), *Nallina* (slight red lotus), *Kumuda* (

lily), *Saygandhika* (highly fragrant lily), *Kuvalaya* (red lily), *Pundanke* (very white lotus), *Saivata* (algae).

6. They are live in clean water.
7. These live in places where more amount of fragrant water is found.
8. They do not feed on dirty foods.

2. *Savisha*:

1. They are born from the urine, excrete and putrefied (decayed) dead bodies of poisonous fish, insects, worms and frogs.
2. They live in dirty water.

Rearing of leeches: These should be caught with moist leather. Then they should be placed in a big pot containing water of ponds or tanks along with their silt. Algae, dried meat of aquatic animals and tubers, all made into powder should be put into water to serve as food. Straw leaves of aquatic plants to serve as bed for sleeping. The water in the pot and food materials should be changed once in every three day and they should be transformed to another pot after every seven days.

Leeches unfit for use: Leeches which are big in middle (abdomen), ugly in appearance, very thick (in with), slow in movement, which do not bite, drink very little blood and poisonous are unfit.

Jalaukavacharan (Method of leech applying on the body)⁽⁵⁾:

Poorva karma (Before procedure):

1. Proper *snehana* (oleation) and *swedana* (sudation) of the patient.
2. The patient should be made either to sit or lie down.
3. Part preparation: Cleaning of place by turmeric water. Patient's skin is cleaned thoroughly with soap and water.
4. Purification of leech by pouring the leech in *haridra* powder (turmeric powder) and water.

Pradhan karma (Main procedure):

1. After knowing that leech is free from fatigue, picked up and made to catch (bite) the place of the disease.
2. Smooth, white moist cotton wool or piece of cotton cloth should be put on it and its mouth moistened with a drop of water after, if it does not bite, a drop of milk or blood should be put at its mouth or even a small incision may be made on the patient body.
3. When it makes its mouth in the shape of a horse's hoop, and lifts its neck then it is to be understood as biting.
4. When it sucks blood, cover the leech with wet cotton.
5. With the appearance of pricking pain and itching at the site of bite, it to be understood that it is sucking pure blood. When it begins to suck pure blood it should be removed. If it does not leave off easily, then powder of *saindhava* should be sprinkled on over its mouth.

Paschat karma (After procedure):

1. After it falls off, its body should be sprinkled with rice flour, its mouth bathed with oil added with salt, held (lifted up) at its tail end by the thumb and fingers of the left hand and its body kneaded slowly in the downward direction with the thumb and fingers of the right hand and make it vomit all the blood it has consumed, till signs of complete vomiting appear.
2. Signs of complete vomiting is that it moves fastly to and fro in search of food when put into the vessel of water. Those which is not vomited completely, develops an incurable disease known as *Indramada*.
3. After it became completely vomited it should be put into the pot.
4. The patients are where the leeches have been put should be examined for local infection.

5. The minor wounds can be cleaned and washed.

Indications: Eczema, Psoriasis, Osteoarthritis, Rheumatoid arthritis, Cellulitis, Sciatica, Varicose veins, Diabetic wound, Boils and abscesses, Alopecia, Herpes zoster etc.

Safety and adverse effect of Jalaukavacharan: Jalaukavacharan rarely ever leads to serious complication. The local pain of treatment and short term itching are side effects.

Local pain during treatment: Perceptions of the local pain varies with patient. Most patients describe a local dragging pain that occurs immediately after the leech bites and persists for around one to five minutes. As more and more saliva is introduced into the tissues the anesthetic effect of leech saliva begins to take effect. The perceived intensity of the leech bite varies from one individual to another. A slight rhythmic pulling sensation is usually noticed for the first one to three minutes after the start of feeding.

Local itching: Transient itching at the site of leech bite in the first few days after treatment is very common and not consider as allergic reaction.

Blood loss: A common degree of blood loss is common. Improper handling, early stoppage of after bleeding from the wound. Blood letting should be done according to strength of the patient, severity of the disorder or severity of the disease or till body is well purified or considering the site of disease such as in smaller site little blood is taken out while in bigger one more blood letting is required⁽⁶⁾.

CONCLUSION: Jalaukavacharan (Leech therapy) is very useful in many acute and chronic disorders without side effects. So time demands for research in this therapy to prove in scientific way. This conceptual

study may help to researchers for their research on this leech therapy.

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