

A COMPARATIVE CLINICAL EVALUATION OF THE EFFICACY OF CHANGERIYADI GHRITA AND MARICHYADI CHURNA IN GRAHANI ROGA

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ABSTRACT

The *Grahani* (Irritable bowel syndrome) is the leading disorder of the digestive system. Due to various etiological factors of *Grahani Roga*, the *Grahani* becomes impaired as a result of *Dusti* or vitiation of *Pachakagni* and *Saman Vayu*. The logical outcome of the *Grahani Dosha* is the Malabsorption of ingested food, resulting in the production of *Pakwa Ama* secondly the Malabsorption of the products of digestion. The *Vaisamyia* at *Saman Vayu* causes the hyper motility of gut resulting in frequent evacuation of the bowel, which one large and hard or liquid. Now-a-day's unwholesome food habits and a lot of changes in lifestyle, mental stress, anxiety, grief, lead to gastric upset (*Agnimandhya*), which is the root cause for the manifestation of various diseases like *Atisar* (diarrhea), *Pravahika* (dysentery), *Amlapitta* (hyperacidity), *Grahani* (Irritable bowel syndrome). Approximately 20% to 30% prevalence is reported and the incidence of Irritable bowel syndrome at 1% - 2% per year (In India).

Keywords: *Grahani roga*, *Changeriyadi ghrita*, *Marachyadi Churna*, IBS

INTRODUCTION

Ayurveda is one of the ancient Indian systems of health life sciences and medicine, its historicity going back to

the Vedas. Ayurvedic classical knowledge and practice is based on its own physics and biology. Acharya

Sushruta narrates, the individual having equilibrium of *Dosha*, *Agni* (digestive fire) *Dhatus* (Body tissues) *Malas* (excreta) together with their normal functions and soul senses and mind being in pleasing state is termed as healthy. The definition of Health according to WHO is given as “Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity”.

Now-a-day’s unwholesome food habits and a lot of changes in lifestyle, mental stress, anxiety, grief, lead to gastric upset (*Agnimandhya*), which is the root cause for the manifestation of various diseases like *Atisar*, *Pravahika*, *Amlapitta*, *Grahani*. *Grahani* is a disease of great clinical relevance in the current era because of its direct link with the improper food habits and stressful lifestyle of the present times. The Diseases in which *Grahani* or small intestine gets vitiated and there is impairment of *Agni* is called as *Grahan*¹. *Grahani* is the important part of the *Mahasrotas* (Gastrointestinal system). According to Sushruta the 6th *Pittadhara Kala* situated between *Amasaya* (abdomen) and *Pakwasaya* (Intestine) is called *Grahani*². *Charaka* mentioned it as the part being situated above *Nabhi*, it is the site of *Agni* and does *Grahana* of *Anna* and it is supported and nourished by the strength of *Agni*³. The clinical features of *Grahani* explained in the classical textbooks of Ayurveda, have at most similarities with the clinical features of Irritable Bowel Syndrome (IBS) explained in modern medicine. In case of *Grahani*, foremost importance has to be given for *Ama Pachana* and *Agni Deepana*. *Satvavajaya* (by the means of counseling) was also given main role, as all the diseases having the involvement of *Manas*. The general line of treatment for *Grahani* as per *Charaka Samhita* includes *Sadhyovamana* (in *Saamaavasta Kaphotklesha*), *Deepana*, *Shodana*, *Peyadikrama*, *Basti* and *Shamanoushadis*.

Approximately 50% of people with Irritable Bowel Syndrome report symptoms beginning before they were age 25 years.

According to Acharya *Charaka*, *Visamagni* and *Tikshanagni* may cause *Grahani Dosha* but *Grahani Roga* is the consequence of only *Mandagni*. *Chakrapanidutta* has commented that *Grahani Dosha*. *Grahani* passes the food in the stage of *Ama* (*Apakwaj*) because of weak

Agni and affection of *Dosha*. In the abnormal condition, when it gets vitiated because of weakness of *Agni*, it releases the food in undigested form only.

Irritable Bowel Syndrome (IBS) is a functional bowel disorder characterized by abdominal pain or discomfort and altered bowel habits in the absence of detectable structural abnormalities⁴. IBS is one of the classic psychosomatic disorders characterized by recurrent abdominal pain in abdomen, abdominal swelling, diarrhea, constipation, flatulence and mucorrhea⁵. Irritable bowel syndrome (IBS) is important because of its high prevalence, substantial morbidity and enormous costs⁶.

Aim & Objectives: -

1. To established Etiopathogenesis of *Grahani Dosha* w.s.r. to IBS.
2. To evaluate the effect of *Marichyadi Churna* in *Grahani Roga*.
3. To evaluate the effect of *Marichyadi Churna* in combination with *Changeriyadi Ghrita*.
4. To provide a reliable, cost effective Ayurvedic treatment for *Grahani Roga*.

This compound drug has been selected for the trial due to the following reasons:

- All the ingredients are herbal-mineral and easily available.
- Ingredients of this compound are having *Tridosha-hara*, *Amapachak*, *Deepan*, *Pachana*, *Sangrahi*, *Krimighna* & *Vishaghna* properties.
- It strengthens the stomach and liver; increases the secretion of the salivary and gastric juices, sharpens appetite, relieves bloating, reduces the frequency of bowel movements and exhibit antimicrobial activity.
- It acts as anti-diarrheal, anti-dysenteric, appetizer, astringents, and digestive, anti-inflammatory and antispasmodic properties.
- Keeping all the above points in mind these drugs are selected to know their effects in treating *Grahani Dosha* (Irritable Bowel Syndrome).

Marichyadi Churna

The present drug formulation *Marichyadi Churna* is taken from *Chakardatta Grahani Chikitsa* 28. It contains *Kalimirch*, *Shunthi*, *Kutajtwak*, *Jaggery* are all in powdered form. All ingredients of these are having

Deepan, Panchan, Tridosahara, Amapachak, Sangrahi, Krimighna & Vishaghna properties and it is beneficial for Atisar, Pravahika and Grahani. Marichyadi

Churna has been mentioned in the treatment of Grahani Roga.

Table 1: Marichyadi Churna Ingredients: -

S.NO.	Name	Scientific Name	Parts used
1	<i>Kali mirch</i>	Pipernigrum	Fruit
2	<i>Sunthi</i>	Zingiber officinale	Rhizome
3	<i>Kutajtwak</i>	Holarrhena antidysentrica	Bark
4	<i>Gur</i>	Jaggery	

Changeriyadi Ghrita: In the present study, Changeriyadi Ghrita was selected for other clinical trial group. Changeriyadi Ghrita described by Bhaishjya Ratnavali in the management of Grahaniroga-Adikara (190/191). The preparation has twelve drugs, viz. 1)Pippali 2)

Nagra, 3) Chitraka, 4) Gokshur 5) Gaj-Pippali, 6) Dhanyak, 7) Bilva, 8) Patha, 9) Yavani, 10) Changeri, 11) Sarpi, and 12) Dadhi (curd). Changeri Ghrita is a medicated form of cow ghee. It balances Kapha and Vata Doshas.

Table 2: Changeriyadi Ghrita Ingredients: -

S.No.	Name	Scientific name	Part used
1	<i>Pippali</i>	<i>Piper longum</i> Linn.	Fruit & root
2	<i>Nagra</i>	Zingiber officinale	Rhizome
3	<i>Chitraka</i>	<i>Plumbago zeylinca</i>	Root- bark
4	<i>Gokshur</i>	Tribulus terrestris	Whole plant
5	<i>Gaj-pippali</i>	Scindapsus officinalis	Fruit
6	<i>Dhanyak</i>	Corianderum sativum	Seeds
7	<i>Bilva</i>	Aegle marmelos	Unripe fruit
8	<i>Patha</i>	Cissampelos pariera	Root
9	<i>Yavani</i>	Trachyspermum ammi	Seeds
10	<i>Changeri</i>	Oxalis Corniculata Linn.	Whole Plant
11	<i>Sarpi</i>	Butyrum Deparatu	
12	<i>Dadhi(Curd)</i>		

Material and Methods

Selection of the Patients:-

The study comprises of a series of 60 patients. The patients were selected from OPD and IPD of Department of Kayachikitsa, Utrakhand Ayurved University, Gurukul Campus, Haridwar. These patients are randomly divided in 30 groups in each, on the basis of inclusion and exclusion criteria depending upon detailed clinical history, physical examination and other necessary/desired investigation. The cases are recorded with help of a special Performa prepared for this purpose.

Selection of Sample:- Randomized Sampling

Type of Study: Clinical research study

Selection of Drug:-

1) **Marichyadi Churna** (Chakardatta Grahani Chikitsa 28)

2) **Changeriyadi Ghrita** (Bhaishajya Ratnavalli Grahani Roga-adhikar/ 190-191)

Drug, Dosages and Duration

1) **Marichyadi Churna** (Chakardatta Grahani Chikitsa 28)

Dose - 3gm BD

Time of Administration - After meal

Anupana – Luke warm water

Total duration of treatment - 30 days

Follow up - 15 days

2) **Changeriyadi Ghrita** (Bhaishajya Ratnavalli Grahani Roga-Adhikar/ 190-191)

Dose - 5 ml BD

Time of Administration - Before meal

Anupana - Lukewarm water

Total duration of treatment - 30 days

Follow up - 15 days

Groups for Drug Trials –

Group A – Marichyadi Churna

Group B – Marichyadi Churna in Combination with Changeriyadi Ghrita

Inclusion Criteria

- Patients with classical features of *Grahani Roga* explained in classical texts.
- Patient of any socio-economic status, both sexes and all ethnic origins will be considered.
- Patient with age group of (16-55 years)
- Acute onset (1-3 weeks) but Non-traumatic in nature.
- Both fresh and treated cases will be selected.

Exclusion Criteria:

- Patient with uncontrolled metabolic and other severe systemic disorder.
- Psychiatric illness and pregnant women.
- Patient having peptic ulcer, duodenal ulcer.
- Patient having surgical intervention will be excluded.

Criteria For Assessment⁷:-

Assessment has been done based on the improvement in signs and symptoms and investigations. The scoring pattern adopted for the assessment of clinical features is as follows

1) Muhurbaddha Muhurdrava Mala Pravritti (Nature & Frequency of stool)

0- Passing of normal consistency stool (1 time/ day) in the morning.

1- Passing stool irregular (1-2 times/day), without pain.

2- Passing stool irregular (2-3 times/day), with pain.

3- Passing stool irregular and just after meal (3-4 times/day), with pain.

4- Passing stool irregular and just after meal (>4 times/day), with pain.

2) Anaddhodarata (Distension of abdomen)

0- No complaint.

1- Rarely complaint once in a week.

2-Distension of abdomen after taking meal, up to 1 hour.

3- Distension of abdomen after taking meal, up to 1-3 hours.

4- Distension of abdomen after taking meal, up to 6 hours.

3) Arochaka (Anorexia)

0- Taking normal diet with interest.

1- No interest in taking normal diet.

2- Food has taking normal diet.

3- Not taken a food even forcefully

4) Balakshaya (General debility)

0- No weakness.

1- Weakness but performs day-to-day activities.

2- Weakness and difficult in performing day-to-day activities.

3- Child cannot able to get up from the bed

5) Alasya (Lethargy)

0- Enthusiastic.

1-Occasionally, the patient is in lethargic condition.

2-Often, the patient is in lethargic condition.

3-Persistent.

6) Klama (Exhaustion)

0-No exhaustion.

1-Exhaustion with moderate work.

2-Exhaustion with mild work.

3-Exhaustion without effort.

7) Trishna (Thirst)

0-Normal thirst

1-Mild thirst, take water frequently.

2-Thirst increase.

3-Feel excessive thirst, never satisfied after taking a good amount of water

8) Mukha- Vairasya (Tastelessness)

0-No complaint

1-Occasionally.

2-Frequently.

3-Whole day.

9) Tikt- Amlaodgara (severe belching)

0-No complaint

1-Occasionally

2-1-3days/week

3-3-5days/week.

4-All the 7 days.

10) Praseka (repeated salivation)

0-No complaint.

1-Mild salivation.

2-Moderate salivation with nausea occasionally per day.

3-Excessive salivation with nausea and with often vomiting.

11) Antrakujanam (Intestinal sounds)

0- No complaint.

1- Occasionally.

2- 2-3times/day before passing stool

3- Persistent.

12) Abhyavarana shakti (Power of ingestion)

0- Good quantity thrice a day.

1- Good quantity twice a day.

2- Normal quantity twice a day.

3- Less quantity twice a day.

13) Jarana shakti (Power of digestion)

Scoring; according to *Jeerna Ahara Lakshana* present after 6 hours after taking food. They are *Utsaha, Laghu, Udgarashudi, Kshudhatrishnapravritti, Yathochitmalotsaraga*.

- Presence of 4-5 symptoms.
- Presence of 3-4 symptoms.

- Presence of 2 symptoms.

- Absence of all symptoms.

Laboratory Investigations-

- **Blood:-** Hb %, TLC,DLC, ESR, LFT.
- Routine and microscopic examination of urine.
- Routine and microscopic examination of stool.
- Bio-chemical and radiological investigation to rule out other pathological conditions.

Assessment of Overall Effect of The Treatment

First percentage improvement of individual patient was calculated as shown below:

Total BT- Total AT × 100

Total BT

The result thus obtained from individual patient was categorized according to the following grades:

Complete cure	100%
Marked relief	≥ 75-99%
Moderate relief	≥51-74%
Mild relief	≤ 50 %
No relief	0%

Observation & Result

Table 3: Presenting Complaint in 60 Patients of *Grahani Roga*

Sign and Symptoms	Group A	Group B	Total	Percentage
<i>Muhurabada Muhurdrava MalaPravariti</i>	30	30	60	100%
<i>Anaddhodarta</i>	30	30	60	100%
<i>Arochaka</i>	30	30	60	100%
<i>Balakshaya</i>	30	30	60	100%
<i>Alasya</i>	30	29	59	98.33%
<i>Kalma</i>	30	30	60	100%
<i>Trishna</i>	30	30	60	100%
<i>Mukha Vairasya</i>	29	29	58	96.66%
<i>Tikt amlaodgara</i>	30	30	60	100%
<i>Praseka</i>	30	28	58	96.66%
<i>Antrakujanm</i>	29	29	58	96.66%
<i>Abhyavarana shakti</i>	30	30	60	100%
<i>Jarana shakti</i>	30	28	58	96.66%

Muhurabada Muhurdrava MalaPravariti, Anaddhodarta, Arochaka, Balakshaya, Kalma, Trishna, Tikt amlaodgar, Abhyavarana shakti were observed in 100% patients *Mukha Vairasya, Praseka, Antrakujanm, Jarana shakti* were observed in 96.66% patients *Alasya* were observed in 98.33% patients.

Comparative Effect of Treatment of Sign and Symptoms of Group A & Group B In Grahani Roga:

There was very significant result in the symptom of *Muhurabada Muhurdrava MalaPravariti, Tikt amlaodgara*, not quite significant result in the symptom of *Arochaka*, and not significant result was shown in other symptoms.

Table 4: Comparison of Overall Effect of Treatment on Signs & Symptoms of Group A & B

Overall Assessment	GROUP A	GROUP B
NO Relief (0%)	0%	0%
Mild Relief ($\leq 50\%$)	50%	16.66%
Moderate Relief ($\geq 51-74\%$)	40%	63.33%
Marked Relief (75-99%)	0%	3.33%
Complete Relief (100%)	0%	0%

On the basis of the specific scoring pattern adopted, the total effect of therapy had been carried out which shows that in Group A: The efficacy of *Marichyadi Churna* in *Grahani Roga* (Irritable Bowel Syndrome) provided marked relief in (0%) patients, moderate response in (40%) patients and (50%) patients showed mild improvement after completion of treatment. (0%) patients got complete cure after completion of treatment.

The efficacy of *Marichyadi Churna* in combination with *Changeriyadi Ghrita* in *Grahani Roga* (Irritable Bowel Syndrome) i.e. Group B provided marked relief in (3.33%) patients, moderate response in (63.33%) patients and (16.66%) patients showed mild improvement after completion of treatment. (0%) patients got complete cure after completion of treatment.

DISCUSSION

Probable Mode Of Action Of *Marichyadi Churna*:-

The *dravyas* of *Marichyadi Churna* contains: - *Kalimirch*, *Shunthi*, *Kutajtwak*, *Jaggery (gur)* It is a good stimulant for appetite, digest *Ama*. Therefore, it is an effective remedy for *Grahani* and irritable bowel syndrome. *Katu*, *Tikta* and *Kashaya Rasa* have *Kaphahar*-property. *Laghu*, *Ushna*, *Ruksha* and *Tikshna Guna* of *dravyas* have *Kaphvatahar* property. *Deepana*, *Pachana*, *Krimihara* properties of *dravyas* of *Marichyadi Churna* corrects *Agni*.

Probable Mode of Action of drugs:-

Kali Marich is an excellent antiviral and antibacterial helps in treating liver infection. *Sunthi* is unctuous, hot in potency and increases *Pitta* and decreases *Kapha*. It improves taste, light to digest, improves digestive strength, and helps to absorb excess moisture especially in intestine. *Kutajtwak* is bitter and pungent in taste, *Katu Vipaka*, *Sheeta Virya*, *Laghu* and *Ruksha* in *Guna*. It pacifies *Tridosha*, *Deepan*, *Sangrahi* in action. *Gud* (jaggery) It activates the digestive enzymes in the body,

it stimulates the bowel movements and thus helps prevent and relieve constipation. It can also help to detoxify the liver.

Probable Mode of Action of *Changeriyadi Ghrita*⁸:-
Bheshajya Ratnavali mentioned *Changeri Ghrita* has a property of *Appetizer (Agnivardhak)* and *Vednashamak* (relives pain). So, pain during defecation will be relieved. *Agnimandhya* is responsible for all types of disease; this *Ghrita* through its *Agnivardhaka* effect relieves the *Agnimandhya*. This *Ghrita* acts on large intestine through its *Mala-Bhedana* effect. This results into the smooth exertion of stool. *Ghrita* has property of *Malabhedhaka* (relieves constipation), *Pachak* (digestive) and *Balya* (energies).

Probable Mode of Action of Drugs:-

Pippali is useful in hepatomegaly. *Nagra* is unctuous, hot in potency and increases *Pitta* and decreases *Kapha*. It improves taste, light to digest, improves digestive strength, and helps to absorb excess moisture especially in intestine. *Chitraka Plumagin* showed antibacterial, antifungal, anticancer activities in Different studies. Its roots believed to increase the digestive power and in used in piles, diarrhoea, in the condition of indigestion (*ama*) or hypometabolic. *Gokshuru Nighantus* are mentioned that *Gokshuru* contain *Madhura Rasa* and its has *Sheeta Virya*. It is used as a *Vrishya* and *Rasayana* drug. Through, it is drug of choice of *Mutravaha Srotas* diseases, it can also used in *Sanipattik* disorder, and it has anticancer, lithotriptic, hepatoprotective, diuretic and aphrodisiac properties. *Gajpippali* it improves digestion strength, balances *Kapha* and *Vata Doshas*, it is useful in diarrhoea and dysentery. It is used in extensively in liver disorders and also used in the treatment of splenomegaly. *Dhanyaka* it is typically known as *dhania* in India is called *coriander* in English; *Dhaynaka* is a word that denotes both plant and its fruit. It helps to reduce anorexia and loss of appetite. *Bilva*

Unripe fruit is an appetizer, digestant and astringent although ripe fruit is astringent and a sweet, mild laxative. An excess dose causes constipation. Unripe fruit are useful in loss of appetite, diarrhea, dysentery, pain in abdomen. *Patha* being an appetizer, digestive, laxative, astringent and anthelmintic, it is used in *Grahani*. *Yavani* is useful in *Udarshool*, *Ajeerna*, *Gulma*, *Aamdosha*, *Aruchi*. It acts as carminative, strengthens the stomach and liver; improves appetite and relieves bloating. It has *Laghu*, *Ruksha*, *Teekshna Guna*, *Katu*, *Tikta Vipaka*, *Ushna Veerya* and *Kaphavatahara* in nature. It improves taste, helps in digestion, abdominal colic pain. *Changeri* it is very hot in potency, pungent in taste, it stimulates the digestive fire and it balances *Kapha* and *Vata Doshas*, *Grahani* and *Diarrhoea*. *Ghrita* It contains 8% low saturated fatty acid which makes it easily digestible. It possesses Antioxidant property due to Vita. A & E present in it. Due to its lipophilic nature, it readily transfers constituents of formulation to the target organ, then to the cell, eventually, producing the result. *Dadhi* It has the ability to maintain a balance in the acids levels in the stomach. The ability of curds to manage the Ph level makes it a perfect remedy for digestion. The tangy taste of curd works as a stimulant for the taste buds. As a result, it gets improved the appetite.

CONCLUSION

All the drugs chosen for the study are having *Deepan*, *Pachan*, *Amapachaka*, *Sangrahi* properties in nature. The drugs are easily available, cheaper and with no side and adverse effects. The drugs act as anti-diarrheal, anti-dysenteric, appetizer, astringents, carminative, digestive and stomachic. It reduces the frequency of bowel movements. Both groups provided better relief in the amelioration of signs and symptoms of *Grahani* (Irritable Bowel Syndrome). Group B found better as compared to Group A in the overall recovery of the patient. There is sufficient evidence provided by this study that *Marichyadi Churna & Changeriyadi Ghrita* have a definite role in the management of *Grahani Roga*.

REFERENCES

1. Agnivesha, Charaka Samhita, Edited By Kasinath Shastri, Chikitsa Sthana, Grahanchikitsaasdhaya, C.Chi.15/44. Varanasi; Chaukhamba Sanskrit Series Office: 2016, Page No-460.
2. Sushruta, Sushrut Samita Edited By Sharma Priyavrit. Uttar Tantra. Atisara Pratishedham, Su.Ut.40/167-168 Varanasi; Chaukhamba Vishwa Bharti. 2010: 404.
3. Agnivesha, Charaka Samhita, Edited By Kasinath Shastri, Chikitsa Sthana, Grahanchikitsaasdhaya, C.Chi.15/56-57. Varanasi; Chaukhamba Sanskrit Series Office: 2016, Page No-462.
4. Irritable Bowel Syndrome At Dorland's Medical Dictionary.
5. Chung Owyang, Harrison's Principles Of Internal Medicine, 17th Edition, Vol 2, Irritable Bowel Syndrome, Gastroenterology 2001, 120. Publication Mc. Graw-Hill Medical Publishing Division, Page 1899-1903.
6. K.R. Palmer, I.D Penman, S.Paterson-Brown, Davidson's Principles And Practice Of Medicine, Irritable Bowel Syndrome 20th Edition, Churchill Livingstone Elsevier Publication, Page 920-921.
7. Agnivesha, Charaka Samhita, Edited By Kasinath Shastri, Chikitsa Sthana, Grahanchikitsaasdhaya, C.Chi.15/43. Varanasi; Chaukhamba Sanskrit Series Office: 2016, Page No-460.
8. [https://www.planetayurveda.com/library/changeri-oxalis-corniculata/\(changeri\)](https://www.planetayurveda.com/library/changeri-oxalis-corniculata/(changeri)).

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