LEECH THERAPY- AN AYURVEDIC PARASURGICAL PROCEDURE

*Dr. Anil Kumar
Consultant, Department of Shalya Tantra, Bapu Ayurvedic Medical College and Hospital, Mau, Uttar Pradesh.

ABSTRACT
The first description about the use of Jalauka (Leech) in different diseases is mentioned in Sushruta samhita written by Sushruta. It is an easy and non-invasive method of bloodletting in which impure blood is sucked out by leech. In Ayurveda Panchkarma is one of the protocols to treat many disorders and Sushruta includes Raktmokshan as one of its part. Leech therapy is considered to be one of the shodhan chikitsa effective in eliminating raktpittaj dosha. Raktmokshan is of 2 types i.e Shashtrakrit (surgical) and Ashashtrakrit (non surgical). Leech therapy (Jalaukaavcharan) comes under later one. The therapy is widely accepted, tested and used in the field of modern medicine as well and finds a place in microsurgery. The following article presents a brief review on the Leech therapy.

KEYWORDS: Leech, Raktamokshana, Pancha karma, Savisha, Nirvisha Jaluka.

INTRODUCTION
Leech therapy is widely used by Ayurvedic as well as modern Physicians. It has gained greater attention globally now due to its use in the treatment of several medical and surgical disorders. Historical documentation of leech is found in our classics from the very past and it is recognized both as a parasite and a therapeutic agent. Leeches are invertebrates. They are segmented worms which belong to the phylum Annelida. Many ancient people including Indians, Greeks, and Europeans practiced leech therapy in their era. Saliva of leech contains several bio-active substances i.e anticoagulants, anesthetics, vasodilators and prosta-glandins. Hirudin a potent anticoagulant inhibits conversion of fibrinogen to fibrin, thus prevents blood clotting. Sushruta has dedicated the whole chapter to leech and its applications. Panchkarma is used to eradicate vitirated dosha and Sushruta has included
Raktmokshan as one of its part. Pitta and Rakta are having Ashrayaashrayee Bhavas and the best way to treat pittaj roga is Raktamokshan by Jaloukavacharan (Leech Therapy).

Jaloukavacharana is one among the bloodletting therapies used in Atyanta Sukumaras, Twak Vikaras, Sthanik Rakta Dushti etc.

**Etymology of Jalauka**[1]

Jalamsyuritijalayuka

This word has two components Jala and Ayuka which means ‘one which dwells only in water’.

**Classification of Leeches in Ayurveda**[2]

Sushruta described 12 kinds of Jalauka. Further he divided them into 2 types:

1. **Savish** (poisonous)
2. **Nirvish** (non-poisonous)

**Savish Jalauka**

1. Krushna- These leeches are black like powder of Anjana (collyrium) and have broad head.
2. Karbura- These leeches are elongated like the Varuni fish, having cleft and elevated ventral surface.
3. Indrayudha- These leeches have raised linear marks and thus appear in variegated colors like those of a rainbow
4. Algarda- These are hairy, with prominent sides and black mouth.
5. Samudrika- These are slightly black and yellow in color and are spotted, and possess the feature of a flower.
6. Gochandana- These leeches appear to be divided in their hind part like the scrotum of a bull and have a pin-pointed mouth.

**Nirvish jalauka**

1. Kapila- These leeches have their sides colored like Manahshila (realgar) and their dorsal surface are slimy and colored like Munga (green gram)
2. Pingala- These are slightly red or brown in color, have round bodies and move fast.
3. Shankhmukhi- These resemble the color of liver, are fast suckers and have tapering mouth.
4. Mushika- These leeches have their color and shape similar to those of a mouse and possess a bad odour.

5. Pundrika- These are colored like Mudga (Moong pulse) and have their mouth like lotus petals.

6. Savarika- These leeches are slimy; colored like Lotus leaves and are eighteen finger breadths in length.

**Habitat and origin of leeches**[3]

Yavana, Pandya, Sahya and Pautan are the areas in India where non poisonous Leeches are found. Leeches that live in these areas are with bigger body (*Mahasharir*), stronger (*Balwatya*), rapid suckers of blood (*Shigrapainyo*) and hyperphagic (*Mahaashana*). Leeches which originates from clean and purifying aquatic plants i.e Utpala, Nalina, Kumudu, Saugandhika, Kuwalaya, Pundarika and dwell in clear water are non-poisonous. Leeches originating from putrefying urine and faeces of poisonous fishes, frogs and insects and live in dirty contaminated water possess poisonous variety.

**Classical indications of Raktmokshan**[4]


**Contraindication of Leech therapy**

According to *Ayurveda*, leech application (bloodletting therapy) should not be performed in patients suffering from generalized anasarca (*Sarwanga Shopha*), cachexia (*Kshina shosha*), Anaemia (*Pandu*), ascites (*Udara*) and also in pregnant women (*Garbhini*).

**Jalaukavacharan Vidhi**

*Raktavistravan* by means of *Jalouka*:

**Purvakarma**

a) Collection and preservation of leeches,

b) Examination of patient,

c) Shodhana of leech,

d) Preparation of patient.
Pradhana karma[5,6,7]
Prepare the patient for therapy already discussed. As leeches are too much Snigdha and Picchala, It is better to wear gloves to catch them. Patient for Jalaukaavacharan should be kept in sitting or lying down posture. If the affected part is woundless, then make it Ruksha by scrapping with Mrita(soil) or Gomaya Churna. Then the leech should be applied by Haridra and Sarspa kalpa and dipped into the pot having clean water. After getting assured that the leech is free from Mada, leech is applied over affected part. If on the affected part leech doesn’t hold or suck, either milk drop should be put over or a small scratch should be made so as to drain a little drop of blood. If leech doesn’t suck even by above methods then another leech should be used. As soon as the leech starts sucking, it should be covered with white cloth or gauze piece, keeping its face open. Continuously pour the water drop by drop to keep the leech cool. The middle part of leech will swell when it starts sucking the blood. The leech sucks impure blood first, if the patient experiences prickling pain and itching at the site, it indicates the leech is sucking pure blood, and this is the time to remove leech by pouring Saindhava Lavana at its mouth.

Paschat karma
After completion of the therapy, attention should be paid towards the patients’ wounds and the leeches.

Patient’s care[8]
According to Sustruta, after assessing the amount of bleeding, the wound should simply be anointed with Shatdhaust ghee or compressed with a piece of gauze. Then, the wounds caused by the leeches are rubbed with honey. Otherwise, cold water should be sprinkled over it or ingredients with properties of kashaya, Snigdha, Madhura, and Sheeta Pradeha should be applied over the wounds.

Care of Leeches[9]
According to Ayurveda, though leeches suck, they are not able to digest the vitiated blood. An incurable disease named Indramada develops in leeches if this blood is not removed from their body. Hence, the leeches are made to excrete the sucked blood. Removal of blood can be done in different ways. According to Sustruta, the fallen leeches should be massaged with powdered rice, mouth with oil and common salt and then its hind portion should be held by the left hand in between the thumb and fingers of the physician. Now leeches should be gently squeezed from tail towards mouth (anulom) with the thumb and fingers of the right
hand. If the leeches are empty stomached, they move freely in search of food. If the leech sinks in the water and does not move, the physician should understand that the removal of sucked blood from leech is incomplete and steps should be taken to remove the remaining blood by making the leech to vomit again. After removing sucked blood, these leeches are kept in jar with water. These leeches can be used for the therapy again after seven days in the same patient.

Therapeutic uses of Leech therapy

*Raktmokshana* is indicated both in healthy and diseased individuals. In healthy person it is done as a prophylactic use and in diseased as a therapeutic use. *Jalauka* is used to treat *Pittaj* disorder especially due to its properties as described by Sushruta. As *Rakta* and *Pitta* have similar properties, hence *Rakta* disorders are best treated with leech therapy. Where there is congestion of blood, abnormal coagulation within body and lesion involving deeper structures of the skin is well treated by this therapy and also people with delicate constitutional like children, aged person and person who scares of bleeding are benefitted by this therapy.

Complication of leech therapy

- Bleeding - Controlled by applying pressure bandage.
- Allergy to leeches or anaphylactic reactions has been reported also.

CONCLUSION

Leech therapy is one of the most important therapeutic procedures described in *Ayurveda*. The therapy is widely accepted and has been proven to be effective in various challenging medical and surgical conditions. Therapy has its origin from *Ayurveda* and it is also equally accepted by modern system of medicine. When it comes to treat people who fear from surgery, this therapy helps a lot with remarkable results.

REFERENCES


5. 5,6,7. Kaviraj Shastri A.D. Sushrut samhita sutrasthan 13/19-21; Chaukhamba Prakashan Varanasi 2011.pg 60.
