

Research Article

## A COMPARATIVE CLINICAL STUDY ON LAVANOTTAMADI CHOORNA AND CHIRABILWADI CHOORNA WITH TAKRA IN THE MANAGEMENT OF RAKTARSHA

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#### Abstract

Ayurveda is the science of life; it deals with all the factors that help to maintain healthy life. The Ayurveda gives maximum importance to Agni. It is said to be the gift of busy life style and sedentary work. Arsha (piles) is commonly seen in people working in sitting position for long time such as drivers, shopkeepers, tailors, bank jobs etc. Treatment of Arsha (piles) involves various techniques such as Medicine (Bhaisaja), Surgery (Shastra-Karma), Parasurgical Procedure (Kshara-Karma & Agni-Karma) etc. But among them Bhaisajya is best mode of treatment due to less amount of complication and discomfort. The medicine selected should have vatanulomana (carminative), agni deepana (appetizer), rakta stambhana (arrests bleeding) and arshoghna (cure piles) property. Lavanottamadi choorna and Chirabilwadi choorna is said to fulfill all the above needs. In present study 40 patients diagnosed to be suffering from Raktarsha (Bleeding Piles) were selected and randomly divided into 2 groups, in Group-A Lavanottamadi Choorna and in Group-B Chirabilwadi choorna were administered with Takra (buttermilk) as common sahapana (adjuvant) to both groups twice a day before food for seven days and was assessed based on subjective and objective parameters for the improvement after 7 and 14 days based on student's't' test. Results showed that Group-B patients were better improved for Pain, bleeding, pressure on defecation, Number and Size of pile mass, where as patient of Group-A showed better improvement to nature of stool. The result was statistically significant for subjective parameter in both the Groups but not in case of objective parameter. Overall result showed Group-B to be better in comparison to Group-A.

Key words: Arsha; Haemorrhoids; Lavanottamadi Choorna; Chirabilvadi Choorna.

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#### INTRODUCTION

Arsha is a disease affecting mankind for thousands of years. It is one of the astha mahagada (Eight main diseases) and difficult to cure. [1] It believes that, all the diseases cause due to Mandagni (decreased digestive fire) and Arsha (piles) is one such disease. [2] Piles are a disease which troubles patient like an enemy. [3] Ayurvedic physicians have regarded this disease as a local manifestation of systemic derangement of dosha (bodily humours). Vitiation of dosha (bodily humours) adversely affects the digestive fire resulting in decreased digestive fire, which in turn leads to constipation. Prolonged contact accumulated mala or excretory material taint Gudavalli (folds of anus), and thus Arsha (piles) develops. Charaka believes involvement of all the three dosha in the causation of disease. [4] Fleshy sprouts or growth in the ano-rectum and torture some agony to the patient seem the most characteristic feature of Arsha.. Enumeration of a vast number of etiological factors including dietic ingredients, habit, indulgences and a systematic description of its pathogenesis are in itself indicative of their keen perception, deep insight and scientific knowledge of the disease. The word Arsha is generally translated as haemorrhoids which is varicosity of haemorrhoidal varices. Animals do not suffer haemorrhoids, probably owing to their horizontal posture and thus effective drainage of venous blood.

Bleeding, pain and prolapsible mass are the three main complaints for which the patient of haemorrhoid usually seeks medical advice. Haemorrhoid is regarded as surgically curable disease. Modern science has very little to offer in terms of medicinal treatment of haemarrhoids. Sushruta, basically a surgeon described four principal therapeutic measures in the management of Arsha, viz., medicinal, chemical cauterization, thermal cauterization and surgical excision. [5] It may be pointed out here that enumeration of these measures in a

definite order is suggestive of similar methods to be preferred first. Similar trend can be seen in the management of the other disease also, that in spite of being primarily a surgeon he has laid minimum emphasis on unnecessary surgery. That is why; skill and judicious use of para surgical measures which are capable to achieve similar results are praised more than technical surgical competence under similar circumstances. He has been nowhere hesitant in advocating medicinal treatment within their limitations in the management of any surgical disease.

Among other para surgical measures, Sushruta has also indicated bloodletting under certain limited circumstances. [6][7][8] In addition, there is description of treating Arsha by kshara sutra, a type of medicated thread, in some books of Ayurveda in the management of Arsha. But among all these mode of treatment medicine is the one that is easy to be administered with minimal discomfort to the patient hence that is the one mode mostly preferred.

## **MATERIAL AND METHODS**

As described in all the Ayurvedic classics, it is very clear that Arsha is a disease that arises from Mandangni and Ama formation. Arsha being a Tridosha disease, [9] than to the chief vitiated Dosha can be taken as Apana Vayu. The Vatanuloman (normalized the path of Vayu) effect was desired for each patient, as we have seen that the principle of treatment of Arsha (piles)<sup>[10]</sup> includes two chief clinical effects i.e. Agni Deepan (increases digestive fire) and Vatanuloman (normalize the path of choorna<sup>[11]</sup> Lavanottamadi Vayu). Chirabilwadi choorna<sup>[12]</sup> is said to fulfill all the above needs. The ingredients are taken in raw form and made into fine powder form separately. (Table 1) All the ingredients are mix well and stored in airtight container.

Total 40 patients of Raktarsha were registered on the basis of symptomatology.



**Table 1: Ingredients of trial drugs** 

Sl. No.	Lavanottamadi Choorna	Chirabilwadi Choorna	Botanical Name	Part Used	Rasa	Guna	Virya	Vipaka	Doshagnata
1	Saindhava Lavana	Saindhava Lavana	-	-	Lavana Madhura	Laghu Snigdha	Sheeta	Madhura	Tridosha hara
2	Vahani	Vahani	Plumbago indica	Roots	Katu	Laghu Ruksh Tikshna	Ushna	Katu	Kapha- vatagna
3	Kalinga Yava	Indrayava	Holarrhena pubescensce	Seeds	Katu Kashaya Tikta	Laghu Ruksha	Sheeta	Katu	Kapha- vatagna
4	Chirabilwa	Chirabilwa	Holoptela integrifolia	Seeds	Tikta Kashaya	Laghu Ruksha	Ushna	Katu	Kapha- pittagna
5	Maha pichumarda	-	Melia azedarach	Barks	Tikta Kashaya	Laghu	Ushna	Katu	Kapha- vatagna
6	-	Aralu	Ailanthus excelsa	Barks	Tikta Kashaya	Ruksha Laghu	Sheeta	Katu	Kapha- pittagna
7	-	Sunthi	Zingiber officinale	Rhizomes	Katu	Ruksha Tikshna Laghu	Ushna	Madhura	Kapha- vatagna
8	Takra	-	-	-	Madhura Amla	Grahi Snighdha Vikasi	Ushna	Madhura	Tridosha hara

**Table 2: Criteria for Overall Assessment** 

Sl.No.	Improvement	Percentage
1.	Cured	100% relief in the signs & symptoms was considered as cured.
2.	Markedly Improvement	76% to 99% relief in the signs & symptoms was considered as markedly improvement.
3.	Moderately Improvement	51% to 75% relief was considered as moderate improvement in the signs & symptoms.
4.	Mild Improvement	26 to 50% relief in the signs & symptoms was considered as mild improvement.
5.	Unchanged	Up to 25% relief was considered as unchanged.

## Diagnostic Criteria

- All the patients were diagnosed & assessed thoroughly on the basis of signs & symptoms of Raktarsha & examined on the basis of specially prepared proforma.
- The routine hematological investigations if necessary were also carried out to exclude any other pathology.

## **Inclusion criteria**

- Patients diagnosed by classical signs & symptoms and proctoscopic examination of Raktarsha (haemorrhoid).
- Patients of either sex.
- Patients of age group between 21 to 50 years.



#### **Exclusion criteria**

- Patients age below 21 and above 50 years.
- Sahaja arsha (congenital haemorrhoids), bhagandara (fistula-inano), arsha (piles) associated with carcinoma of rectum, prolapsed piles.
- Patients suffering from any systemic disorders and congenital anomalies of rectum
- Haemorrhoids related to pregnancy.

#### **Interventions**

#### Group A/B

Sample size - 20 patients

Drugs

Group-A [Lavanottamadi choorna with Takra (Buttermilk)]

Group-B [Chirabilwadi choorna with Takra (Buttermilk)]

Dose

Choorna = 1 Karsha (6 g bid); Takra = 2 Pala (approx. 100 ml bid)

Time - Pragbhakta (before food)

Duration - 7 days

Post Treatment Follow up - On 8<sup>th</sup> and 21<sup>st</sup> days

## **Criteria for Assessment**

## **Subjective Criteria**

Pain Bleeding Nature of stool Pressure on defecation

## **Objective Criteria**

No. of pile mass Size Criteria for overall assessment are mentioned in Table 2.

#### RESULTS

Statistical data presentation of Group A and Group B were mentioned in Table 3 and Table 4 respectively. Mean difference % of both the groups is elaborated in Table 5. Overall assessment of treatment was tabulated in Table 6.

#### **DISCUSSION**

#### Pain

Lavanottamadi churna contains Lavana which is said to be effective Vata Anulomaka hence it helps in Apana Vayu anulomana thus brings a good effect on easy mala pravrutti and helps in relieving pain.

Chirabilwadi Choorna contains Lavana as well as Aralu which does give relief from local Shotha and hence reduces pain caused at defecation.

## **Bleeding**

Lavanottamadi Churna contains Kalinga yava which act as Rakta Stambhaka and Lavana helps in easy passage of stool thus not harming the hemarrhoidal vessels hence relieving from bleeding.

Chirabilwadi Choorna contains Indrayava and Aralu as well as Shunthi and Lavana where Shunthi does ama rakta pachana and thus preventing excess flow, Lavana helps in easy defectaion and Aralu due to its Kashaya Rasa pradhanata helps in Rakta Stambhana.

## Nature of stool

Lavanottamadi Churna which has Lavana as its content along with Vahni helps in treating Agni mandya and thus improves the formation of Mala as well as their easy passage.



Table 3: Statistical data presentation (Group A)

Criteria	Group	Mean	Mean Diff	%	S.D.	SEM	SED	N	t value	df	L.L U.L.	.I.	P value	Significance
	BT	2.45			0.60	0.14		20						
Pain	AT	0.80	1.65	67.34	0.62	0.14	0.131	20	12.567	19	1.38	1.92	< 0.001	E.S.
	BT	2.25	5	73.33	1.12	0.25	0.12	20	12.567		1.38	1.92	<0.001	
Bleeding	AT	0.60	1.65		0.75	0.17		20		19				E.S.
Nature of	BT	1.95	1.45	74.35	0.83	0.18	0.114	20	12.704		1.21	1.69	<0.001	E.S.
Stool	AT	0.50			0.51	0.11		20		19				
Pressure	BT	2.15			0.49	0.11		20						
on Defecation	AT	0.90	1.25	58.13	0.55	0.12	0.143	20	8.752	19	0.95	1.55	< 0.001	E.S.
	BT	2.60			0.50	0.11		20	1.000		- 0.16 0.4		0.3299	N.S.
No. of Pile mass		2.45	0.15	5.76	0.76	0.17	0.150	20		19		0.46		
	ВТ										0.92	1.38	<0.001	
Size of	AT	2.85	1.15	40.35	0.81	0.18	0.109	20	10.509	19				E.S.
Pile mass	AI	1.70			0.73	0.18		20						

Table 4: Statistical data presentation (Group B)

Criteria	Group	Mean	Mean Diff	%	S.D.	SEM	SED	N	t value	df		.I. .L L.	P value	Significance
	BT	2.65	1.00	<b>67.02</b>	0.74	0.16	0.138	20	12.054			2.08	<0.001	E.S.
Pain	AT	0.85	1.80	67.92	0.67	0.15		20	13.076	19	1.51			
	BT	2.05			1.23	0.28	0.179	20	9.48				<0.001	E.S.
Bleeding	AT	0.35	1.70	82.92	0.59	0.13		20		19	1.32	2.08		
Nature of	BT	1.90	1.35	71.05	0.85	0.19	0.131	20	10.282		1.08	1.62	<0.001	E.S.
Stool	AT	0.55			0.51	0.11		20		19				
Pressure	BT	2.20		61.36	0.41	0.09	0.150	20	9.000				<0.001	
on Defecation	AT	0.85	1.35		0.59	0.13		20		19	1.04	1.66		E.S.
No of	BT	2.75			0.72	0.16	0.210	20	1.902		0.04	0.84	0.0724	N.S.
No. of Pile mass	AT	2.35	0.40	14.54	0.99	0.22		20		19				
Size of Pile mass	BT	3.00			0.46	0.10	0.128	20	10.177		9 1.03	1.57	<0.001	E.S.
	AT	1.70	1.30	43.33	0.73	0.16		20		19				



**Table 5: Mean difference % of both the groups** 

Parameters	Mean difference %					
rarameters	Group A	Group B				
Pain	67.34%	67.92%				
Bleeding	73.33%	82.92%				
Nature of Bowel	74.35%	71.05%				
Pressure on defecation	58.13	61.34%				
No. of pile mass	5.76%	14.54%				
Size of pile mass	40.35%	43.33%				

**Table 6: Overall assessment of Treatment** 

Sl. No.	Criteria	G-A	%	G-B	%	Total	%
1	Unchanged	-	-	-	-	-	-
2	Mild improvement	9	45%	5	25%	14	35%
3	Moderate improvement	11	55%	13	65%	24	60%
4	Marked improvement	-	-	2	10%	2	5%
5	Cured	-	-	_	-	-	-

Chirabilwa Choorna contains Lavana, Shunthi, Vahni which also does Amapachana, regulates the Agni and helps in there formation and expulsion but due to presence of Aralu which is Kashaya rasa pradhana may produce a little constipation.

#### Pressure on defecation

Lavana present in both the drug may help in giving relief from Baddha Mala as it is mainly known for its Vata Anulomana property and other ingredients would further add on to this by doing Ama Pachana and Agni Vardhana.

## Number of pile mass

The pile mass which has formed from longer duration pathology may need comparatively more duration of treatment. Hence the same medicine should be studied for more time to know its actual effect on number of pile mass.

The given treatment in both the Group didn't produce marked relief on number of pile mass and the small amount of change formed may be due to reduced pressure on vessels caused by easy mala pravutti that was brought by Vata Anulomaka Dravyas.

## Size of pile mass

The change caused by the given treatment on size of pile mass is almost same in both Groups.

This effect may be brought due to combined effect of all the drug where the Vata Anulomaka drugs help in easy evacuation of Mala, the Amapachaka Dravya cause Ama Pachana and Agni Vardhana and Rakta Stambhaka Dravya cause reduction in bleeding as well as reduction in Shotha and local infection due to combination of all this the size of pile mass reduces.

#### Total effect of therapy

The total effect of therapy shows that patient in Group A showed better result in Nature of stool whereas patient in Group B showed better result on Pain, Bleeding, Number and size of pile mass.

On comparing the total effect it becomes clear that in whole Group B proved to be better in comparison to Group A.



# Probable mode of action of Lavanottamadi choorna

As per various Ayurvedic classics, the drug which is to be used in the management of Arsha must possess the Deepan, Pachan, Anulomanam, Samshamana and Rakta Sangrahi properties.

Chief ingredients of Lavanottamadi Choorna are having properties like Vata Anulomana, Agnideepana, Rakta Stambhana etc. When this Choorna is mixed with Takra as Sahapana this lead to increase in their qualities to do Samprapti Vighattana because of further increase in Agni Deepana, Arhsighna and Rakta Stambhana properties.

The samprapti of Arshas shows that it is a Manda agni janya vyadhi where the main reason for occurrence of this disease is Mandaagni itself. When the Agni Deepana occurs due to Lavanottamdi Choorna the first stage of Smaprapti itself undergoes Vicchedana hence further the disease progress can be stopped, further it also contains Indrayava that acts best as Rakta Stambhaka, hence patient could be given relief from Rakta ati pravrutti. Vahni causes Agni Deepana, whereas Chirabilwa, Mahapichumarda, does Ama pachana. Hence the complete Samprapti Vighattana is brought about by Lavanottamadi Choorna.

# Probable mode of action of Chirabilwadi choorna

A single drug works on the principles of Rasa, Guna, Veerya, Vipaka or Prabhava. But when a composed drug formula is used it acts by many different ways to dissolve the pathology.

Chirabilwadi Choorna also contains almost same ingredients as that of Lavanottamadi Choorna but there is addition of Shunthi and Aralu along with Sindhava lavana, Vahni, Indrayava and Chirabilwa.

Saindhava Lavana and Vahni at their best help in Agni Deepana whereas Lavana due to its Vishyandana Guna causes Vata Shamana and Anulomana and thus relieve Mala Baddhata.

Indrayava helps in doing Rakta Stambhana where the Samprapti Vighattana causes stoppage of excessive blood flow through pile mass.

Chirabilwa and Aralu do Amapachana as well as their Kashaya rasa causes Stambhana of Rakta and Shoshana of Mamsa Ankura.

Shunthi which is an additional ingredient in Chirbilwadi Choorna brings Agni Deepana and Amapachana hence Chirabilwadi Choorna helps in doing Samprapti Vighattana of Arsha in whole were all the Lakshanas such as Baddha Mala, Rakta pravrutti, Shoola in total are relieved.

This choorna is administered with Takra as Sahapana which is best known drug in treating Arshas, hence it further adds on to the efficacy of both drugs in treating the same.

Here both the Choorna has been referred in Bhaisajya Ratnavali and at the reference there is a clear mentioning about duration where it is mentioned that this medicines are capable enough to give relief in Arsha symptom within the duration of 7 days of administration. This has been proved correct by the observation which showed the results to be statistically extremely significant hence the efficacy can be relied on.

### **CONCLUSION**

Lavanottamadi choorna and Chirabilwadi choorna with Takra not only gives relief from symptoms but also are helping in breaking down of samprapti. These both are said to be effective treatment in treating Raktarsha within 7 days as per Bhaisajya Ratnavali.



There were no adverse reactions found during the administration of both the medicines.

On comparing both the group the percentage of improvement shows that Group B showed better effect on pain, bleeding, pressure on defecation, no of pile mass where as Group A showed better results on treating nature of stool.

Overall percentage of improvement shows that effect of Chirabilwadi choorna was more in comparison to Lavanottamadi choorna.

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