

ROLE OF KALLINGADI CHURNA IN MANAGEMENT OF GRAHANIDOSHAArti Sharma¹, Savaj Vaishali Nanubhai², Om Pandey³, Dr. M. N. Shaikh⁴^{1,2}Final year, P.G. Scholar; ³B. A. M. S., Private Practitioner, ⁴M.D. (Ayu.), Lecturer of Upgraded Dept. of Kayachikitsa; Govt. Akhandanand Ayurved College, Ahmedabad, Gujarat, India**ABSTRACT**

Grahanidosha is prime diseases of GIT. It occurs due to vitiation of *Agni* i.e. functional derangement of *Grahani* regarding production of *Pachaka Pitta* and also holding (*Grahana*) of *Ama* (undigested food) for digestion, but when it converts in structural deformity then that chronic condition can be considered as *Grahani Roga*. To evaluate the effect of *Kallingadi Churna* in the management of *Grahanidosha* total 21 patients were randomly selected for the study. *Kallingadi Churna* 6 g/day in two equally divided doses before meal were given for 6 weeks with *Takra* (Buttermilk). The effects of therapy were assessed by a specially prepared Performa designed on the basis of classical sign and symptoms of *Grahanidosha*. The results were analysed statistically by Paired t-test. Statistically highly significant improvement was observed in most of symptoms in the management of *Grahanidosha*.

Keywords: *Agni, Ama, Grahani, Kallingadi Churna, Pachaka Pitta.*

INTRODUCTION

In the current scenario of modern era, people are fed up with the side effects of modern drugs. Fast acting modern drugs suppress the diseases but at the same time responsible for lowering the human immunity. Sedentary life style, poor dietary habits and stress play a key role in the development of all disease. These all factors primarily initiate GI tract disturbances leading to poor digestion, absorption and retention capacity of gut. One of the most common digestive disorders prevalent in the society is "*Grahanidosha*". *Acharya Vagbhatta* described *Agni Viktruti* (*Agnimandhya*) as the *Nidanbhut* (root cause) of *Arsha* (Haemorrhoid), *Atisara* (Diarhoea) and *Grahanidosha*¹, while *Acharya Sushruta* considered *Atisara* as one of the predisposing factor of "*Grahani Roga*"².

Grahani has *Adhara Adheya Sambandh* (inter related) with *Agni*³. This shows that *Agni* and hence *Grahani* is very important part of human body, considering above all things this subject is selected. Malfunction of *Agni* i.e. *Mandagni* causes improper digestion which leads to *Grahanidosha*. *Kallingadi Churna*⁴ having *Amapachaka, Dipana, Shulaghnaaa, Grahi & Kapha Pitta Shamaka* Properties have been selected.

Aims and objectives:

1. To study the etio-pathogenesis of *Grahanidosha* according to *Ayurveda*.
2. To evaluate the effect of *Kallingadi Churna* in the management of *Grahanidosha*.

Materials and methods: In the present study 21 patients fulfilling the criteria for

diagnosis of the disease were selected from the OPD of *Kayachikitsa* department, Govt. Akhandanand Ayurved college and hospital, Ahmedabad. The research protocol was registered in Clinical Trials Registry of India (CTRI/2016/04/006184; date: 15/09/2015). An informed consent from each enrolled patient was obtained before commencement of the treatment.

➤ **Inclusion Criteria:**

- Patient having age between 20 years to 60 years.
- Patients having symptom of *Grahanidosha*, i.e. *Muhur Baddha / Drava Mala Pravritti Durgandhita / Picchila Mala Pravritti, Madhur/ Tikkat/ Amla Udgar Pravritti, Arochaka* (Anorexia), *Praseka* (Hypersalivation), *Vidaha* (Burning sensation), *Trishna* (Thirst) etc.
- Uncomplicated cases with classical pictures of *Grahanidosha* have been selected irrespective of sex, caste, religion and profession.
- Patients have been divided in two groups.

➤ **Exclusion Criteria:**

- Patients having age < 20 and > 60 years.
- Patients suffering from Acute diarrhea, Intestinal T.B., Gastric and Peptic ulcer, uncontrolled D. M. and H.T, *Gulma, Atisara, Arsha*.

Investigations:

1. Muhur Baddha / Muhur Drava Mala Pravritti

0-	Passing normal consistency stool (1times/day).
1-	Passing stool (1-2 times /day) irregular, without pain.
2-	Passing stool (2-3 times /day) irregular, without pain.
3-	Passing stool (3-4 times / day) just after meals, irregular, with pain.
4-	Passing stool (4-6 times / day) just after meals, irregular, with pain.
5-	Passing stool more than 6 times/day just after meals, irregular, with pain

2. Mala Swaroop : Durgandhita / Picchila Mala

0-	Passing of normal consistency stool (1times/day).
1-	Passing stool with slight foul smell and mild unctuousness
2-	Passing stool with moderate foul smell and moderate unctuousness

1) Routine Haematological examinations-Hb, TLC, ESR. Above investigations has been done before and after treatment to see patients general condition and to rule out any other pathology. These investigations were not the part of diagnostic criteria for *Grahanidosha*.

Posology:

There was 21 Patients were registered for the study only 17 patients were completed the study.

Kallingadi Churna (Table 1)

- ◆ Dose: 3grm two times a day before meals.
- ◆ Duration: 6 week.
- ◆ *Anupana*: *Takra* (Buttermilk) Diet: - The patients were strictly advised to follow the restrictions regarding food, food habits and life style. They were instructed to avoid the possible causative factors of disease and causes for *Agnimandya*.

Criteria for assessment:

- The improvement provided by the therapy was assessed on the basis of classical signs and symptoms of *Grahanidosha*.
- All the signs and symptoms were assigned score depending upon their severity to assess the effect of the drugs objectively. The following pattern was adopted for the scoring.

3-	Passing stool with severe foul smell and severe unctuousness
4-	Passing stool with either intolerable foul smell or intolerable unctuousness
5-	Passing stool with intolerable foul smell and intolerable unctuousness

3. Udgara Pravritti : Madhura / Tikta / Amla

11111A>1	No Udgara at all
1-	Occasionally during day or night for less than half hour after meals.
11111C>1	<i>Udgara</i> occurs daily for two to three times for 1/2 - 1 hrs and relieved by sweets, water and antacids, etc.
D>1	<i>Udgara</i> after every intake of meal any food substance for half to one hour, and relieved by digestion of food or vomiting
11111E>	<i>Udgara</i> for more than one hour not relieved by any measure
11111F>1	<i>Udgara</i> disturbing the patient's even small amount of fluid regurgitate to patients mouth

4. Trishna

0	Normal 1.5-2 litres
1	Increased but can be controlled 2-2.5 litres
2	Increased with increased frequency of drinking water 2.5-3 litres
3	Very much increased >3 litres

5. Arochaka

0-	Willing towards all <i>Bhojya Padartha</i>
1-	Unwilling towards some specific <i>Ahara</i> but less than normal
2-	Unwilling towards some specific <i>Rasa</i> i.e. <i>Katu/ Amla/ Madhura</i> food
3-	Unwilling for food but could take the meal
4-	Unwilling towards unliking foods but not to the other
5-	Totally unwilling for meal

6. Vidaha

0	Normal, no Vidaha.
1	Occasionally after taken spicy food.
2	Once in week after taken spicy food.
3	Every day after taken spicy food.
4	Every day without taken spicy food.
5	Burning all the time even after normal food

7. Bala Kshaya

0	No Daurbalya
1	Not able to perform strenuous activity.
2	Not able to perform moderate activity.
3	Cannot perform moderate activity but can perform mild activity without any difficulty.
4	Even mild activities cannot be performed

8. Tama Pravesha

A>	No feeling of Tama
B>	Occasional feeling of <i>Tama</i>
C>	Feeling of <i>Tama</i> < 2-3 times a day
D>	Feeling of <i>Tama</i> 3-6 times a day
E>	Many times a day with problem in maintaining posture, tries to sit

9. Praseka : Hypersalivation

0	Normal salivation
1	Increased salivation but no inconvenience
2	Increased salivation and patient has to spit once or twice

10. Aalasya

0	No Aalasya (doing satisfactory work with proper vigor and in time)
1	Doing satisfactory work/late initiation, like to stand in comparison to walk
2	Doing unsatisfactory work/late initiation, like to sit in comparison to stand
3	Doing little work very slow, like to lie down in comparison to sit.
4	Don't want to do work/no initiation, like to sleep in comparison to lie down

11. Chardi : Vomiting

A>1	No vomiting at all
B>	Frequency of salivation on every day
C>	Feels sense of nauseating and vomits occasionally
D>1	Frequency of vomiting is two to three times or more per weeks and comes whenever <i>Daha</i> or pain is aggravated
E>	Frequency of vomiting is daily
F>	Frequency of vomiting after every meal or even without meals

12. Pad Shotha

0	No swelling
1	Mild swelling (1- 2 times in a week)
2	Moderate swelling (3- 4 times in a week)
3	Severe swelling (Continuous, not decreasing)

Total effect of therapy:

The obtained results were measured according to the grades given below,

Complete Remission	100% relief
Marked Improvement	76% to 99% relief
Moderate Improvement	51 % to 75 % relief
Mild Improvement	26 % to 50 % relief
Unchanged	= & <25 % or No relief

Statistical Analysis

The Paired t-test is applied to the statistical data for evaluating the difference in the B.T. and A.T. scores of subjective parameters.

The obtained results were interpreted as:

P >0.05 Insignificant

P <0.05 Significant

P <0.001 Highly significant

Observation and results:

Total percentage of relief in *Kallingadi Churna* (71.20%) was observed. *Kallingadi Churna* 5 patients had marked improvement, 12 patients had moderate improvement. While evaluating the overall

effect of therapy, it was observed that none of the patients showed complete remission, mild improvement and remained unchanged. (Table No. 2)

Effect of Kallingadi Churna:

17 patients who completed treatment in, highly significant results were found in cardinal signs like *Muhurbaddha/Drava Mala Pravritti, Durgandhita / Picchila Mala Pravritti, Madhura/Tikta/ Amla Udgar Pravritti, Arochaka, Bala Kshaya, Tama Pravesha, Praseka* and *Alasya*, while in *Trishna* and *Chardi* had significant result and *Pad Shoth* shows insignificant improvement

(Table 3). There was statistically significant increase in Hb, ESR and WBC.

Probable mode of action of Kallingadi Churna:

Acharya Charaka stated that, certain drugs act through *Rasa*; some through *Veerya*; some through *Gunas*; some through their *Vipaka*, and some through their *Pravaha*.

On the basis of physiochemical properties of *Kallingadi Churna*, probable *Samprapti Vighatana* can be understood as follows, Because of its *Laghu*, *Ruksha Guna* and *Katu*, *Tikta Rasa* (dominant with *Agni*, *Vayu* and *Akasha Mahabhuta*), it subsides the aggravated *Kapha*, whereas, by *Ushna* and *Tikshna Guna*, it counteracts *Vata*. By virtue of its *Tikshna Guna*, it enhances the function of *Pitta*, which stimulates *Jatharagani*, which turn-by-turn stimulates all other *Agni*. Due to its *Laghu*, *Ruksha*, *Tikshna Guna* and *Ushna Veerya*, it removes present *Srotorodha* as it penetrates minutest *Srotasa*.

In *Grahanidosha*, mainly there is vitiation of *Agni*, usually *Mandagni* is seen. This ultimately results in *Ama* formation. *Kallingadi Churna* has properties like *Katu-Tikta Rasa*, *Katu Vipaka*, *Laghu-Ruksha-Tikshna Guna*, which acts as *Agnideepaka* and also *Amapachaka*.

DISCUSSION:

The observations made in this aspect lead to the conclusions that maximum number of

Patient's was from age group of 34-47 years. This age group is major working class in the society. Recurrent abdominal infections are very common in this age group due to unhygienic and fast food culture, irregularity in consuming meal (i.e. *Adhayaasana*, *Vishamasana*). Due to this *Agni Dushti* occurred and it causes the *Tridosha Prakopa*.

Maximum patients were having *Madhyama Ruchi*, *Madhyama Abhyavaharana shakti* and *Madhyama Jarana Shakti*. This signifies the importance of *Agni* in the pathogenesis of *Grahanidosha*.

In the present clinical study, highest number of patients had *Madhyama Kshudha*. *Alpa Kshudha* results into vitiation of *Dosha* which leads to *Ama* formation. It plays a key role in *Samprapti* of *Grahanidosha*. Therefore here drug was given having *Deepana* and *Pachana* properties.

According to *Nidana* of *Grahanidosha*, *Ati Ambupana*, *Ati Snigdha* and *Abhojana* were observed in maximum patients. *Ati Katu Ahara*, *Ati Vidahi Ahara* was found in most of patients. According to *Viharaja Nidana*, *Vega Vidharana* was observed in maximum patients. In *Manasa Nidana*, *Krodha* was observed in most of patients. In all of cases, involvement of *Purishavaha* was observed. These all factor were vitiated the *Agni* and this vitiated *Agni* will cause *Grahanidosha*.

All patients were having *Muhurbaddha / Drava*, *Durgandhita*, *Picchila Mala Pravritti*, irregular bowel habit. Maximum patients were had motion frequency 4 to 6 times / day was observed. Most of patients having *Alpa Sama Mala Pravritti* while other patients having *Ati Sama Mala pravritti*. This observation shows, vitiation of *Agni* may cause improper digestion and it may create irregular, *Sama*, *Durgandhita*, *Picchila Mala Pravritti*.

CONCLUSION:

Grahanidosha is vitiation of *Agni* i.e. functional derangement of *Grahani* regarding production of *Pachaka Pitta* and also holding (*Grahana*) of *Ama* (food) for digestion, but when it converts in structural deformity then that chronic condition can be considered as *Grahani Roga*. A

single disease entity cannot be correlated with *Grahani Roga* as per modern literature, even though Malabsorption syndrome is more similar. Chronic colitis, IBS, etc can also be considered.

On the basis of all results obtained in the study it can be concluded that *Kallingadi Churna* works effectively in management of *Grahanidosha*.

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Table -1: Contents of Kallingadi Churna.

Sr.No	Name of Drug	Latin Name	Parts Used	Proportion
1	<i>Kutaja</i>	<i>Holarrhena antydysentrica</i> Linn.	Bark	1 Part
2	<i>Haritaki</i>	<i>Terminalia chebula</i> Linn.	Fruit	1 Part
3	<i>Ativisha</i>	<i>Aconitum heterophyllum</i> Wall.	Tuberous root	1 Part
4	<i>Vacha</i>	<i>Acorus calamus</i> Linn.	Rhizome	1 Part
5	<i>Hingu</i>	<i>Ferula narthex</i> Boiss.	Exedute	1 Part
6	<i>Sauvarchala</i>	Black salt (eng)	Whole Part	1 Part

Table - 2: Overall effect of therapy on 17 Patients of Grahanidosha.

Drug	Complete remission	Marked Improvemrnt	Moderate Improvement	Mild improvement	Unchanged
<i>Kallingadi Churna</i>	00%	29.41%	70.59%	00%	00 %

Table -3 Effect of therapy on signs and symptoms of Grahanidosha.

Symptoms	N	Mean		% Relief	X	S.D.	S.E.	‘t’	P
		BT	AT						
<i>Muhurbaddha-Muhurdrava Mala Pravitti</i>	17	3.59	0.88	75.4	2.70	0.77	0.19	14.46	<0.001
<i>Durgandhit/ Pichhila/ Sanna Mala Pravitti</i>	17	2.53	0.47	81.4	2.06	0.75	0.18	11.36	<0.001
<i>Udgara Pravritti-Madhur/ Tikta/ Amla</i>	7	2.29	0.71	68.8	1.57	0.54	0.20	7.77	<0.001
<i>Trishna</i>	6	2.17	0.83	61.5	1.33	0.52	0.21	6.33	0.001

Arochaka	13	3.39	0.69	79.5	2.69	0.95	0.26	10.25	<0.001
Vidaha	9	2.67	0.89	66.7	1.71	0.67	0.22	8.00	<0.001
Bala-Kshaya	16	2.50	0.88	65	1.62	0.50	0.13	13	<0.001
Tam Pravasha	13	1.85	0.62	66.7	1.23	0.6	0.17	7.41	<0.001
Praseka	5	1.40	0.40	71.4	1.00	00	00	(+inf)	<0.001
Alasya	14	1.86	0.86	53.8	1	00	00	(+inf)	<0.001
Chardi	6	2.67	0.33	87.5	2.33	1.03	0.42	5.53	0.003
Pad Shoth	5	1	0.80	20	0.20	0.45	0.20	1	0.374

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