

EFFECT OF *JALAUKAVACHARANA* IN THE MANAGEMENT OF PERIANAL HEMATOMA: A CASE STUDY

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ABSTRACT

A perianal hematoma is a localized accumulation of blood outside blood vessels beneath the skin surrounding the anal area. These hematomas can develop rapidly and are often associated with significant pain. The primary symptom is discomfort and swelling around the anus, which can vary in intensity from mild to severe, depending on the size of the swelling. Treatment may involve *Jalaukavacharana*, a parasurgical procedure rooted in Ayurveda. *Jalaukavacharana*, or bloodletting via leeches, is utilized for various inflammatory conditions, particularly when there is a vitiation of Pitta *Dosha* that becomes trapped in the blood. The therapeutic effect is largely attributed to the bioactive compounds found in leech saliva, which are introduced into the patient's tissues during the blood-sucking process. These constituents exhibit anti-inflammatory, analgesic, thrombolytic, vasodilatory, anticoagulant, and properties that enhance blood circulation. The aim

of this study is to assess the efficacy of *Jalaukavacharana* (Leech Therapy) in treating perianal hematoma. A 55-year-old female patient presented with pain and swelling in the perianal region and was diagnosed with a perianal hematoma in the *Shalya* OPD of GAC Nanded. The selected treatment was *Jalaukavacharana*, administered over three sessions on alternate days, which proved to be highly effective for the condition.

KEYWORDS: *Jalaukavacharana*, Leech Therapy, Perianal Hematoma, Parasurgical

Procedure.

INTRODUCTION

In today's world, lifestyle changes, irregular eating habits, stress, and busy schedules have contributed to various health issues. One such condition is a perianal hematoma, which occurs when a small vein that drains blood from the anus ruptures. This can happen due to forceful or strained bowel movements, heavy lifting, coughing, or other forms of straining. Once the vein ruptures, blood quickly accumulates within a few hours, and if not addressed, it can form a clot.

The symptoms of a perianal hematoma can develop rapidly, manifesting as pain, discomfort, and swelling. The pain can range from mild to severe, often intensifying as the skin surrounding the rupture stretches due to pressure. This discomfort may persist even after the blood has clotted, typically lasting for two to four days.

If diagnosed within the initial hours after symptoms appear, the accumulated blood may be evacuated using a syringe. Once the blood has coagulated, it is removed through an incision over the lump under local anesthesia. In less severe cases, only conservative management will occur, involving medications and procedures to alleviate pain.

While seeking treatment for this condition, even though individuals are typically drawn to new advanced medical science and technology, Ayurveda, the science of Life, offers a superior remedy without side effects, such as *Jalaukavacharana*, or leech therapy. This is a parasurgical procedure and one of the techniques of bloodletting (*Raktamokshana*). It provides a rapid and sometimes dramatic reduction of symptoms in certain acute disorders, especially when *Pitta Dosha* is disturbed and becomes lodged in the blood.

Raktamokshana is indicated in various types of *Kushtha* (skin disorders), *Visarpa* (Erysipelas), *Pidaka* (boils and carbuncles), *Vidradi* (abscess), *Kandu* (itching), *Arbuda* (tumor), *Arshas* (hemorrhoids), etc.

Medicinal leeches have been found to secrete saliva containing approximately 60 different proteins. These achieve a wide array of functions beneficial to the leech as it feeds, helping to maintain the blood in a liquid state and enhancing blood flow to the affected area. Several of these secreted proteins act as anticoagulants (such as hirudin), platelet aggregation factors (most notably apyrase, collagenase, calin), prostaglandins, vasodilators, and proteinase

inhibitors. It is also believed that the saliva contains an anesthetic, as leech bites are generally not painful.

CASE REPORT

A 55 year old female was admitted in IPD of Shalya department on 19/03/2024. She had complaints of severe pain, discomfort and swelling at perianal region since 3 days. The patient had history of cough and constipation since last week. On local examination, there was small swelling present at 5 O' clock position. Per rectal examination revealed no abnormality. The diagnosis was confirmed as Perianal Haematoma and treatment of choice was *Jalaukavacharana*, ie. Leech Therapy. At the time of baseline assessment, a profile of hemogram, CT, BT, biochemical investigations like RBS and serological tests for HIV, HBsAg was obtained. They all were within normal limits.

General Examination

General Condition: Fair, Afebrile.

Blood Pressure: 130/90mmHg

Pulse Rate: 78/min

Systemic Examination

RS- AEBE Clear

CVS- S1S2 Normal

CNS- Conscious and Oriented to time, place and person.

Local Examination

Perianal Region- NAD

Anal Verge-swelling present at 5O'clock position.

P/R Digital- NAD

Investigations

Hb%-11gm%

WBC-7360mg/dl

PLT-186k/mm³

BSL-R-112mg/dl

BT-2.15/min

CT-3.51/min

HIV-Negative

HBsAg-Negative

MATERIAL AND METHOD

Hirudo Medicinalis leech, which indicated for the medical use was applied locally, i.e. at the perianalhematoma.

Jalaukavacharana procedure is divided in 3 parts.

1) Purva Karma

Purification and Activation of leech was done by putting it in bowl which contain Haridra (Turmeric) powder and water for 30min. After this the leech was transferred to another bowl having clean water.

Part Preparation of the Patient was done. Patient was put in lithotomy position, anus was cleaned by lukewarm water.

2) Pradhana Karma

The posterior sucker of the leech was held in one hand and anterior sucker was placed at the site of application (the most prominent part of swelling) where leech was expected to be fixed. The posterior sucker was released from the hand which got attached to the surrounding perianal region.

It is covered by wet cotton gauze to moist its skin.

Around 30-70 minutes of blood sucking, Leech falls off from the site.

3) Pashchata Karma

Haridra powder was applied on bleeding site. T-Bandage was applied.

Induction of emesis to the leech was done by dusting Haridra Churna on its mouth then it was put into Haridra Jala, then in pure water.

The used leech was kept in a separate jar labelled with details of patient [name, IPD no., Date of application]. Each alternate day, the same procedure was done.

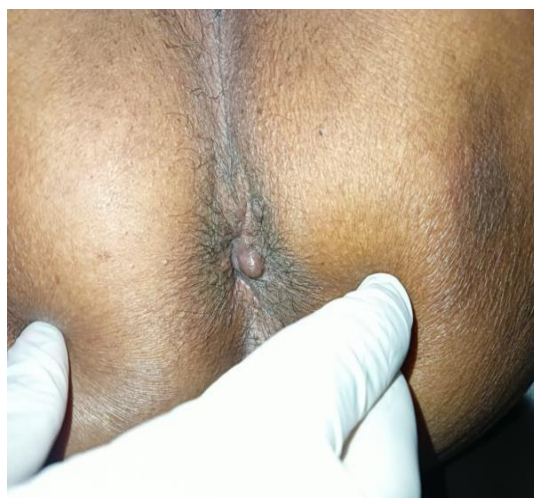
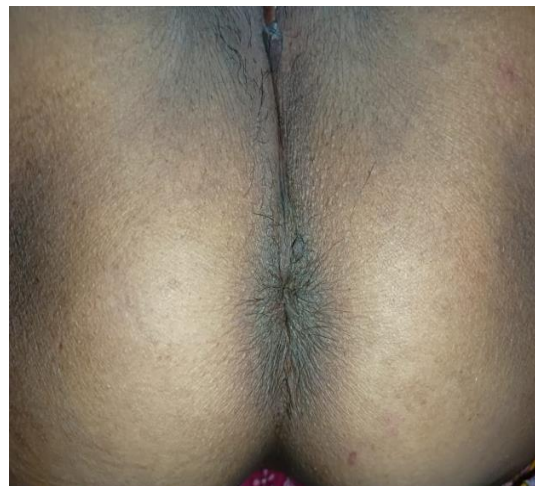
Comparative Table on Observation before and after Jalaukavacharana

Title	Before Treatment	After 1 st Sitting	After 2 nd Sitting	After 3 rd Sitting
Amount of Leech applied	-	1	1	1
Tenderness	+++	++	+	No Tenderness
Size of	1x1cm	1x0.5cm	0.5x0.5cm	Hematoma

Hematoma				completely reduced
Amount of Blood Letting	-	2.5ml	1ml	0.5ml



Image 1-Before Treatment.

Image 2-Jalaukavacharan 1st Sitting.Image 3-After 2nd Sitting.Image 4-After 3rd Sitting.

RESULT

Patient got complete relief from pain at perianal region. On local examination size and tenderness of perianal hematomas was completely reduced.

DISCUSSION

Acharya Sushruta elaborated on leech therapy (*Jalaukavacharana*) under the topic of *Raktamokshana*, which can also be performed using *Shringa*, *Alabu*, and *Siravedh*. *Jalaukavacharana* is one of the mildest and safest methods for bloodletting.

The acute onset of pain accompanied by a palpable mass is typically associated with perianal

hematoma. We have examined the analgesic and anti-inflammatory effects of *Jalaukavacharana*, finding it to be highly effective in conditions like hematoma, as it alleviates pain and other signs of inflammation, such as tenderness, redness, local temperature, and swelling, all of which returned to normal.

The therapeutic effect occurs through the leech's bloodsucking action, which reduces local pressure, thereby minimizing swelling and pain. Beyond blood extraction, leeches also introduce their saliva into the patient's tissues, which contains various bioactive compounds with anti-inflammatory, analgesic, thrombolytic, vasodilator, anticoagulant, and blood circulation-enhancing properties. The anesthetic agents present in leech saliva help alleviate pain and tenderness, providing symptomatic relief. Hirudin and calin are anticoagulants that effectively inhibit coagulation and possess thrombolytic properties, dissolving fibrin. Thus, leech application proved beneficial in this case.

CONCLUSION

Leech application provides significant relief in pain, discomfort and swelling size of perianal hematoma without any side effect or complication and it can be an alternative treatment in the management of perianal hematoma in which surgery is advised and patient is not willing for the same.

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