

**“LITERARY REVIEW OF JALAUKAVACHARAN (LEECH THERAPY) IN THE  
MANAGEMENT OF DUSHTA VRANA”****Dr. Tarun Meena<sup>\*1</sup>, Dr. Rajesh Gupta<sup>2</sup> and Dr. Sudesh Rani Gupta<sup>3</sup>**<sup>1</sup>MS Scholar of Shalya Tantra Department, Dr.S.R. Rajasthan Ayurved University College, Jodhpur Rajasthan.<sup>2</sup>Head of The Department, Department of Shalya Tantra, Dr.S.R. Rajasthan Ayurved University College, Jodhpur, Rajasthan.<sup>3</sup>MD Scholar of Agad Tantra Department, Major SD Singh Pg Ayurvedic Medical College Farukhabad.**\*Corresponding Author: Dr. Tarun Meena**

MS Scholar of Shalya Tantra Department, Dr.S.R. Rajasthan Ayurved University College, Jodhpur Rajasthan.

Article Received on 24/01/2020

Article Revised on 14/02/2020

Article Accepted on 04/03/2020

**ABSTRACT**

Method of removing blood from the body using jalauka (leech) is considered as the most easy and convenient method. Blood vitiated by vata, pitta and kapha should be removed from the body, by using sringa, jalauka and alabu respectively. Jalauka is ideal to remove blood vitiated by pitta. They are of twelve kinds – six are savisa poisonous and the same number Nirvisa – non poisonous Leech sucking capacity is only 1 to 2 gm of blood. It is improper quantity of ‘bloodletting’. Sometimes leech can suck more than capacity. Bloodletting is second one important line of treatment of Vrana-Shotha. Leech saliva contains a chemical which has powerful antibacterial action. A wound refused to heal or heals very slowly despite of best efforts is known as dushta vrana. Advancement in science, technologies and antibiotics has improved a lot in wound healing process but still understanding its pathology and management is in phase of evolution. There are so many cause of chronic ulcer (dushta-vrana) of the skin some of them are recurrent infection, trauma, poor blood supply, hypoxia, loss of sensation, specific causes like tuberculosis, diabetes, fibrosis etc. A clean wound is normal body heals earlier with minimum scar as compared to contaminated wounds.

**KEYWORDS:** Dushta vrana, bloodletting, jalaukavacharan.**INTRODUCTION****Dushta Vrana**

Dushta is one in which there is localisation of Doshas or Dushta means getting vitiated by Doshas. There are various sign and symptoms of dushta vrana according to Acharya Sushruta. Greatly covered (slightly exposed) or greatly exposed (broad); very hard or very soft ; greatly elevated or empresas ; very cold or very warm; having colour any one of black, red yellow and white; terrifying, filled with putrefying pus, blood muscles, veins, ligaments etc; exuding putrefying pus and exudates moving in abnormal paths; wound raised up, having unpleasant look (ugly in appearance) and smell (foul smell); accompanied with severe pain, burning, suppuration, redness, itchy swelling, eruption and such other complication greatly; exuding vitiated blood and persisting for long time are the symptoms of Dushta vrana. Any type of vrana either Nija or Agantuja, If not properly cared may turn into Dushta vrana which indicate the need for intensive attention to make it shuddha, only after which the healing process will start.

Shuddha Vrana:-shuddha Vrana is one, which is free from the localization of Doshas. Vrana which is not

invaded Tridoshas, having Shyaava Oshta, which has developed sama pidaka, not having Vedana and sraava is said to be shuddha vrana.

**Jalaukavacharan Vidhi**

(A) Purva Karma:- Before the application of leech, it should be applied with sarshaprajani kalka and kept in fresh water for one muhurta and if found ready to suck then cleaned and taken. The patient's skin is cleaned thoroughly with water or turmeric water.

(B) Pradhan Karma:- Application of honey or by making an incision or a sterile needle prick at the desired site so that drop of blood is produced and the leech attaches to the wound quickly. Jalauka is applied on the body part by holding it with a piece of cloth. If it refuses to suck to the desired spot, than the affected part should be applied with drops of milk or blood.

The leech when start sucking from the affected part may be infured the mouth of the leech which assumes the shape of horseshoe and raised and arched position of their necks after they had attached. While sucking is started, the leeches should be constantly cold water

soaked cotton or cloths. If sensation of itching and pain at the site of application than it has to be assumed that the leech is sucking pure blood. For preventing further loss of pure blood the leech should be removed immediately by sprinkling sandava lavana over its mouth.

(A) Paschat Karma:- After falling off, the leeches should be dusted with turmeric powder and their mouth should be lubricated with a mixture of oil and sandava lavana. Then they should be caught by the tail end with the thumb and the forefinger of the left hand and their body should be gently rubbed in anuloma direction with finger of the right hand to make them to vomit the full quantity of blood. This should be repeated until the symptoms of emission are fully manifested. Then the leech should be kept in a pot containing pure water. Leech that had vomited the full quantity of blood sucked will move swiftly in water in quest of next feed where as if there is no complete emission it will be laying dull and upset. After the complete emission leech should be put into a new pot and treated as earlier. After one week, leech can be reapplied.

### History of Jalauka

Ayurved scriptures such as Charak and Sushrut Samhita leeches are a critical player in an age old form of Ayurvedic detoxification known as Rakt mokshan. The first description of leech therapy classified as blood letting was found in the text of Sushrut Samhita written by Sushrut who was also considered the father of plastic surgery.

Physician leeches might play a special role in certain kinds of surgery by helping promote blood flow to damaged tissue. That's because when leeches bite a victim, their unique saliva causes blood flow to increase and prevents clotting. As a result, once bitten, victims can bleed for hours, allowing oxygenated blood to enter the wound area until veins re-grow and regain circulation. The most common complication from leech treatment is prolonged bleeding, which can easily be treated, Although allergic reactions and bacterial infections may also cure.

### Mechanism of Action of Leech

Blood sucking leeches suck blood using two ways; they use a proboscis to puncture skin, or they use their three jaws and millions of little teeth. The leech can remove any congested blood to allow normal circulation to return to the tissues, thus preventing gangrene from starting. While sucking the blood it discharges certain ingredients through saliva.

(A) Hirudin – which prohibits blood clotting.

(B) Himatina – which dissolves the clots in the blood medicinal leeches have been found to secrete saliva containing about 60 different proteins. These achieve a wide variety of goals useful to the leech as it feeds, helping to keep the blood in liquid form and increasing blood flow in the affected area. Several of these secreted

proteins serve as anticoagulants (hirudin), platelet aggregation inhibitor, vasodilators, and proteinase inhibitors. The leech saliva contains an anesthetic, as leech bites are generally not painful.

There are three compounds in the leech saliva that act as a vasodilator agent and they are the histamine like substances the acetylcholine and the carboxypeptidase an inhibitor. All these act to widen the vessels thus causing an increase in flow of blood to the site. The saliva of leeches also contains anesthetic substances and also bacteria inhibiting substances which inhibit the growth of bacteria.

### DISCUSSION

A wound is a break in the integrity of the skin or tissues often, which may be associated with disruption of the structure and function. There are two types of wound tidy and untidy.

#### Types of wound Healing

1. Primary Healing (First intention):- It occurs in a clean incised wound or surgical wounds, wound edges are approximated with sutures. There is more epithelial regeneration than fibrosis. Wound heals rapidly with complete closure. Scar will be linear smooth and supple.
2. Secondary Healing (Second Intention):- It occurs in a wound with extensive soft tissue loss like in major trauma, burns and wound with sepsis. It heals slowly with fibrosis. It leads into a wide scar, often hypertrophied and contracted.

#### Stages of Wound Healing

- (1) Stage of Inflammation
- (2) Stage of granulation tissue formation and organisation. Here are to fibroblastic activity synthesis of collagen and ground substance occurs
- (3) Stage of Epithelialisation
- (4) Stage of scar formation and resorption
- (5) Stage of maturation

### CONCLUSION

Non Healing to Healing.

Leech is the best parasurgical sharp live instrument. Leech saliva contains so many chemicals which are useful to human being. Blood letting is second one important line of treatment of Vrana-Shotha. Leech saliva contains anticoagulant chemical which is useful for sandhan. Only Leech is useful for shodhan and ropan also because of its – saliva contains a chemical which has powerful antibacterial action and it is proved today. Leech treatment is the best divine solution for such ulcer like diabetic and tubercular ulcer. If we do leech therapy locally in diabetic patients at the beginning stage then we must can save the patient from amputata. Leech can be the best remedy because Leech saliva contains a

powerful chemical which destroys foreign-body or bacteria. Leech is safe, live antibiotic.

**Leech therapy Contraindications**

- Those who have AIDS are not recommended to undertake medicinal leech therapy because it could put them at risk of bacterial sepsis.
- Likewise, patients who take Immunosuppressive drugs are also not advised to undergo leech therapy due to the same reason.