

# Efficacy of *Yashtimadhu ghrít matra basti* in post-operative management of Ano-rectal Cases – A case Series

## Case Report

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## Abstract

**Background:** Exploitation of analgesics is becoming an advent scenario in the current practice of both medical and surgical cases. Adopting a less complicated and a wholesome beneficial modality for post operative analgesia is the need of the hour. In this case series, focus has been placed on *yashti ghrít matra basti* as the intervention for pain and wound management of post-operative cases of chronic fissure in ano associated with internal haemorrhoids. **Objective:** The current study was aimed at post operative analgesia and wound management with *yashti ghrít matra basti* in ano-rectal cases. **Material & Methods-**The method adopted here was Lord's anal dilatation followed by excision of sentinel tags or ligation haemorrhoidectomy according to the case presentation, followed by *yashti ghrít matra basti* as primary ayurvedic intervention for post operative analgesia and wound healing. **Results:** It is found that the planned treatment gave a positive response as post operative analgesia and also played an adjuvant role in wound healing. **Conclusion:** This case series provides the successful pain and wound management of post-operative ano-rectal cases with a promising ayurvedic intervention.

**Keywords:** *Ayurvedic post operative analgesia, Shalyatantra, Wound healing, Anorectal surgery, Matra basti, Glycyrrhiza Glabra.*

## Introduction

### Patients Information And Surgical Management Case 1

A 45 year old female patient visited the OPD with severe burning sensation during and post defecation along with complaints of hard stools and occasional bleeding per anum for the past six months. After digital rectal examination, diagnosis was made as chronic fissure in ano both at anterior and posterior midline, with anterior sentinel tag, and a huge anal papilla at 12 o'clock position. Surgical management was chosen after all routine investigations. Procedure was Lord's anal dilatation, excision of tag with thermal cauterization and excision of anal papilla by thermal cauterisation under spinal anesthesia in Shalya department of MGACH RC.

### Case 2

A male patient, 30 years old, came with complaints of pain during and post defecation along with bleeding while defecation on and off and tag like mass at anal verge. Digital rectal examination revealed chronic fissure in ano at anterior and posterior midline

and inflamed sentinel tag at anterior midline. After all routine investigations, under spinal anesthesia, Lord's anal dilatation with excision of sentinel tag by LASER energy was done as the primary surgical management in Shalya department of MGACH RC.

### Case 3

A 47 year old male patient came to Shalya OPD with complaints of bleeding post defecation on and off, and pain during and post defecation along with and feeling of mass like structure at anal verge. Digital rectal examination revealed Chronic fissure in ano at anterior and posterior midline, with anterior sentinel tag and inflamed posterior tag associated. Due to severe spasm proctoscopy was not performed. Operative diagnosis includes second degree internal haemorrhoids at 7 and 11 o'clock position. After all routine investigations, under spinal anesthesia, Lord's anal dilatation with excision of tag by thermal cauterization and open hemorrhoidectomy was done in Shalya department of MGACH RC.

### Case 4

A 36 year old male patient had complaints of pain during and post defecation along with bleeding per anum on and off and feeling of mass like structure at anal verge. Diagnosis was chronic fissure in ano with sentinel tag at 12 o'clock position associated with submucosal fistula arising from the sentinel tag and second degree internal haemorrhoid at 11 o'clock position and external haemorrhoid at 7 o'clock position. After all routine investigations, under spinal

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anesthesia, Lord’s anal dilatation with fistulectomy, hemorrhoidectomy was done in Shalya department of excision of tag by thermal cauterisation and open MGACH RC.

**Table 01: Routine investigations of the four cases**

Investigations	Case 1	Case 2	Case 3	Case 4
Complete blood count	Hb – 11.2 g% RBC- 4.56 M/uL PCV- 41.5 % MCV- 84 umd MCH- 26.6 pg MCHC- 35.5 g/dL ESR – 05mm/hr  TLC – 4500/cumm N- 53% L – 42% E- 1% , M – 4%  Platelets; 2,50,000/cumm	Hb – 11.9 g/dL RBC- 4.38 M/uL PCV- 38 % MCV- 87 umd MCH- 27.2 pg MCHC- 31.2 g/dL ESR – 40mm/hr  TLC – 7100/cumm N- 57% L – 38% E- 2% , M – 3%  Platelets; 1,75,000/cumm	Hb – 13.1 g/dL RBC- 4.96 M/uL PCV- 43.6 % MCV- 88 umd MCH- 26.5 pg MCHC- 30.1 g/dL ESR- 16mm/hr  TLC – 6300/cumm N- 60% L – 35% E- 3% , M – 2%  Platelets; 2,25,000/cumm	Hb – 13.4 g/dL RBC- 4.75 M/uL PCV- 44.8 % MCV- 94 umd MCH- 29.3 pg MCHC- 31.1 g/dL ESR- 6mm/hr  TLC – 6700/cumm N- 72% L – 24% E- 1% , M – 3%  Platelets; 1,99,000/cumm
Bleeding and clotting time	2min 40 sec 6 min 23 sec	2 min 10 sec 5 min 45 sec	1min 55 sec 6 min 55sec	2 min 10 sec 5 min 25 sec
Blood group	A positive	O Positive	B positive	B Positive
Urine Routine and microscopy	No abnormality detected except 5-6 pus cells .	No abnormality detected	No abnormality detected	No abnormality detected
HIV and HbsAg	Non - Reactive	Non - Reactive	Non - Reactive	Non - Reactive
Random blood sugar	135 mg/dL	120 mg/dL	142 mg/dL	150 mg/dL
Liver function test	Within normal limits.	Within normal limits.	Within normal limits.	Within normal limits.
Kidney function tests	Within normal limits.	Within normal limits.	Within normal limits.	Within normal limits.

**Post Operative Management**

In the post operative period, for all the cases the following common treatment plan was executed as given below in table no.2.

**Table 2: Post Operative Management**

	Intervention Needed	Duration
Antibiotic regime	Inj. Cefotaxime 1g IV – BD (followed by oral antibiotics if needed)	POD 0 to POD 1
	Inj. Metronidazole 500mg – IV - TDS	
	Inj. Pantaprazole 40mg – IV - OD	
	T. Triphala guggulu 2 BD – after food with luke warm water	15 Days
IV fluids	NS/RL/DNS at maintenance	POD 0 to POD 1
Analgesia	Diclofenac suppository – SOS	From POD 0 to POD 1 (continued SOS) Basti – POD 1 to POD 10HJ
	T. [Diclofenac (50mg) + paracetamol (325mg) + (serratiopeptidase 15 mg)] – SOS	
	<b>YASHTI GHRIT MATRA BASTI 5 ml to 10 ml Twice a day</b>	
Laxatives	Syp Lactulose – 30 ml HS	POD 1 to 5
	Syp . Abhaya aristam 20ml – BD after food with equal water	POD 6 to POD 15
	Panchasakar churnam / Gandharva Haritaki churnam – 10 g – HS with luke warm water	
Vihara	Warm sitz bath – 10-15 min – twice a day	20 – 30 days
Ahara	Soft diet	Till POD 1
	Normal full diet with excess oil and spice restrictions	Till POD 10

**Observation and Outcome**

All the patients were observed on the basis of the following criteria on first , fourth and seventh post operative days.

**1. Pain (vedana) (1): assessed by the VAS pain scale**

- 0 = no pain,
- 1 = 1-3 in chart (mild pain),
- 2 = 4-6 in chart (moderate pain),
- 3 = 7-9 in chart (severe pain),
- 4 = 10 in chart – (unbearable pain.)

**Fig 1: Cases and their pre-op and post operative images**



**Figure 2: Administration of yashtimadhu ghrīt matra basti**



5-10 ml luke warm *ghrīt* administered as *matra basti* in left lateral position or lithotomy position.

**2. Burning sensation (*Daha*) (2)**

- 0- No any burning sensation,
- 1- (Mild degree) burning sensation after defecation for 15 min,
- 2-(Moderate degree) burning sensation after defecation(15-30 min),
- 3-Unbearable severe burning sensation after and before defecation (more than 30 min)

**3. Assessment of granulation by wound bed colour (*Vrana varna*) (3)**

- 0 - Skin colour,
- 1 - Pale pink granulation,
- 2 - Red granulation,
- 3 - Blackish white / grey

**4. Assessment of wound discharge (*Vrana Srava*) (3)**

- 0 - No discharge,
- 1 - Serous discharge,
- 2 - Mucous discharge,
- 3 - Mucopurulent discharge

**5. Bleeding per rectum (*Raktasrava*) (4)**

- 0- No Bleeding,
- 1- Mild bleeding along with defecation (1-5 drops of blood),
- 2- Moderate bleeding (5-10 drops of blood),
- 3- Profuse bleeding (more than 10 drops of blood)

Significant improvement in the parameters have been observed in all the four patients. Pain , burning sensation and wound healing aspects showed remarkable differences post the administration of *matra basti*. The following table no. 3 shows the assessment of the patients and their observations.

**Discussion**

All the four cases were given the same post operative management and the observation on assessment criteria showed significant results. Drastic decrease of burning sensation and pain was observed and from post operative day 1, patient was subjected to only *matra basti* as analgesic agent and oral painkillers were given only when needed. Wound healing showed remarkable improvement and was faster. No bleeding per rectum was also observed.

**Mode of action of *Yashti ghrīt matra basti***

In view of a holistic approach for analgesia and wound healing and overall betterment of the patient, along with luke warm sitz bath and laxative, *Yasti ghrīt matra basti* was followed in the post operative management. *Acharya Sushruta* had mentioned the role and importance of *ghrita, basti* in wound management elaborately in *Shashti Upakramas* for *Vrana Ropana*, and mentioned the use of *Yastimadhu* in *parikartika chikitsa*. (5) *Charaka* has mentioned the use of *sukhoshna ghrīt* in management of bleeding piles too. (6) *Yashtimadhu* has many multiefficient phytochemical constituents, proving it to be a supreme choice of drug. Glycyrrhizine a saponin has anti-inflammatory and anti-



**Table 3: Assessment of the patients**

Assessment criteria	Case 1				Case 2				Case 3				Case 4			
	Pre op	Post op day			Pre op	Post op day			Pre op	Post op day			Pre op	Post op day		
		1	4	7		1	4	7		1	4	7		1	4	7
<b>Pain</b>	4	3	1	0	3	3	2	0	3	2	1	0	3	2	1	1
<b>Burning sensation</b>	3	1	1	0	2	1	0	0	3	1	0	0	2	1	0	0
<b>Wound colour</b>	-	2	2	2	-	2	2	2	-	2	2	0	-	2	2	2
<b>Wound discharge</b>	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0
<b>Bleeding per rectum</b>	2	0	0	0	2	0	0	0	2	1	0	0	3	1	0	0

thrombotic effect (7) and Glycyrrhetic acid is a potent anti-inflammatory agent. Asparagine belong to class of amino acid works as analgesic (natural painkiller) and anti – inflammatory agent. Sodium glycyrrhizate possess anti-ulcer activity and stimulates of regeneration of mucosa and skin. Significant antinociceptive effect by central and peripheral activity is also noted (8). Glycyrrhizic acid works as antioxidant by means of donating hydrogen and high free radical scavenging (9) whereas saponins, alkaloid and flavonoid contents like Licochalcone A for its potent antibacterial activity.(10) Tannins and Terpenoids like licoric acid, licoricone etc contribute to wound healing due astringent and antimicrobial properties both gram positive and negative, increasing rate of epithelialization and decreasing fibrosis. (11)

Ghee attributes for increased neo-vascularisation in the wound site causing rejuvenating effect to hasten the wound healing process. By providing a moist atmosphere around the wound, it maintains mild vasodilatation which helps in perfusion and early epithelialisation, enhancing the repair of tissue and wound healing.(12) Vit A and K which possess antioxidant properties preventing oxidation injury while Vit. K maintains the epithelial tissue of the body intent aiding wound healing. Liolenic acid helps in granulation. (13) At the cell surface, penetration of lipid soluble into cell and subsequently into the circulation is more rapid than water soluble drugs. (14)

*Gritha* posses *Madhura rasa, sheeta veerya, vata-pittahara doshakarma, ropana* and *vishahara* properties.(15) *Yashtimadhu* is *Madhura* in *Rasa, Sheeta* in *Virya, Madhura* in *Vipaka* and is *Vata-Pitta hara* and had *vrana sodhana karma. Sheeta virya* facilitates its *Vedanahara* and *Dahashamak* action, and *Madhurarasa* acts for the *Vrana Ropana* and *Shothahara karma*. (16)

Basti, the *ardha chikitsa* is synonymous with the terms *nivasa* and *acchadana* in its mode of action and has a significant role in post-operative management. It stays in the place, surrounds , envelops and delivers a prolonged, hence superlative effect of the drug . When *Yashtimadhu ghrith* is administered as *matra basti*, dose of *Sneha* is minimum, which has easy absorption in the body without coming out. (17) *Matra basti* classified under *anuvasan basti* doesnot cause any untoward problem by vitiating doshas and hence can be administered daily without strict restrictions.(18) *Guda marga* being the site of surgical wound, it also serves as *vrana basti. Ghritha* highly reduces the *Rukshata* of

*Vayu* and retains the normal tone of sphincter muscles preventing anal spasm. Being *Yogavahi* in nature, it accelerates the healing process and the action of the drug is potentiated by the *Samskaraanuvarti* property which creates a good medium for absorption, tranportion and delivery of the drug used. Basti provides analgesic effect by soothing the peripheral nerves in the anal region justified by its *vatahara karma*. (19) *Sthoola guda* (anal canal) is one of the root of *purishavaha strotas* (20), and when *basti* with lukewarm *yashti ghritha* is administered, works as *vata-pitta hara, shoolahara, shothahara, balya* ,prevents constipation. *Ghrith* and *Yastimadhu* fuels itself together and works significantly as *vrana shodana, ropana* and a local analgesic and *daha shamak* agent. It also nourishes the *sira* and the total structure of anal canal with appreciable systemic effects too. Strength of the patient in an wholesome way is increased too.

While considering the assessment parameters, significant difference was noticed before and after the surgery, especially with the induction of *matra basti*. Pain and burning sensation drastically reduced in all the four cases. The wound healing parameters like wound colour showed efficient healing and wound discharge was bare minimum or absent. Bleeding per rectum post surgery a major complication was also tackled by the *matra basti* administration of the *yasti ghrith*.

### Conclusion

Rapid epithelization and better wound healing was observed at the wound site. The healing, anti-ulcer, anti-inflammatory and skin regeneration activity of *Yashtimadhu*, have been mentioned by the modern scientific parameters. *Yastimadhu Ghritha* showed analgesic property and cures bleeding per anum, itching, discharge and burning sensation. Pain is reduced due to *vedanashamak* effect of *Yashtimadhu ghritha basti*, which also acts as *vatahara, pitta shamak, ropaka, dahashamak, stambhak* in *Vrana*. The mucosal ulcer healing effect of *Yashtimadhu Ghritha* is also significant. *Yashtimadhu* and *Ghritha* are having *gunas* like *madhura rasa, madhura vipaka* and *sheeta virya* which adds the efficiency of both. Administering *matra basti* is a significant substitute for abuse of oral analgesics, as oral analgesics can be given only on need and *basti* provides the needed analgesic along with other benefits in the post operative period.

### Conflict of interest

There is no conflict of interest.

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