



## EFFECT OF ALOE VERA AND MULETHI WITH HONEY IN THE MANAGEMENT OF FISSURE IN ANO

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### ABSTRACT

Ayurveda is an age old science of health which emphasizes to cure diseases. The fissure in ano is the most painful condition among all the ano rectal diseases. In ayurvedic literature description of this disease is available in the context of kshudra roga as parikartika. It is also clearly mentioned as the condition arising from improper administration of virechan/vastikarma. There are many treatment modalities for fissure in ano in conventional surgical practice, but these treatments often provide partial relief and chances of recurrence is more. Some of these treatments are associated with development of complications making these unacceptable as the suggested treatment of fissure in ano. According to ayurvedic literature, there are several methods of treatment among them bhaisaja karma is the first line of treatment. In this study, an effort is made to derive a standard and easily accessible treatment for fissure-in-ano from classical resources. Aloe vera, mulethi, and honey having properties of vrana sodhana-ropana which can help the vrana (wound) to heal rapidly. These are time tested classical ingredients, so selected for the clinical evaluation in this study. The patients diagnosed and selected for the therapy were put into 2 groups, 10 in each group. The treatment was accessed with observation and results for a period of eight weeks. After this therapy, significant result was observed. It was observed that the results achieved are effective and stable during follow up period.

**KEYWORDS:** Parikartika, aloe vera, mulethi, fissure-in-ano.

### INTRODUCTION

The fissure in ano is the most painful condition among all the ano rectal diseases. A constipated person when strain for defecation there may be chance of tearing anal mucosa at its terminal end (most often posteriorly 90%). It is a longitudinal ulcer in the wall of anal canal especially at the musculocutaneous junction. It is usually a few millimeter in width and rarely large than 1 cm. This tear is because of acute angulations between the anal canal and rectum. It varies in appearance from superficial crack in the mucosa to a long oval shaped ulcer with induration or undetermined edges and at the base of which plain muscles may be exposed. This fissure is invariably associated with sphincteric spasm which not only causes pain but also delays healing process of an ulcer. Fibrosis occurs around the base and margins of fissure and oedema may be present which indicates chronicity of ulcer.

Chronic fissure is identified by the following triad called anal triad which includes hypertrophied anal papillae, an ulcer lying below that and a sentinel tag present below the ulcer.

In Ayurvedic literature description of this disease is available in the context of Kshudra roga as Parikartika. It is also clearly mentioned as the condition arising from improper administration of virechan/vastikarma.<sup>[1-4]</sup> The sign and symptom of fissure in ano include constipation, pain around anus during and after defecation, bleeding per rectum, spasm of sphincter, anal tenderness, ulceration of anal canal, stenosis of anal canal, hypertrophied papilla and sentinel tag.

There are many treatment modalities for fissure in ano in conventional surgical practice like the measures to avoid constipation, local use of anaesthetic ointments, use of analgesics, injections of local anaesthesia, anal dilation, excision of fissure bed followed by skin grafting, sphincterectomy etc. But these treatments often provide partial relief and chances of recurrence is more. Some of these treatments are associated with development of complications making these unacceptable as the suggested treatment of fissure in ano. Hence a mere patient friendly treatment method was tried to overcome all the deficits.

## MATERIAL AND METHODS

Patients who are suffering from acute fissure in ano were selected from Shalya OPD of SBLD Ayurved Vishwa Bharti, Sardarsaher, Rajasthan. The selected patients were examined thoroughly and recorded in the case sheet specially designed for this study. Local ano rectal examination of patients include careful examination of fissure in ano, other associated lesion and digital examination if possible to elicit sphincter tone.

### Inclusion Criteria

Patients of acute fissure in ano were selected for study.

### Exclusion Criteria

- Patients of chronic fissure
- Associated lesion like piles, fistula in ano
- Diabetes mellitus
- History of ulcerative colitis & Crohn's disease
- History of chronic constipation



**Mulethi Powder**



**Aloevera Gel**



**Honey**



**Prepared Gel**

### Assessment Criteria

The efficacy of the treatment was assessed on the basis of the following subjective and objective parameter.

#### Subjective parameters

1. Pain
2. Constipation
3. Burning sensation

#### Objective parameters

1. Local tenderness
2. Healing of the ulcers

#### Grading of the assessed parameters

**Pain** (assessed on the basis of visual analogue scale)

- 0- No pain
- 1- Mild pain upto mark 3

**Grouping of patients-** Two groups of 10 patients each were made for present clinical study.

**Group A** (control group) patients dealt with standard treatment.

**Group B** (Trial group) Patients were treated with fresh aloevera gel, mulethi powder and honey (local application) along with standard treatment.

### Treatment Schedule

**Group A** – Triphala Guggulu 2 tabs TDS orally and Jatyadi Taila for local application TDS.

**Group B** – Triphala Guggulu 2 tabs TDS orally and Fresh aloevera Gel, Mulethi powder and Honey TDS for local application.

### Common Treatment for both groups

Anal dilation and Sitz bath in warm water twice a day and fiber rich diet as pathya.

**Duration of trial** – 2 weeks.

- 2- Moderate pain from 4 to 6 mark
- 3- Severe pain from 7 to 9 marks
- 4- Severe pain from 10 – 12 marks.

#### Constipation

- 0- Normal stool passed regularly with liquid consistency
- 1- Patient passes semi solid stool
- 2- Patient passes normal consistency
- 3- Patient passes completely hard stool
- 4- Patient unable to pass stool.

#### Burning sensation

- 0- No burning sensation
- 1- Negligible burning sensation for a few minutes after defecation

- 2- Tolerable burning sensation and completely relieved by sitz bath  
 3- Constant and tolerable burning sensation and slight relieve by warm sitz bath  
 4- Intolerable burning sensation.

- 3- Winces with pain  
 4- Patient winces and withdraw the part  
 5- Patient doesnot allow the part to be touched.

**Local tenderness**

- 0- No tenderness  
 1- No pain on pressure  
 2- Painfull on pressure

**Healing of ulcer**

- 0- Completely healed ulcer  
 1- Healed ulcer which fissured during examination  
 2- Slightly healing ulcer from outward  
 3- Ulcer with fresh healthy granulation tissue  
 4- Ulcer with rough surface.

**OBSERVATIONS AND RESULTS****Group A (Control Group)**

S.no. of Patients	Pain		Constipation		Burning Sensation		Local Tenderness		Healing of ulcer	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1.	4	2	4	1	4	0	3	1	2	0
2.	4	2	2	1	3	1	1	0	3	2
3.	4	0	2	0	4	2	3	2	3	1
4.	2	1	2	1	4	1	2	0	3	1
5.	2	1	2	1	3	1	2	0	2	1
6.	2	0	4	1	3	1	3	1	2	0
7.	4	1	2	1	4	1	2	1	3	1
8.	2	0	3	1	2	1	3	2	2	0
9.	2	0	2	0	3	1	2	0	2	0
10.	2	0	4	1	3	1	2	0	3	1

**Group B (Trial Group)**

S.no. of Patients	Pain		Constipation		Burning Sensation		Local Tenderness		Healing of Ulcer	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
1.	4	1	4	1	4	1	3	1	4	1
2.	3	0	2	0	4	0	3	0	3	0
3.	4	0	3	1	3	0	2	0	2	0
4.	3	1	3	0	4	1	2	1	3	1
5.	3	0	3	1	4	0	2	0	2	0
6.	2	0	2	1	4	1	3	0	2	0
7.	2	0	3	0	3	0	2	0	3	0
8.	4	1	4	2	2	0	2	1	3	1
9.	3	0	2	0	3	0	2	1	2	0
10.	2	0	2	0	2	0	2	0	2	0

**Statistical Analysis**

Symptoms	Gr A			Gr B		
	%	t	p	%	T	P
Pain	77.5	11.711	<0.001	91.6	10.386	<0.001
Constipation	69.16	6.866	<0.001	80.8	11.006	<0.001
Burning sensation	68.3	9.804	<0.001	92.5	14.243	<0.001
Local tenderness	74.9	7.248	<0.001	86.6	9.495	<0.001
Healing of ulcer	75.8	13.551	<0.001	90.7	10.919	<0.001

**DISCUSSION**

Analysis of the result in both the groups clearly indicates the effectiveness of the therapy. The patients treated with aloevera gel, mulethi, honey as local application along with Trifala guggul were more relieved from all the symptoms. The pain, burning sensation and healing status of fissure in ano has remarkable result in Trial

group as compared to control group. The main feature pain of Fissure in ano was relieved upto 91.6%.

The drug aloevera contains 75 potentially active constituents i.e vitamins, enzymes, minerals, sugars, lignin, saponin, salicylic acid and amino acid. It contains anthraquinone aloin and emodin which acts as analgesic as well as healing of wound. The enzyme bradykinase

also helps in the same way. It also contains glucomannans, a polysachharide and gibberelline a growth hormone, interacts with growth factor receptors on the fibroblast, thereby stimulating its activity and proliferation, which in turn significantly increases collagen synthesis after topical application. It also changed the collagen composition and increase the degree of collagen cross linking which helps in contraction of wound and healing.

In ancient text Mulethi is described under Kakolyadi, anjanadi and sarivadi group and also considered as best analgesic in case of management of pain of vrana induced by sastra or Sadyovrana.<sup>[5]</sup> It contains glycerrrhizin which has anti inflammatory effect. Now a days Mulethi is used in many compound drugs with Aswagandha to relief pain in arthritis.

Honey is used as a binding agent in this compound lepa. But it has also therapeutic properties which are largely attributed to its antimicrobial and anti inflammatory activity and there by promoting healing. It offers antimicrobial activity, maintains a moist wound condition and its high viscosity helps to provide protective barrier to prevent infection and its immune modulatory activity is relevant to wound repair too.

## CONCLUSION

The present study concluded that combined use of these drugs aloevera, mulethi and honey has significant efficacy in the management of acute fissure in ano. This therapy not only helps in reducing pain, inflammation but also helps in promoting healing of fissure in ano. Now a days fissure in ano is a very common problem for all of us due to busy schedule of our life and taking lots of fast food. So it is not far away to declare it as a Life Style Disorder. Since the number of patients taken for the study is very small large sample is needed to establish this therapy as the standard therapy for the treatment of Fisure in ano.

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