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# A FOCUS ON IMPORTANCE OF RAKTAMOKSHANA (LEECH THERAPY) – IN SKIN DISEASE

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#### **ABSTRACT**

Any disease that involves skin, hampers many functions and gives the person a hideous look. As skin diseases are perceptible to others, they are more painful for the patient and troublesome for the physician. Several skin diseases affect the person's psychological status and disturb the social life, thus patient have some kind of inferiority complex. In Ayurveda, skin diseases are explained under the common terminology "Kushtha" which implies exposed diseases. Skin disorder characterized by itching erythema, scaling, edema, vesiculation, and oozing. The involvement of Vata results in dry or blackish lesion of skin. However, itching in those affected areas is due to Kapha. Modern medical science treats these skin diseases with corticosteroids, antibiotic and antifungal agents.. But these medication may gives side effects like liver and kidney failure, bone marrow depletion etc.

The texts of Ayurveda consider Rakta dusti as one of the prime causes of skin diseases; on the other hand, patients may get relief after letting out the vitiated Rakta. Acharya sushruta propounds practical guidelines for Raktamokshana( bloodletting) and claims it as most effective therapy in half of the body ailments. Among various methods for Raktamokshana (bloodletting) such as Jalaukavacharana Karma, Prachhanna Karma and Siravedhana Karma, jalaukavacharana Karma (Leech therapy) is considered as the ideal method to expel out the vitiated blood safely, quickly and effectively. So among all, now a days the jalokavacharana method practising more for bloodletting therapy.

#### INTRODUCTION

Acharyas emphasize the shodhana therapy as the line of treatment at various places. Among these various shodhana therapy, Raktamokshana is indicated specially because rakta is mainly involved as dushya in sampraptighatak<sup>[1]</sup>

Leech therapy has shown drastic result in patients with Pain disorders, Psoriasis, Eczema, Swelling and all other kind of skin infections. [2] Leeches are 'worms' with suckers on each end. Leeches can range in size from a half of inch to ten inches long. They are brown or black in color. Some feed on decaying plant material. Others are parasites, feeding on blood and tissue of other animals. [3]

According to Ayurveda, Leech at first bite, only sucks impure blood from the skin and only the pure blood is left so it is a blood purification therapy<sup>[4]</sup> Later, when it starts sucking pure blood, the patient feels pain. Blood-sucking leeches suck your blood using two ways: they use a proboscis to puncture your skin, or they use their three jaws and millions of little teeth. They live just about anywhere where water is rich. The leech can remove any congested blood to allow normal circulation

to return to the tissues, thus preventing gangrene from starting. $^{[5]}$ 

Jalaukaavacharna Karma (Leech therapy) is considered as the ideal method to expel out the vitiated blood safely, quickly, and effectively. It was also practicing in the ancient time and so much importance is given to it in classics.

#### INDICATIONS OF LEECH THERAPY ARE [6-7]

Eczema, Psoriasis, Osteoarthritis, Rheumatoid arthritis, Cellulitis, Sciatica, Inflammatory Reactions, Blood purification, Varicose Veins, Rheumatic Diseases, Diabetic Wounds, Boils and abscesses, Hypertension, Thrombosis (blood clot), Alopecia, Herpes zoster etc.

# SAFETY AND ADVERSE EFFECT OF LEECH THERAPY $^{[8]}$

Leech therapy rarely ever leads to serious complications. The local pain of treatment and short-term itching are regular side effects. Prior to treatment, the patient should be advised accordingly and asked to sign a consent form describing the relevant side effects . Prevalence data from systematic and prospective studies are only available for some of the different side effects of leech therapy-

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# LOCAL PAIN DURING TREATMENT<sup>[9]</sup>

Perceptions of the local pain of leeching varies. Most of the 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 (or sometimes somewhat stronger) rhythmic pulling sensation is usually noticed for the first one to three minutes after the start of feeding. Whether stimuli of exactly the same intensity are perceived as painful or are not perceived at all is certainly depend on the individual's personality, and also depends on that person's concentration on the leech or attitude toward leech therapy. Many people never even notice the leech bite, for example when they are bitten under water while their attention is focused on something else. Frequently, the more anxiously the patient focuses on the leech preparing to bite, than higher the pain perception noticed . Gloves must be worn for hygienic reasons, the leech therapist should never use forceps on the leech.

# LOCAL ITCHING[9]

Transient itching at the site of the leech bite in the first few days after treatment is very common and should not be mistaken for an allergic reaction.

# BLOOD LOSS<sup>[10]</sup>

Leech therapy is always associated with a certain degree of blood loss, which is clinically irrelevant in most cases. The cause of this wound-healing disorder is unknown. Improper handling, especially early stoppage of after bleeding from the wound, squeezing the head of the leech with forceps, forceful removal of the leech before it has finished feeding, and failure to keep the animals in fresh water, have frequently been implicated as potential causes.

#### STEPS FOR APPLICATION OF LEECH-

- 1. Purvakarma (before procedure)<sup>[11]</sup>
- Proper snehana (oleation) and swedana (sudation) of the patient.
- Purification of leech by pouring the leech in haridra (turmeric powder) and water.
- Part preparation cleaning of place by turmeric water. The patient's skin is cleaned thoroughly with soap and water or turmeric water.

# Pradhana karma (main procedure)<sup>[11]</sup>

- Application of honey or by making an incision or a needle prick at the desired site so that of blood is produced and the leech attaches to the wound / incision quickly.
- Steer the leeches head to the area to be treated. The head of the leech can be recognized by is searching forward movements, while the tail end is used as a sucker for attachment, The leeches must be applied in adequate numbers to area of maximum infection / congestion.

- When Leech starts sucking blood, cover the leech with wet cotton.
- When the leech has finished sucking the blood, usually within 30 minutes, remove it (if it does not come off by itself then apply salt or turmeric powder on its head).
- Ensure that the same leech is applied next time to the same patient.
- Check the bleeding & clotting time of the patient.
   These should be normal.

# Paschata karma $(after\ procedure)^{[11]}$

- Induction of emesis to the leech by dusting of haridra churna (turmeric powder) on its mouth.
- Sometimes pressing the leech from caudal to front end is required for proper emesis so Press the detached leech between fingers to force out the sucked impure blood.
- Then put back in fresh water container. Leech should be freed in fresh water, where it swims swiftly and then settles down.
- The patient's area where the leeches have been put should be examined for local infections.
- The minor wounds can be cleaned and washed with honey, and bandaged.
- One leech should be reserved for one particular patient.

# PATHOLOGY OF SKIN DISORDER & HOW LEECH THERAPY WORKS (MODE OF ACTION OF LEECH THERAPY) IN CURING DISEASE. [12]

Leeches have been known to possess biologically active compounds in their secretions, especially in their saliva. The blood-sucking annelids, leeches have been used for therapeutic purposes since the beginning of civilization. Ancient Egyptian, Indian, Greek and Arab physicians used leeches for a wide range of diseases starting from the conventional use for bleeding to systemic ailments, such as skin diseases. Recently, extensive researches on leech saliva unveiled the presence of a variety of bioactive peptides and proteins involving antithrombin (hirudin, bufrudin), antiplatelet (calin, saratin), factor Xa antibacterial inhibitors (lefaxin). (theromacin. theromyzin) and others. Consequently, leech has made a comeback as a new remedy for many skin diseases.

#### **CONCLUSION**

Jalaukavacharana Karma provides goods result in the symptoms of skin diseases like Kandu, Pidika, Raktima, Daha etc. Leech saliva is reported to have many therapeutic contents like hirudin, bdellins. Hyaluronidase, apyrase and collagenase etc.; among them, eglins and bdellins have anti-inflammatory and antifungal property which gives relief in symptoms of skin diseases. Pidika and Daha are pittaja vyadhi with involvement of Rakta Dosha. Due to removal of Rakta which is Asraya Sthana of Pitta, these symptoms were relieved by the above therapy. In present study, "Jalaukavacharana Karma" proved to be more effective in the management of skin diseases.

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