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Case Study

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ROLE OF JALOUKAVACHARANA IN THE MANAGEMENT OF ACUTE THROMBOSIS OF EXTERNAL HEMORRHOIDS – A CASE REPORT

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ABSTRACT

External hemorrhoids relate to venous channels of the inferior haemorrhoidal plexus deep in the skin surrounding the anal verge and are not true hemorrhoids; they are usually only recognized as a result of a complication, which is most typically a painful solitary acute thrombosis.^[1] In modern science, if conservative treatment fails surgical enucleation of thrombus is done. [2] In Ayurveda, thrombosed external hemorrhoids can be correlated with bahya arsha. Jaloukavacharana is indicated in the treatment of Arshas by Acharya Vagbhata. [3] Leech's saliva contains numerous bioactive constituent that possesses anti-inflammatory, analgesic, thrombolytic, anticoagulant, and blood circulation-enhancing properties. In this case report a 37-year-old female patient suffering from acute onset anal pain along with a hard lump in the perianal region was diagnosed as a case of Acute thrombosis of external hemorrhoid, based on clinical findings and treated by jaloukavacharan. After Ist sitting of jaloukavacharan there was a remarkable reduction anal pain, tenderness, swelling, and

discoloration of hemorrhoids. After 2nd sitting symptoms were completely relieved. The patient has shown tremendous improvement in the VAS score. Even after 1 year of follow-up, the patient had relief in all symptoms. This case study demonstrates that the case of

thrombosed external hemorrhoid can be successfully managed with jaloukavacharan - A minimally invasive nonsurgical therapeutic intervention.

KEYWORDS: Jaloukavacharana, Thrombosed external hemorrhoids, bahya Arsha.

INTRODUCTION

One of the most common anorectal crises is thrombosed external hemorrhoids. They are linked to swelling and excruciating discomfort. The etiology of the discomfort involves internal sphincter hypertonicity. All Thrombosed External Hemorrhoids patients typically have some degree of internal anal sphincter hypertonicity, which can trap the hemorrhoidal mass outside the anus and cause strangulation, necrosis, and gangrene. When a patient exhibits both an obvious perianal/anal lump and acutely significant discomfort, the diagnosis is clinical and straightforward, and in any case, the size of the thrombus affects how severe the symptoms are. The natural course of acute thrombosis starts with thrombosis of an external hemorrhoid. This event is sometimes associated with effort or straining (moving or lifting furniture, heavy exercise, etc.). The tissue around these clots swells, causing moderate to severe pain. The pain is usually described as burning rather than throbbing, and the degree usually, but not always, depends on the size of the thrombus. Histopathologic studies reveal an intravascular thrombus of the capillaries that can be stretched to 1 cm in diameter or larger. The thrombus is confined to the anoderm and does not cross proximally beyond the dentate line. The natural history of thrombosed external hemorrhoids is an abrupt onset of an anal mass and pain that usually peaks within 48 to 72 hours. The pain then reduces and the thrombus will shrink and dissolve in 2 to 4 weeks. Occasionally, the skin overlying the thrombus becomes thinned and the residual clot is extruded with associated bleeding. A large thrombus can result in a skin tag. Since thrombosed external hemorrhoids are self-limited, the treatment should be aimed at relief of severe pain, prevention of recurrent thromboses, and residual skin tags. If not treated, in 2 to 4 weeks, the clot in the thrombosed vessels will either spontaneously drain through the thinned overlying skin or be gradually resorbed and the discomfort will gradually diminish. After resolution, redundant anal skin will remain, which is usually asymptomatic and requires no treatment. If a tag causes irritation or difficulty in cleansing the anal area, a conservative excision under local anesthesia can be performed in the office. If the patient presents early, the procedure of choice is excision.^[4]

In ayurveda thrombosed external haemorrhoids can be correlated with bahya arsha and raktaj arsha. Raktaja Arshas are red and appear like sprouts of Nyagrodha and Pravala (coral) which

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are associated with severe pain and bleeding.^[5] Arshas are among the Mahāgadās because they interfere with a person's day-to-day activities like an enemy.^[6] According to Caraka Samhitā Arshas arising in the external fold caused by a single Dōsha and manifested recently are curable.

Easily.^[7] According to the Susruta Samhitā, the next below Visarjani (second fold) or third fold that is Bahya (external) is called Samvarani since it constricts or closes the rectal orifice.^[8] Arshas which are situated in the outer fold and are caused by the increase of any one Dōsha are easily curable, as also those which are not chronic.^[9]

Acharya Sushruta has mentioned four ways to treat the Arshas effectively. They are Bheshaja (medicines), Kshara (application of alkali), Agni (thermal cauterization), and Shastra (surgical excision).^[10]

Apart from these, Jaloukavacarana is indicated in the treatment of Arshas by Vagbhata.^[3] According to Sushruta, Jaloukavacharana is indicated in patients who are young or older, female, who are weak, sensitive, and cannot tolerate Shastra Chikitsa.^[11] It has been explained that in prolapsed (Nirgatani) and thrombosed (Doshapurnani) hemorrhoids, Raktamokshana is the choice of treatment, which relieves pain and edema.

Surgery is contradicted when the hemorrhoids are associated with secondary complications like thrombosis. Thus an effective method for the treatment of thrombosed piles as well as to minimize the post-operative complications becomes necessary. Hence the effect of bloodletting through leech therapy (Jaloukavacharan) on thrombosed hemorrhoids has been studied in this case report.

AIM AND OBJECTIVE: To Study the Role of Jaloukavacharan In Acute Thrombosis Of External Haemorrhoids.

MATERIAL AND METHOD

Study design: Single-arm clinical study.

For ethical consideration, consent has been taken from the patient before the commencement of treatment.

For the present study, a 37-year-old female patient having symptoms of Acute Thrombosis of hemorrhoids for 2 days has been discussed in a detailed manner.

The patient was treated with jaloukavacharan.

ASSESSMENT CRITERIA^[12]

1. Pain: VAS scale

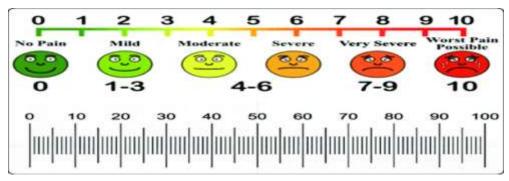


Fig. 1.1 Visual Analogue scale. [13]

2. Swelling: [Table 1]

| Swelling | Grade |
|----------------------|-------|
| No swelling | 0 |
| 1 to 5 mm swelling | 1 |
| 6 to 10 mm swelling | 2 |
| 11 to 15 mm swelling | 3 |

3. Tenderness: [Table 2]

| Tenderness | Grade |
|--|-------|
| No tenderness | 0 |
| Little response to sudden pressure | 1 |
| Wincing face on superficial slight touch | 2 |
| Resist to touch | 3 |

4. Discoloration: [Table 3]

| Discoloration | Grade |
|------------------|-------|
| No discoloration | 0 |
| Red | 1 |
| Reddish blue | 2 |
| Bluish purple | 3 |

5. Anal spasm: [Table 4]

| Anal spasm | Grade |
|------------|-------|
| Absent | 0 |
| Present | 1 |

CASE REPORT

HISTORY OF PRESENT ILLNESS

A 37-year-old patient presented to the outdoor patient department of the hospital on 10^{th} October 2023. The patient complained of severe anal pain during and after defecation, with a

painful hard lump at the anal verge. The pain was continuous and for hours with discomfort throughout the day, for days. The pain was aggravating on sitting. She has taken medication from a local doctor but symptoms have worsened. The patient has been suffering from the same complaints on and off for 4 months and consulted allopathic doctors but temporary relief was obtained. Since the patient had already spent much time and money on all possible treatment options, she opted for Ayurveda management.

CLINICAL FINDINGS

On examination, her vitals were found to be within the normal limits. Pallor, icterus, clubbing, and lymphadenopathy were absent. The patient was having vatakapittaja nadi (vata pitta/dominated pulse), Akriti (-body stature) was Sthoola (~overweight), with a body mass index of 25.6 kg/m2. Her Vyayamashakti (-the power of performing exercise) was Alpa (~less), and Vaya (~age) was Madhayama (~medium). Systemic examination did not reveal any abnormality. There was no specific family history, surgical history, or history of past hospitalization.

General Examination of Patient

BP-130/80 mm of Hg. P-80/min

Sleep - Disturbed

Bowel - Constipated

Micturition- Normal

Systemic Examination:

CVS-S1S2 normal

CNS- conscious and oriented

RS- air entry bilaterally equal, clear

PA-Soft, non-tender, no organomegaly.

TIMELINE: [Table 5]

| 10 th october2023 [1 st visit] | C/O - severe pain after defecation, with a hard lump at the anal verge. Jaloukaavacharana's 1st sitting is done. Pain - VAS score- 10 Swelling- Grade 3 Tenderness- Grade 3 Discoloration- Grade 2 Anal spasm – Present |
|---|---|
| 11 th october2023 | Jaloukaavacharana 2 nd sitting done |

| [2 nd visit] | Pain- VAS score- 3 |
|---|------------------------|
| | Swelling- Grade 1 |
| | Tenderness- Grade 1 |
| | Discoloration- Grade 1 |
| | Anal spasm - Absent |
| | Pain- VAS score-0 |
| 12 th october2023 [3 rd visit] | Swelling- Grade 1 |
| | Tenderness- Grade 0 |
| | Discoloration- Grade 0 |
| | Anal spasm – Absent |

DIAGNOSTIC ASSESSMENT

The patient was examined in OPD on 10th October 2023 and clinically diagnosed as a case of Acute thrombosis of external hemorrhoids at 7 and 11 'o'clock.

On 1st visit, a digital rectal examination with the index finger was done and severe anal sphincter spasm was detected. On the 3rd-day follow-up after completion of leech therapy treatment again DRE was performed and the anal sphincter tone was found to be normal. 2nd-degree internal hemorrhoids were palpated at 3,7,11 the clock. On the first visit, the Visual Analog Scale (VAS) score of the patient was 10 out of 10, On local examination, there was tenderness of Grade 3, swelling of 10 mm, and reddish-blue Discolouration. Routine blood investigations were carried out before treatment and reports were analyzed. The investigations, including HIV and HBsAg, were negative, and bleeding time and clotting time were in the normal range.

Findings - Thrombosed external hemorrhoids at 7 o'clock and 11 o'clock positions with severe anal and Swelling, Tenderness, and Discoloration.

THERAPEUTIC INTERVENTION

PROCEDURE OF JALOUKAWACHARAN^[14]

Purva karma (~Preparatory procedures)

Nirvisha Jaloukas of medium size were selected for the procedure.

- Jaloukas were activated by letting them in Haridra Jala.
- The patient was explained about the procedure and informed written consent was taken.

Pradhan karma (~Main therapeutic procedures)

- Nirvisha Jaloukas of medium size were selected for the procedure.
- Jaloukas were activated by letting them in Haridra Jala.

- The patient was explained about the procedure and informed written consent was taken
- The patient was made to lie in a lithotomy position and the activated Jalouka was applied over the thrombosed mass.
- Jalouka was covered with cotton gauze soaked in water to create a suitable environment.

Observation of Leech during blood sucking

While sucking the blood following signs appears in the body of the leech

- Gradual distension in the central portion of the body.
- Pulsations on the body of leech may be visible.

Paschat karma (~Post-therapy procedures)

- After 30-40 minutes of application Jalouka was detached from the mass by itself or by Application of haridra.
- Haridra churna was applied over the bite site to initiate hemostasis.

Care of wound After detachment of leech

- There is a triangular wound created by the mouth of the leech.
- To stop bleeding tight bandaging with the application of turmeric powder was done.

FOLLOW UPAND OUTCOME

The patient was examined on the 2nd day, 3rd day, and 2 sittings of jaloukavacharan were done. After completion of treatment follow-up for at least 9months on every 3 months was maintained. Patient had significant reduction in the VAS score, Tenderness, swelling, and discoloration. [Table 6].

| Sign symptom | Before treatment | After treatment |
|---------------|------------------|-----------------|
| Pain | Grade 3 | Grade 0 |
| Swelling | Grade 3 | Grade 1 |
| Tenderness | Grade 3 | Grade 0 |
| Discoloration | Grade 2 | Grade 0 |
| Anal Spasm | Grade 1 | Grade 0 |

RESULT AND DISCUSSION

In this case report, a 37-year-old female with Acute Thrombosis of external hemorrhoids along with severe anal pain experienced complete relief from pain after two sittings of jaloukavacharan. Every 3-month follow-up was maintained for up to 9 months during which the effect of Jaloukavacharan treatment was sustained. Further, the follow-up clinical findings

revealed that the hemorrhoid growth was arrested and the patient experienced no pain even after the presence of hemorrhoids.

The assessment was done before and after treatment based on relief in signs and symptoms i.e. Relief of Pain, Tenderness, Swelling, and discoloration.

Table 6 shows the gradation of signs and symptoms before and after Jaloukavacharan.

A partial reduction in Anal pain, swelling, tenderness, and discoloration was seen after 1st sitting of Jaloukavacharan. Complete relief in signs and symptoms was seen after 2nd sitting of Jaloukavacharan.

In this case, the possible explanation for the effectiveness of Jaloukavacharan is that the Anesthetic gel present in the saliva of Leech reduces pain. Hirudin acts as an anticoagulant causing thrombolytic action on the pile mass, which reduces its size. Bdellin present in the saliva of Leeches acts as an anti-inflammatory agent. It goes to a deeper level through the action of hyaluronidase, hirudin causes more liquefaction of accumulated blood. So there was a significant reduction in the size of swelling as jaloukavacharan reduces inflammation & maintains normal circulation.

Leech therapy or Jalaukavacharan is an ancient ayurvedic bloodletting technique with immense potential to treat inflammatory conditions. Leech saliva contains several bioactive constituents that possess anti-inflammatory, anticoagulant, vasodilator, anesthetic, antibiotic, and antioxidant properties acting through multiple mechanisms in thrombosed piles. Thrombosis is a common acute complication of hemorrhoids with tense & tender swelling in the perianal region. There is every chance of suppuration, necrosis, busting & fibrosis. In this condition application of leech help to improve circulation by sucking the liquid blood & interstitial fluid from inflammatory swelling & there will be an immediate reduction in the size of swelling, pain & tenderness. [15][16]

Leech therapy is effective, safe, simple, and noninvasive & is cost-effective too. During Jalaukavacharana antibiotics, antiseptic & analgesic drugs are not required, and is painless therapy. Leech therapy is an alternative treatment in the management of Arsha, as an analgesic, thrombolytic, anti-inflammatory in action especially in those patients who are not fit or willing for surgery, Sukumar [contra indicated for surgery], Garbhini [a pregnant woman], Sutika [post natal condition of patient], Anxiety patients, etc.

IMAGES



Fig. 1.2 Before treatment.



Fig. 1.3 After treatment.



Fig. 1.4 Application of Jalouka.

CONCLUSION

From this Case report, we can say that jaloukavacharan has a significant effect on the management of acute thrombosis of external hemorrhoids. Jaloukavacharan is a simple economical procedure with minimum or no side effects and can be performed at the OPD level. However, to establish its effectiveness, further large-scale studies are required.

PATIENT PERSPECTIVE

The patient suffered from severe anal pain after defecation which was aggravating after sitting and a painful hard lump anus. She is currently free from anal pain. She can now sit comfortably even in the morning.

INFORMED CONSENT

The patient gave written informed consent for the publication of this case report along with images and other clinical information in the journal.

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REFERENCES

- 1. Bailey & Love's short practice of surgery / [edited by] Norman Williams, P. Ronan O'Connell, Andrew mccaskie.27th edition. | Boca Raton, FL: CRC Press, 2017.
- 2. Grosz CR. A surgical treatment of thrombosed external hemorrhoids. Dis Colon Rectum, 1990; 33(3): 249–250.
- 3. Acharya Vagbhata. Ashtanga Hridaya. Sutrasthana. Shastravidhi Adhyaya.
- 4. Gordon_and_Nivatvongs'_Principles_and_Practice_of_Surgery_for the_Colon,_Rec.pdf
- 5. Dr. Ambikadatta Shastri Editor (Reprint ed.). Ayurveda Tattvasandipika Hindi commentary on Nidanasthana: Chapter 02 (Arshonidan), Verse 14. Varanasi: Chaukhambha Sanskrit Sansthan, 2013; 308.
- 6. Acharya Vagbhata, Ashtanga Hridaya, Nidana Sthana: Chapter 7(Arshonidana). Verse1.
- 7. Sharma RK. Charaka Samhita, Volume I, Chaukhamba Orientalis, Sanskrit series office, 2005; P. 230.
- 8. Sharma PV. Susruta Samhita, Volume I, Chaukhamba Orientalis, Varanasi, 2010; P. 477.
- 9. Srikantha Murthy KR. Ashtangahrdyam, Chowkhambhakrinadas Academy, Varanasi, India, 2009; P. 75.

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- 10. Dr. Ambikadatta Shastri Editor (Reprint ed.). Ayurveda Tattvasandipika Hindi commentary on chikitsasthana: Chapter 06 (Arsha chikitsa), Verse 03. Varanasi: Chaukhambha Sanskrit Sansthan, 2013; 46.
- 11. Dr. Ambikadatta Shastri Editor (Reprint ed.). Ayurveda Tattvasandipika Hindi commentary on Sutrasthana: Chapter 13 (Jaloukavacharaniya), Verse 03. Varanasi: Chaukhambha Sanskrit Sansthan, 2013; 57.
- 12. Rakshitha M, S M Sridhara Rao. Role of Jaloukaavacharana followed by Kaasisaadi Taila application in thrombosed Haemorrhoids A Case Study. J Ayurveda Integr Med Sci, 2022; 6: 200-203.
- 13. Source:https://www.researchgate.net/figure/Fig-2-Faces-Pain-Scale-and-Visual-Anologue_fig2_34889934
- 14. Dr. Ambikadatta Shastri Editor (Reprint ed.). Ayurveda Tattvasandipika Hindi commentary on Sutrasthana: Chapter 13 (Jaloukavacharaniya), Verse19-23. Varanasi: Chaukhambha Sanskrit Sansthan, 2013; 60.
- 15. Field WS. The history of leeching and hirudin, Haemostasis, 1991; 21: 3-10.
- 16. Patel, Manuni, and Ekta M. Vyas. "a review on the role of jalaukavcharan karma in thrombosed hemorrhoids." (2018).
- 17. Greenspon J, Williams SB, Young HA, Orkin BA. Thrombosed external hemorrhoids: outcome after conservative or surgical management. Dis Colon Rectum, 2004; 47(9): 1493–1498.

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