



Effect Of Leech Therapy On TEP (Thrombosed External Pile): A Case Study

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ABSTRACT:

The Thrombosed external pile is the one which is located distal to the dentate line and develop as a result of tortuosity and distension of External Hemorrhoidal venous system. The engorgement of a hemorrhoidal vessel with acute swelling may allow blood to pool and subsequently clot; this leads to the Acute Thrombosed External Pile mass, a bluish purplish discolored swelling with severe pain and tenderness. The present case is of TEP (Thrombosed external pile) and the effect of Leech application is evaluated on this. The main objective is to assess the effective role of Leech on essential parameters of the patient, that are troublesome sign and symptoms - Pain, edema, tenderness and discoloration. The case is successfully managed with Leech therapy. Hirudin, calin, Factor X_a present in the saliva of Leech helps in oppressing the process of blood clot in an External pile mass and provides a symptomatic relief to the patient.

Keywords : Leech Therapy, Thrombosed External Pile, *Jaloka avcharana*, *Arsha Chikitsa*

INTRODUCTION

Hemorrhoidal disease can occur as a result of weakness of supportive connective tissue within the anal cushions, reduced blood flow to perianal area and increased intra - abdominal pressure. Other risk factors such as history of Constipation, prolonged straining during bowel movements, heavy weight lifting, obesity and pregnancy also leads to the manifestation of this disease. Once hemorrhoids have developed, blood pooling within the blood vessel can contribute to the formation of a blood clot, resulting in Thrombosis. Hemorrhoids are otherwise painless unless they are thrombosed, prolapsed or strangulated, meaning their blood supply has been cut-off¹. A thrombosed external pile (TEP) occurs when a blood

clot forms inside a dilated hemorrhoidal vein (external hemorrhoidal venous system) and obstructs a blood flow causing a painful swelling below the dentate line. These appear as a painful dark purplish lump at the verge of anal canal. In some cases, the increased pressure within the hemorrhoid can lead to necrosis and ulceration of skin on top of it, causing rectal bleeding. As per Acharya *Vagbhata*, the *rakta visravana* is advised in *Sanchit dushta rudhira*(thrombosed), *shoon* (swelling) and *kathina* (hard) *Arsha*²

Surgery is contraindicated if hemorrhoids are associated with secondary complications like thrombosis³. Hence in the present case, Leeches are used in the management of TEP as it, with its sucking mechanism removes the pooled blood in the engorged hemorrhoidal vein and restores the blood circulation in the blocked vessel, and therefore,

proves its efficient thrombolytic and decongestant action.

CASE REPORT

A 46 year old male patient visited Shalya OPD of KSVAMC&RC, and presented with severe pain and swelling at anal verge since 1 month, per rectal bleeding and constipation. He had not taken any medical advice for the same earlier and directly came here in agony to seek emergent relief in pain as it hampered his sitting posture and daily activities.

1)Personal History-

Marital status: Married

Sleep pattern: Poor and disturbed

Addiction: Not addicted to smoking/alcohol/drugs

Height: 165 cm

Weight: 78 Kg

2) *Ashta-vidha parkisha*-(Table 1)

3) Local examination-

Patient was examined in left lateral position. There was severe swelling reddish purple in color, seen at the anal verge at 3 o'clock position. On palpation, it was extremely tender, indurated swelling. The condition was diagnosed as a Thrombosed External pile mass.

The systemic examination of CVS/CNS/RS did not reveal any abnormality. On the other hand, all the important Laboratory investigations (biochemical, pathological blood investigations, coagulation profile, Triple H, Stool and urine investigations etc) were carried out before the start of treatment plan and were within normal range.

Treatment

Patient was given a total of 4 Leech sittings, after every 3 days and all the essential parameters were carefully assessed before the start of sitting and after sitting.

Apart from this, Sitz bath in lukewarm water with *Haridara & Kankshi* (Alum) was advised twice daily and *Haritaki churana* 3gm daily at bedtime, for a good *anulomana* of *Vata & Mala*.

Methodology Of Leech Application On Tep-

Materials required : Leeches, kidney tray, gauze piece, cotton padding, *Haridra churana*, Bandage, pair of gloves.

1.*Purva Karma* -The patient was advised to lie down in a left lateral position and the application site was cleaned and dried

2.*Pradhana Karma*-Leech was made to catch on the place of pile mass and they were covered with a moist gauze piece. Due care was taken, so that the leeches do not enter the anal canal. Patient experienced itching and slight sucking pain at the site.

3.*Paschata Karma*-Some of the leeches got detached by itself while the other that do not leave the site, *Haridra churana* was sprinkled over them. The sucked site was covered with a *Haridra* packed gauze piece and T bandage was given. Patient was kept under observation in IPD and all the essential vitals (TPR & BP) were recorded and general condition was assessed.

Criteria For Assessment⁴

1.Pain

0-Absent

1-During defecation only

2-Present after defecation till 1 hour

3-Continuous pain for more than 1 hour.

2.Edema

0-Absent

1-Present

3.Tenderness

0-No tenderness

1-Tenderness on superficial slight touch

2-Resist to touch

4.Discoloration

0-No discoloration

1-Reddish blue

2-Bluish purple

OBSERVATION & RESULT

The troublesome signs and symptoms patient suffered from, were well relieved after 4 sittings of Leech application. Pain is a subjective criteria and edema, tenderness and discoloration-the objective parameters were evaluated with Inspection & Palpation of the effected site. The gradings were as such : (Table 2)

DISCUSSION

The severe edema, pain, tenderness and discoloration was resolved with subsequent 4 sittings of Leech therapy because of its anti-coagulant, thrombolytic, anti-inflammatory, vasodilator and anesthetic action⁵. *Bdellin* present in the saliva of leech act as anti-inflammatory agent and reduces pain and recovers discoloration. *Hirudin*, *Calin* and *Factor X_a* act as anti-coagulant and prevent clot

formation⁶. Probably due to the action of Hirudin and Hyaluronidase, Leech improves the blood circulation to the tissues, ensure drainage, by partially or totally replacing the venous return and restores the blocked circulation in blocked veins by removing the pooled blood. Therefore, it promotes reduction of edema and dissolution of organized blood clots.

CONCLUSION

In present study, the leech application in Thrombosed external pile is found to be effective. The method is cheap, noninvasive, less time consuming and an OPD procedure. Leech with its sucking mechanism removes the pooled blood in the engorged hemorrhoidal vein and restores the blood circulation in the blocked vessel, and therefore, proves its efficient thrombolytic, decongestant and analgesic actions. Hence, it can be used as an alternative treatment in the management of TEP.

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REFERENCES

1. <http://www.osmosis.org> Anna Hernandez Castillo, MD, Thombosed hemorrhoid: Causes, diagnosis and treatment.
2. Tripathi B, Ashtang Hridaya chikitsa Sthana, 8/28, By Vagbhata, Varanasi, Choukhamba Sanskrit Sanstana, 2009
3. Bhat S M. SRB'S Manual of Surgery, 3rd edition. Panama: Jaypee Brothers Medical Publishers Ltd; 2009
4. Pradnya J. Bhagat, Subhash Y Raut and Arun M. Lakhapati, Clinical efficacy of Jaluka awcharana (Leech application) in Thrombosed piles. Ayu. 2012 Apr-June; 33(2); 261-263.
5. Michalsen A, Manfred Roth, Gustav Dobos; Medicinal Leech therapy, New York 2007; pg 132.
6. www.leechtherapy.com
[Hhttp://hemorrhoidsorted.com](http://hemorrhoidsorted.com) (cited 2014 April 12)

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Table 1 Ashta-vidha parkisha-

1. <i>Nadi</i> : 96/min(pulse),140/90(BP)	5. <i>Shabda</i> - Spashta(usual)
2. <i>Mala</i> : <i>swalpa, badha, vedanyukta</i> (Constipation)	6. <i>Sparsha</i> - Tenderness on Thrombosed external pile mass.
3. <i>Mutra</i> : <i>samanya varna, sankhaya.</i>	7. <i>Drika</i> - <i>Prakrit</i> (usual)
4. <i>Jihva</i> : <i>Shushka, Ruksha</i>	8. <i>Akriti</i> -Normal

Table 2

S.No	CRITERIA	BEFORE TREATMENT	AFTER TREATMENT
1	PAIN	3	0
2	EDEMA	1	0
3	TENDERNESS	2	0
4	DISCOLORATION	1	0

STUDY PHOTOGRAPHS



FIG1.-THROMBOSED EXTERNAL PILE MASS AT 3 O’CLOCK POSITION OF ANAL VERGE



FIG2.-1ST SITTING OF LEECH APPLICATION



FIG3.2ND SITTING OF LEECH APPLICATION



FIG4.3RD SITTING OF LEECH APPLICATION



FIG5.4TH SITTING OF LEECH APPLICATION.