

A study of Jalaukavacharana (medicinal leech therapy) in context of Vranashopha (Cellulitis) Described in sushrutsamhita

(1) DR.MUDITA NAVNATH SHINGARE, M.S. 1st year (Shalyatantra PG scholar)

Hon. Shree AnnasahebDangeAyurved Medical College, Ashta, Tal. Walwa, Dist. Sangli, Maharashtra.

Email ID muditashingare123@gmail.com

(2)DR.AKBAR R.WALANDKAR , M.S(Shalyatantra)Professor & HOD of Shalyatantra Department

Hon. Shree AnnasahebDangeAyurved Medical College, Ashta, Tal. Walwa, Dist. Sangli, Maharashtra.

Email ID akbar.walandkar@gmail.com

Corresponding Author: DR.MUDITA NAVNATH SHINGARE

ABSTRACT

Cellulitis is a spreading inflammation of the skin and subcutaneous tissue that is usually caused by a bacterial infection. *Cellulitis is characterized by inflammatory symptoms such as pain, redness, tenderness, and swelling. Vranasopha is Raktapradoshajavyadhicharacterized by spreading, nodular, equal or unequal elevation, seated in Twacha or MamsaDhatu with vitiated Doshas present in one part of body which resembles to features of Cellulitis in modern science.*

Cellulitis is associated with Vranshopha in Cellulitis is associated with Vranshopha in Ayurveda. ekadesaupakrama is recommended as a course of treatment.

The *VranaShopha* is described as *earlier phase of Vrana.* Acharya Sushrutawas well aware about

importance of *Vranashopha*, *Vrana*(wound) and their management in surgical practice, along with its unfavourable and untreated complications. The surgical aspects of *Shopha* and *Vranais* explained in *Sushruta Samhita*. *vrnashopha* explained by acharyasushurta resemble in inflammatory swelling like cellulitis.

cellulitis appear as a swollen, red area of skin. It is spreading inflammation of swelling like cellulitis explained an infection of deeper layer of skin and underlying tissue.

Achaarya Sushruta has given immense importance to the concept of *Vrana*(wound) and for that he has explained Sixty procedures i.e. ShastiUpakrama for its management. Out of these Apatarpana(fasting or low diet) to Virechana (purgation) were mentioned for *VranaShopha* and rest for *Vrana*(wound).

Raktamokshana (Bloodletting) is one amongst them, it is the ancient and important parasurgical procedure described in *Ayurveda*. Of them, Jalaukavacharana or *leech therapy* has gained greater attention globally, because of its medicinal values.

Conclusion: it was concluded that *Jalaukavacharana* shown significant improvement in reducing pain, swelling, redness, local temperature and healing of wound at affected site without any side effect. Hence, it can be concluded that this *Jalaukavacharana* is useful in the treatment of *Vranashopha* (Cellulitis).

KEYWORDS:- *VranaShopha*, *JalaukaAvacharana*, cellulitis, *leech therapy*

INTRODUCTION

ShalyaTantra is one of the eight important branches of Ayurveda and describes surgical and semi-surgical techniques for the treatment of various diseases. Vranashopha is the predecessor of NijaVrana. *VranaShopha* is considered to be the predecessor of *Vrana*(scar). If left untreated, *avrana* (scar) manifestation occurs.

Acharya sushruta has mentioned a detailed description of inflammatory swelling under the heading of *vrnashopha*. According to sign & symptoms of *vrnashopha* it can be correlated with cellulitis. SthanikaShopha is termed as Vranashopha which occupies a significant place in surgical practices. Vranashopha is characterized by EkdeshiyaShotha, Twakvivarnata, Osha, Chosha, Paridaha like Vedana.

VranaShopha has **3 progressive stages**. These are

Amawastha (just early stage of inflammatory process)

तत्र, मन्द्रोष्मतात्वक्सवर्णताशीतशोफता

स्थैर्णमन्द्रवेदनताऽल्पशोफताचामलक्षमुद्दिष्टः।सु.सू.17/3

In this condition *KaphaDoshama* may be predominant due to which swelling is produced, hence it has symptoms as slight swelling with mild increase of temperature, colour is same as that of the skin, swelling being cold to touch, immovable and mild pain is noted

Pachyamanawastha (true inflammatory stage)

सूचचचिरिवचनस्तुरद्यते, दश्रतइवचपपीचलकाचिं, ताचिश्रसटसवणतइव, चिद्यतइवशस्तेर्, चिर्तइवशचिचिं, ताड्यतइवदण्डेन, पौड्यतइवपाचर्ना, घट्यतइवचाङ्गुला, दह्यतेपच्रतइवचाचिक्षािाभ्राम्, ओषचोषपीदाहाश्चिवचन्दत्, वृचक्षकचवद्धइवचस्थानासनशर्नेषुनशाचन्दत्मुपैचल. आध्मातबचस्तरिवाततश्चशोफोिवचतत्वग्वैवण्णशोफाचिवृ चद्धज्जिदाहचपपासाििारुचचश्चपच्रमानचल्गट।सु.सू 17/8

Pain as if pricking or bitten by ants or cutting pain, burning pain, locally and all over the body, swelling resembles the bag of air, patient doesn't find comfort on sitting or lying down, change in skin colour, increase in swelling, fever, thirst, loss of appetite

Pakwawastha (suppurative stage) respectively

वेदनोपशाचन्दत्तःपाण्डुताऽल्पशोफतावलीप्रादुिाणवस्त्वक्परिपुटनटचनम्रदशणनमुलाऽवपीचडतेप्रत्रुन्नमनट, बस्ताचवोदकसञ्चिर्तपूर्र्प्रपीडर्कमन्दतमन्दतेचावपीचडते, मुहुमुणहस्तोदं:कण्डूरुन्नतताव्याघेरुपरवशाचन्दतिणाचिकाक्षचपक्कचल्गाम्सु.सू. 17/9

Pain subsides, appearance of wrinkles, cracking of skin, itching, subsiding of complications

mainly six types. The six types are as *Vataja*, *Pittaja*, *Kaphaja*, *Sannipatika*, *Raktaja* and *Agantuja*. *Vranashopha* Sign and symptoms of *Vranashopha* are more or less similar to cellulitis. Cellulitis is a sort of spreading inflammation of the subcutaneous tissue that is usually caused by a bacterial infection. The skin findings in cellulitis follow the classic signs of inflammation: dolor (pain), calor (heat), rubor (erythema) and tumor (swelling). The basic principle of *Vranashopha* management is to prevent onset of *Pakwawastha*. Considering the concept of *Shatkriyakala* (six main stages of disease manifestation), it was explained for the first time in this context by *Aachaarya Sushruta*. Sixty procedures for management of *VranaShopha* and *Vrana* (wound) were told by *Sushruta*. Out of these *Apatarpana* (fasting or low diet) to *Virechana* (purgation) were mentioned for *VranaShopha* and rest for *Vrana*. *Avasechana* is one amongst them which is been considered as *Raktamokshana* (bloodletting) which eliminates the vitiated *doshas* and leads to early reduction in the disease, *Jalaukavacharana* (Leech Application) is considered as the best

methods for the removal of *Pitta Dosha* vitiated blood. *Jalaukavacharana* is an ancient method mentioned in *Ayurveda* used for purification of the body by removing deeply seated toxins in the blood and pacifying vitiated *Doshas*.

Management of *vranashopha*

Jaloukavcharana therapy:- Since ancient time, leeches

were used to treat many diseases through bloodletting as a method. Impure blood out to remove to treat the disease. Mostly they are used in skin disease, hypertension & varicosity.

METHODS

Fresh leeches, storage pot, purification trays, turmeric powder, rice, *Saindhava* salt, sterile needle, dressing materials.

1. *Jalauka*

(Leech and Leech lab)

2. *Haridra Churna*

3. Sterilized Gauze pieces

, dressing pad, cotton, gloves

4. Kidney tray, distilled water, needle

5. Container of sterile water, for placing leeches after they have been fed.

These are the basic requirements for leech therapy.

Methodology of *Jalaukavacharana* (Leech Therapy) As Described by *Sushrutacharya***A) Purva karma**

2-3 *Jalaukas* (according to size of *Vranashopha*) of moderate size was first prepared for Raktamokshana by keeping it in *HaridraJala*. Affected site cleaned by distilled water prior to leech therapy and then by dry gauze.

B) Pradhan Karma (Procedure of leech application):

Leech was applied at the region of *VranaShopha*. Leech bites the affected area spontaneously and sucked the blood. Once leech started to suck the blood, its neck part looks elevated that indicates that sucking was well and in progress. During sucking gradual distension were observed at its body centre and wavy movement pulsation was visible throughout its body. The body part was covered with a wet swab except his mouth to create a natural atmosphere and it was maintained through out the process by pouring of some water on it.

C) Paschat Karma (post procedure):

Immediately after removal of leech the local part was cleaned. *Haridrachurna* (turmeric powder) and was applied and was bandaged tightly. When *Jalauka* (leech) give up automatically, then it was kept in a kidney tray and *Haridrachurna* was sprinkled on its mouth. *Jalauka* (leech) automatically vomit the ingested blood. Finally leech was squeezed smoothly to remove all the remnant part of ingested blood from its body. It is very important to remove all ingested blood otherwise leech will die or get diseased as mentioned in classic. *Jalauka* (leech) were kept in clean vessel and clean water separately.

INDICATION

classical indications mentioned in *Ayurveda* is *Gulma* (abdominal lump), *Arsha* (piles), *Vidradhi* (abscess), *Kustha* (skin diseases), *Vatarakta* (gouty arthritis), *Netraroga* (eye disorders), *Visarpa* (erysipelas), *Koshtuka-Shirsha* (Infective Arthritis), *SandhigataRoga* (Osteo-Arthritis), *Kantharoga* (goiter), *Granthi* (Nodular Swelling), *Arbuda* (Cancer), *Shlipada* (Filaria), *Vidarika* (Cracks), *Vishadamsha* (Insect Bite)

Jaloukavacharana is also indicated in

Raktapradoshajavikara as *jalouka* is indicated in treating the vitiated *rakta*.

Venous disease, varicose veins (*siragranthi*): Leech therapy is seen effective in the management of complicated varicose veins, It treats post phlebitis syndrome in which venous valves are obliterated by deep vein thrombosis.

Peripheral vascular diseases: Leech therapy is effective in management of Burger's disease as it relieves the inflammation and thrombosis. It is also effective in other peripheral vascular diseases.

Haemorrhoids: Found to be very effective in the management of thrombosed haemorrhoids.

DISCUSSION

Leech therapy is considered as most unique and effective method of bloodletting. It drains impure blood, useful in *PittaDushithaRakta* diseases (disease manifested due to vitiation of *pitta* and *raktadosha*), various skin disorders and all types of inflammatory conditions. It can be tried in all mankind including females, children, old and patients having poor threshold to pain. Acharya Sushruta has explained *Shashti Upakramas* (sixty types of treatment procedures) in *Dwivraniya Adhyaya of Chikitsasthana* for comprehensive management of *Vrana* out of them first eleven (*Apatarpana to Virechana*) is described for treatment of *Vranashopha* Acharya Sushruta also mentioned *Shodhana by Raktamokshana* (bloodletting) in acute inflammatory conditions, indurate, cyanosed, painful swellings and many inflammatory conditions like *Vidhradhi*, *Granthi*, *Arbuda* etc. It contains various bioactive constituent which possesses anti-inflammatory, analgesic, thrombolytic, antioxidant, vasodilator, anti-coagulant and blood circulation enhancing properties and advised *Jalaukavacharana* (Leech therapy) in *Vranashopha* (Cellulitis).

VranaSopha (Cellulitis) with *Pitta RaktaDushti* and *VataAvarodha*, hence *Pitta Shaman*, *RaktaShuddi* and *Vatanulomana* were targeted for treatment. The therapeutic protocol included *Jalaukavacharana* (leech application). Leech therapy is thought to be the most distinctive and effective way of bloodletting in infected wounds and cellulitis treatment.

CONCLUSION

Jalaukavacharana is adopted mainly in *Pitta Doshapredominant* diseases.

Jalaukavacharana is one of the best *Anushastra*.

Chikitsa used mainly in *RaktaPradoshajaVyadhis*. *Jalaukavacharana* gave tremendous relief from *VranaSopha*(Cellulitis) symptoms such as *Vedana*(pain), *Daha* (burning sensation), and *Shopha* (swelling on leftleg).

Leech application is the best one because it's delicate easily applicable, easily available, quickreliever and purificatory nature.

During the whole study, we found that there was no adverse reaction of *Jalaukavacharana*

REFERENCES

1. AachaaryaJadavjitrikamjiSushrutaSamhita; Dalhana, NibandasangrahaCommentary; ChowkhambhaSurabhaaratiPrakaashana, Vaaraanasi, 1st Edition; Reprint 2014; Sutra Sthana17/3. Pg-81
2. Sushrutasamhita; ShastriAmbikadatta; AyurvedatattvaSandipika commentary, Sutrasthan17/6; Chaukhamba Sanskrit sansthan, Varanasi; Edition, 2007; 71
3. Sushruta Samhita Prof.K.R.ShrikanthaMurthy, ChaukhambaOrientalia Publishers, chikitsasthanaChapter, 2014; 1: 6.
4. Aacharya Vaidya JadavajiTrikamji, Acharya Narayana Ram., editors. 2nd ed. Vol. 8. Varanasi: ChaukhambaSurbhartiPrakashan; 1990. Susruta, Susrutasamhita, Sutrasthana, ShastravacharniyaAdhyaya; p. 23
5. KavirajAmbikaduttaShastri: Part 1, Sutrasthana, Jalaukavacharaniyaadhyaya of Sushruta Samhita of Maharishi Sushruta Edited with Ayurveda tattvasandipika, Hindi commentary published by Chaukhamba Sanskrit Sansthan, Varanasi, 13th edition. 13/19-21 P.45.
6. Sushrut Samhita, Ayurveda TattvaSandeepika, KavirajDr.AmbikaduttaShastri, Sutra Sthan, 13/18,
7. Sushrut Samhita, Ayurveda TattvaSandeepika, KavirajDr.AmbikaduttaShastri, Sutra Sthan, 13/09.
8. Sushrut Samhita, Ayurveda TattvaSandeepika, KavirajDr.AmbikaduttaShastri, Sutra Sthan, 13/22.