

EFFECT OF BAL-BILVA PHAL MAJJA ON PITTADHARA KALA IN GRAHANI W.S.R IRRITABLE BOWEL SYNDROME

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ABSTRACT

In this era of fast food, there is change or irregularity in diet and diet timings and also increased sedentary lifestyle. Also one is always under tremendous mental stress all leading to *Agni dushti*. According to Ayurveda, healthy life depends upon “*Prakrut Agni*”. Root cause of all diseases is ‘*Mandagni*’, thus being the site of *Agni*; the *Pittadhara kala* is related with all diseases. When this normal physiological function of *pittadhara kala* is hampered because of the earlier mentioned reasons, it gives rise to *Grahani vyadhi*. *Grahani* is *tridoshatmaka* disorder of digestive system and occurs due to vitiation of *Pachakapitta* (it’s site being *pittadhara kala*), *Samanvayu*, *Apanavayu*, and *Kledaka Kapha*. The classical symptoms of *Grahani*

vyadhi coincide with most of the symptoms of Irritable Bowel Syndrome mentioned by the modern medicine. The present study was carried out on 30 patients having classical symptoms of *grahani w.s.r* IBS with *Bal-bilva phal majja alongwith takra as anupan*, for a period of 28 days. Follow up was taken on 7th, 14th and 21st and 28th day of treatment. Observation was done before treatment i.e. on 0 day and after treatment i.e. on 28th day. The present study mainly highlighted the effect of *Bal-Bilva phal majja (Aegle Marmelos)* with *takra* in *grahani vyadhi w.s.r* IBS.

KEYWORDS: *Pittadhara Kala, Grahani, IBS, Bal-bilva phal majja.*

INTRODUCTION

Now-a-days, due to changed lifestyle and faulty dietary habits, more and more people are falling prey to diseases of *Annavaha strotto dushti* leading to *Agni dushti*, causing 'Grahani vyadhi'. The main function of *pittadhara kala* is to receive the undigested food, hold different kinds of food, digest it and then propel the digested food further to *pakvashaya*. This *Pittadhara kala* is called as *grahani* and is the site of *Agni*. Qualities of *Agni* and *Pitta* are similar; also the relation between *Grahani* and *Agni* is reciprocal and interdependent.^[1] Acharya Sushruta considers *Pittadhara Kala* as *Grahani*, which is located between *Amashaya* and *Pakwahsaya*.

Grahani is *tridoshatmaka* disorder of digestive system and occurs due to vitiation of *Pachakapitta* (it's site being *pittadhara kala*), *Samanvayu*, *Apanavayu*, and *Kledaka Kapha*. In *Grahani*, *Agni* and *Vata Dosha* decide the course.^[2] The functional dependency between normal *Vata* and *Agni* is altered to a significant level. *Samanya laxana* of *Grahani* includes abdominal pain, passage of foul smelling semi-solid or liquid stools, evacuation of mucous stools after taking meals, painful defecation, acidic eructation, episodes of either constipation or diarrhea and others include *Arochaka*, *Hasta- Pada Shotha*, *Karshya & Dourbalya* etc.^[3] The significance of this disease can be known by its inclusion in the *Ashta mahagad*.^[4] These classical symptoms of *Grahani vyadhi* coincide with most of the symptoms of Irritable Bowel Syndrome mentioned by the modern medicine.

Irritable bowel syndrome (IBS) or spastic colon is a functional bowel disorder characterized by abdominal pain and altered bowel habit which may be in the form of altered stool frequency (diarrhea or constipation) or altered stool form (thin, hard, firm or soft). Psychological stress exacerbates gastro-intestinal distress in patients with IBS to a great degree than in the normal population. It is the most common reason for referral to a gastroenterologist, accounting for 20% to 50% of referred patients and also the one with the least treatment available.

Symptomatic treatment for Diarrhea or Constipation combined with antidepressant therapy forms the mainstay of treatment for most patients with mild to moderate disease. The treatment line of *Grahani* is similar to *Ajirna* and *Atisara Chikitsa*.^[5] As *Grahani* is caused due to *Agni Mandya*, the main line of treatment is to correct the *Agni Dushti* by following *Langhana* and administering drugs which are *Deepana*, *Pachana* and *Grahi* in action.

In various samhitas the properties of *Bal-bilva phal majja* have been mentioned as- *Grahi*, *Pachanam*, *deepanam*, *vatkaphapham*. They mainly correct the *Agni Mandya* and the *Dushti* of the *Anna* and *Purishavaha Srotas*. Thus these properties of *bal-bilva phal majja* when combined with *Takra* as anupan which too has *laghu*, *grahi*, *deepanam* properties and which is said to be most useful in the management of *grahani*; help to gain a combined and potentiated effect on *Grahani* by facilitating easy absorption and faster action of the drugs by targeting *Agni Dushti* as well as *Sroto dusthi* in the *Anna* and *Purishavaha Srotas*.

As there are hardly any treatment modalities available in the modern medicine, this cost-economic, almost completely effective and easily available *Bal-Bilva phal majja* was chosen for treating *Grahani vyadhi* (Irritable bowel syndrome).

AIM AND OBJECTIVES

To evaluate the efficacy of *Bal-bilva phal majja* on *pittadhara kala* in *grahani* w.s.r IBS.

MATERIAL AND METHODS

Materials

- *Bal-bilva phal majja*
- *Takra*
- Water
- Jaggery

Preparation of *Bal-Bilva Phal Majja*

Firstly unripe *Bilva* fruits were collected. They were then boiled for 30-40 mins. Pulp of all fruits was collected in a bowl. Around 500ml of water was kept for boiling, and 10 grams of jaggery was added to it. After a while, the entire pulp (around 140-150grams) was added to it, and the mixture was stirred until all the water evaporated. The final *bal-bilva majja* was then cooled and stored in tight pack container.

Drug Administration Details

Medicine - *Bal-Bilva majja*.

Dose-10gm twice a day after meals, *Anupan-Takra* (200ml).

Inclusion Criteria

1. Patients of either sex with age between 16 and 40 years.

2. Known case of IBS as per Rome III criteria (Symptoms of recurrent abdominal pain or discomfort and a marked change in bowel habit for at least 6 months, with symptoms experienced on at least 3 days/month in the last 3 months).
3. Patients attending the OPD & IPD of Ayurved College and Hospital.
4. Willing and able to participate in the study.

Exclusion Criteria

1. Subjects age group below 16years and above 40years of either sex.
2. Subjects presenting with IBS which includes Chron's disease, ulcerative colitis, acute conditions like cholera, gastro enteritis, bleeding per rectum etc.
3. Subjects with uncontrolled metabolic and other systemic disorders.
4. Pregnancy and lactating mothers.

Subjective Parameter

1. Colicky abdominal pain (*Udar shool*)

Sr.	Observations	Grade
1.	No or transient pain	0
2.	Occasional aches and pains interfering with some social activities	1
3.	Severe or crippling pains with impact on all social activities	2
4.	Prolonged and troublesome aches and pains causing request for relief and interfering with many social activities	3

2. Altered stool pattern diarrhea or constipation [*Muhur badham muhur dravam*]

Sr.	Observations	Grade
1.	No change in pattern of stool	0
2.	Occasional change in stool pattern	1
3.	Frequent changes in stool pattern	2
4.	severe changes in stool pattern	2

3. Post-prandial urgency in defecation (*Bhojnottar Malpravrutti*)

Sr.	Observations	Grade
1.	Normal control	0
2.	Occasional feelings of urgent need for defecation	1
3.	Frequent feelings of urgent need for defecation with sudden need for a toilet interfering with social performance	2
4.	Inability to complete defecation	3

Objective Parameter**1. Epithelial cells**

Sr.	Range	Grade
1.	0-2/hpf	0
2.	2-4/hpf	1
3.	4-6/hpf	2
4.	6-8/hpf	3

3. Pus Cells

Sr.	Range	Grade
1.	0-2/hpf	0
2.	2-6/hpf	1
3.	6-10/hpf	2
4.	10-14/hpf	3

Investigations

Stool microscopic examination.

Study Duration & Follow UP: 28 Days; 0th, 7th, 14th, 21st and 28th day.

OBSERVATION AND RESULTS

Table No. 1: Effect of *Bal-Bilva phal majja* on *Udarshool lakshan* of *grahani*.

	B.T.Mean Grade	A.T.Mean Grade	Sum of ranks(W)	Number	P value
Trial Group	1.50	0.16	357	30	0.0004

On applying Wilcoxon sign ranked test P value is far less than 0.05. Hence, the effect of treatment is highly significant.

Table No. 2: Effect of *Bal-Bilva phal majja* on *Muhur badham Muhur dravam lakshan* of *grahani*.

	B.T.Mean Grade	A.T. Mean Grade	Sum of ranks(W)	Number	P value
Trial Group	2.20	0.23	465	30	0.0120

On applying Wilcoxon sign ranked test P value is far less than 0.05. Hence, the effect of treatment is highly significant.

Table No. 3: Effect of *Bal-Bilva phal majja* on *Bhojnottar Malpravrutti lakshan* of *grahani*.

	B.T. Mean Grade	A.T. Mean Grade	Sum of ranks	number	P value
Trial Group	2.23	0.20	465	30	0.0047

On applying Wilcoxon sign ranked test P value is far less than 0.05. Hence, the effect of treatment is highly significant.

Table No. 4: Effect of *Bal-Bilva phal majja* on Epithelial cells in stool microscopic.

EPI CELLS	B.T. Mean Grade	A.T. Mean Grade	Sum of ranks (W)	No	P value
Trial Group	1.43	0.33	276	30	0.0006

On applying Wilcoxon sign ranked test P value is far less than 0.05. Hence, the effect of treatment is highly significant.

Table No. 5: Effect of *Bal-Bilva phal majja* on Pus cells in stool microscopic.

PUS CELLS	B.T. Mean Grade	A.T. Mean Grade	Sum of ranks (W)	No	P value
Trial Group	1.80	0.33	465	30	0.0076

On applying Wilcoxon sign ranked test, P value is far less than 0.05. Hence, the effect of treatment is highly significant.

DISCUSSION

Grahani is a disease of great clinical relevance in modern era because of its direct link with the improper food habits and stressful lifestyle of the present time. This *grahani vyadhi* is caused due to vitiation of *saman vayu*, *pachak pitta* and *kledak kapha* all leading in anatomical and physiological impairment of *pittadhara kala*- the site of *Agni*.

It was observed at each follow up that there was significant reduction in *grahani lakshane*. Statistical value showed significant result at each follow up, out of 30 patients, 17(56.66%) patients showed complete relief (100%) at the end of treatment, whereas 13 (43.33%) patients showed marked relief (<100-75%). 83.33% patients had complete relief from *udarshool* whereas *muhur badham muhur dravam* and *bhojnottar malpravrutti lakshan* was completely improved in 76.66% patients.

Bilva, due to its *Kashaya*, *Tikta Rasa*, *Katu Vipaka* and *Laghu Guna* acts as *Agni Deepana* and also *Amapachaka*. *Kashaya Rasa* and *Ushna Virya* help in reducing the colonic motility. *Sangrahi* property of *Bilva* is very useful to treat the increased frequency of defecation and the consistency of stool. Unripe bael fruit produces anti-inflammatory, anti-oxidant and mast cell stabilizing effects. As a result, even the severe abdominal pain, discomfort, bloating is also significantly reduced.^[6]

One of the most important *dravya* mentioned by almost all *Acharyas* in the management of *grahani* is “*Takra*” i.e Buttermilk. It is given equal importance as that of Ambrosia.

“*Yatha suranam amrutham pradhanam tatha naranam bhuvitakramuhuhu*”.^[7]

It is highly appreciated for its theurapetical values. It is *Agni Deepak*, *grahi*, *vaatkaphahara*, and also *vatanulomak*. Due to its *madhur vipak* it doesn't aggravate *pitta*. Due to *kashay anuras*, *ushna veerya*, *ruksha guna*, it counteracts aggravated *kapha dosha*. Thus correcting the *agni dushti*. Due to its *madhur amla ras*, and *sandhrata* it brings down the aggravated *Vata*. Administration of *takra* encourages the normal acid producing organisms in the GI, as it is the administration of cultured fermented organisms.

Thus, *bal-bilva* and *takra* mainly correct the *agni dushti* and the *stroto dushti* of the *Annavah* and *Purishvah strotas* and greatly help in relieving the classical symptoms of *grahani* mainly IBS.

CONCLUSION

As we all know how the changing lifestyle and faulty dietary habits are increasingly making people fall prey to IBS, and with the limitations of modern medicine, the entire world is looking upto Ayurveda for long lasting cure. This study is definitely a step in the series of developments in the field of Ayurveda to find satisfactory solutions in the treatment of IBS which shows that *Grahani* i.e IBS symptoms are significantly reduced with the use of *bal-bilva majja* with *takra*. Hence, we can conclude that, there is effect of *Bal-bilva majja* on *pittadhra kala in grahani* w.s.r IBS.

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