



AYURVEDA REVIEW ON JALOUKAVACHARA W.S.R. TO LEECH THERAPY AND ITS CLINICAL IMPORTANCE

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ABSTRACT

Ayurvedic treatment is based on two fundamental principles: Shodhan chikitsa and Shamana chikitsa. Shodhan Chikitsa is concerned with the five purificatory procedures known as Panchakarma. Raktamokshana was included in Panchakarma by Acharya Susruta and described it as the best procedure because it eliminates all three vitiated Doshas along with morbid Rakta. Jaloukavachara is one of the approaches of Raktamokshana described in ancient Ayurveda. Jaloukavachara known as leech therapy; which is an ancient method of bloodletting in which impure blood is removed from the body using medicinal leech. This therapy offers therapeutic potential in the treatment of many ischemic, inflammatory and infectious diseases, etc. It is regarded as the most simple and convenient method of bloodletting therapy, as well as the most effective in Ayurveda. Present article deals with the Ayurveda view on Jaloukavachara W.S.R. to leech therapy and its clinical importance.

KEYWORDS: *Shalyatantra, Panchakarma, Raktamokshana, Jaloukavachara, Leech.*

INTRODUCTION

Jalaukavacharana is a non-surgical type of *Raktamokshana* that is widely regarded as the most innovative and effective method of bloodletting. Leeches are widely used in the treatment of most disorders, ranging from skin disease to ischemic heart diseases, etc. Leech saliva contains a variety of biologically and pharmacologically active compounds that have anticoagulant, anti-inflammatory and anti-oedema properties. Leech therapy can successfully treat arthritis, vascular diseases, abscess, venous congestion and ischemic heart disease, etc.

Raktmokshana is performed using the ancient technique of *Jalaukavacharana*, where *Jalauka* refers to leeches and *Avacharana* refers to application. *Jalauka*, along with *Shring*, *Alabu* and *Prachhana*, is one of the tools for *Raktmokshana*, which are used for treating *Pitta*, *Vata*, *Kahpa* and *Rakta Vyadhi*.

Leeches are known as *Jalauka* because *Jala* is their way of life or because they are accustomed to being near water. *Rakatajroga* can be treated with *Raktmokshana* therapy which is recommended for people who have an aggravated imbalance of *Rakta* and *Pitta dosha* as well as a high level of toxicity. Ayurvedic physicians have

used leech therapy since ancient times. Leech therapy is widely used in plastic and reconstructive microsurgery as a venous congestion prevention tool.

Aktamokshana is also used as a regimental therapy for purifying vitiated body humours and should be performed in the autumn season. There are two kinds of *Raktmokshana*; one is *Shastra Vistravan* which involves uses of sharp instruments and second approach utilizes *Jalaukavacharan*, *Alabu* and *Shringa*. *Jalaukavacharana* is the safest of these procedures because no sharp instruments are used, so it can be used safely on sensitive people. *Jalauka* is commonly used in *Raktaj* and *Pittaj roga*. The leech therapy can be indicated in varieties of disease as depicted in



Figure 1: Indications of Leech Therapy

Descriptions of Leeches

Ayurvedic texts describe twelve different types of *Jalauka* and based on their therapeutic uses, these twelve types are divided into two categories *Nirvish Jalauka* and *Savish Jalauka*. *Nirvish Jalauka* is *Jalauka* that are suitable for therapeutic purposes, and they are further classified into different types i.e.; *Shankhamukhi*, *Pingla*, *Mushika*, *Savarika* and *Pundarikamukhi*. The *Savish Jalauka* is *Jalauka* that are not suitable for therapeutic purposes. These were further subdivided into six types including *Krishna*, *Algarda*, *Karbura*, *Indrayudha*, *Samudrika* and *Gochandana*. *Nirvish Jalauka* is considered suitable for therapeutic use. It is critical to correctly identify *Nirvish Jalauka* in order to avoid uses of *Savish Jalauka*. *Nirvish Jalauka* is identified by their breeding grounds, behavior and appearance which are described in Ayurvedic texts.

There are approximately 650 leech species, with the most commonly used leech being *Hirudo-medicinalis*, which is collected from freshwater bodies. The presence of various biological substances in leech saliva causes the therapeutic effect. This saliva contains hundreds of bioactive substances, including an anti-platelet aggregation factor, anaesthetics, vasodilators, thrombolytic agents, antimicrobial agents, antibiotics and anti-inflammatory agents, etc. Leech therapy imparts therapeutic effects due to the presence of acetylcholine, dopamine, serotonin and others constituents, etc. The patient feels no pain during the leech bite because of the presence of anaesthetizing agent in the saliva of leech.

Therapeutic Applications of Leech Therapy

The specific indications of *Jaloukavacharana* mentioned in Ayurvedic text are *Vidradhi*, *Gulma*, *Arsha*, *Kushta*, *Vatarakta*, *Koshtuk-Shirsha*, *Sandhigat Roga*, *Kanharoga*, *Netra Roga*, *Arbuda*, *Shlipada*, *Vidarika*, *Vishadamsha*, *Visharpa*, *Shiroroga* and *Dantaveshta*, etc.

Jalauka mainly indicated in diseases of vitiated *Rakta* and *Pittadosha*; it can be used in *Raktapradoshaj vikars* which includes *Mukhpaka*, *Akshiroga*, *Puti-nasa*, *Asyagandhata*, *Gulma*, *Upkusha* and *Visarpa*, etc.

- ✓ Leech application is effective in the management of diabetic foot ulcers.
- ✓ Surgeons are using leeches to remove stagnant blood from a flap or reattached limb.
- ✓ Leeches have been widely used to reduce venous congestion in reattachments and replants of fingers, ears, scalp, limbs and toes, etc.
- ✓ *Jalouka* revealed symptoms of skin diseases including eczema.
- ✓ *Jalouka* also reported to offer therapeutic benefits in *Khalitya*.
- ✓ Study reported therapeutic value of *Jaloukavacharana* in *Indralupta*.
- ✓ *Jaloukavacharana* relieves severity of *Shlipada* and *Visarpa*.

Contraindications

- ✓ Hemophilia and anticoagulant medications
- ✓ Gastrointestinal bleeding and extremely fearful patient
- ✓ Severe allergic diathesis and mental disorders
- ✓ Hypotension, active tuberculosis and pregnancy

Precautions

- ❖ The patient's bleeding and clotting time should be taken in considerations.
- ❖ Handling of leeches with care.
- ❖ Cover the leech with wet cotton.
- ❖ Leeches should not be used on femoral or jugular veins.
- ❖ Leeches should not be used on penis, eye lids and breast, etc.

Adverse Effects

- ✚ Local discomfort, hypotension and itching, etc.
- ✚ Haemorrhage, infection and allergic reactions, etc.
- ✚ Ulcerative necrosis and transmission of infectious diseases, etc.

CONCLUSION

After considering various aspects of *Jaloukavacharana* and medicinal leech therapy, it is possible to conclude that leech therapy has enormous potential to treat a wide range of difficult medical and surgical disease conditions. The various bioactive elements found in leech saliva offer enormous biological effects. Ayurvedic texts describe twelve different types of *Jalauka* and based on their therapeutic uses, these twelve types are divided into two categories *Nirvish Jalauka* and *Savish Jalauka*. *Nirvish Jalauka* is *Jalauka* that are suitable for therapeutic purposes. *Jaloukavacharana* can be recommended for varieties of diseases including *Gulma*, *Arsha*, *Vidradhi*, *Kushta*, *Koshtuk-Shirsha*, *Sandhigat Roga*, *Kanharoga*, *Arbuda*, *Vatarakta*, *Vishadamsha*, *Dantaveshta* and *Shiroroga*, etc. *Jalauka* mainly indicated in diseases which are triggered by the vitiation of *Rakta* and *Pittadosha*. Consideration of precautionary measures and contraindications are prerequisite while performing leech therapy for therapeutic purposes.

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