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Management of Irritable Bowel Syndrome (IBS) in Ayurveda: A Case Report.

Vijayendra Bhat G.,¹ Prashant Basnet,¹ Aniruddha Saralaya¹

¹Department of Kayachikitsa and Manasaroga, SDM College of Ayurveda, Udupi, India..

ABSTRACT

Introduction: Irritable Bowel Syndrome is a chronic functional bowel disease characterized by symptoms of abdominal pain and/or discomfort associated with altered bowel habits. Though some biomarkers for IBS have been developed, studies are still being carried out to increase their sensitivity, specificity and validity to differentiate IBS and subtypes of IBS. Laxatives, prosecretory agents, antispasmodics, tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs) are used for its treatment in conventional medicinal systems. IBS can be correlated with *Grahani* in Ayurveda based on its symptomatology. In *Grahani* disease, *Agni* (digestive factors) of the body is weakened due to which there is abnormality in digestion, assimilation of foods and bowel movements.

Case Report: In this case report, we have made an attempt to treat a male patient of 38 years having the symptoms of *Muhurbaddha Muhurdrava*, *Udarashool* and weight loss. Patient diagnosed with *Grahani*/ IBS was treated with few oral medicines like *Bilvadi Vati*, *Panchamrit Parpati*, *Panchakarma* procedures; *Basti* (therapeutic enema), *Shirodhara* (therapeutic oil-streaming over forehead) and Ayurveda psychological counselling. At the end of 51 days of treatment the patient showed 75% relief in passing of loose and constipated stool, 75% relief in distension of abdomen, 100% improvement in appetite and passing of mucus in stool.

Keywords: *Agni, Ayurveda, Basti, Grahani, IBS, Shirodhara,*

INTRODUCTION

IBS is a chronic functional bowel disease characterized by symptoms of abdominal pain and/or discomfort associated with altered bowel habits, in the absence of a structural or organic cause.¹ The precise cause of IBS remains unknown.^{2,3,4} However, several factors have been implicated in the pathophysiology of IBS symptoms, including genetic disposition, diet, intestinal microbiota, and mucosal low-grade inflammation. IBS is common worldwide, with an estimated global prevalence of 11.2%.⁵ Due to the multi-symptomatic nature of IBS and lack of awareness of diagnostic criteria in clinical practice, a substantial proportion of patients may not receive a formal diagnosis of IBS.⁶ In most populations, women

report IBS approximately 1.5- to 3-fold higher than those seen in men.^{7,8} Laxatives, prosecretory agents, antispasmodics, tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs) and psychological therapies are used for its treatment in conventional medicinal systems.^{9,10,11,12}

Correspondence: Dr. Prashant Basnet.
Department of Kayachikitsa and Manasaroga,
SDM College of Ayurveda, Udupi.
Email: pacificbasnet18@gmail.com. Phone No.
+91-9019293297.

Grahani Dosha is one of the *Mahagadas*.¹³ It is associated with digestive problems and in the current scenario due to the bad dietary habits, irregular lifestyle, stress and environmental conditions the prevalence of *Grahani* has increased.¹⁴ The function of the *Grahani* part of the intestine is supported by the strength of *Agni*. During abnormal physiological conditions, due to weakness of *Agni*, *Grahani* gets vitiated and releases undigested food. This overall stimulates formation of *Ama* which leads to *Grahani Dosha*.¹⁵

Thus, it produces symptoms as *Muhurbaddha Muhurdrava Mala* (alternate loose and constipated stool), *Udarashoola* (pain abdomen), *Trushna* (thirst), *Arochaka* (tastelessness), *Asyavairasya* (inability to perceive taste), *Praseka* (excessive salivation), *Shoon Padakara* (edema over hands and feet), *Asthiparva Ruk* (pain at joint and bone), *Chardan* (vomiting), *Jwara* (fever) and *Louhagandhi Amlaudgara* (iron smelling pungent odor burps).¹⁶

In spite of the presence of guidelines to treat IBS, due to diversity and complexity of symptoms, patients are reported to get relief only in priority symptoms like diarrhea, constipation, abdominal pain, but lower priority symptoms which are also significant in wellbeing like fatigue are not resolved in many patients. Though impairment of gut-brain axis is well understood in IBS but its utility to treat IBS hasn't yet been validated.^{17,18} So, this case report is a sincere effort to observe the effect of gut therapy using Basti and mind-body therapy like *Shirodhara* and Ayurveda counselling along with simple communication about disease condition to patient in treating IBS.

CASE REPORT

A male patient of age 38 years was admitted in Inpatient Department (IPD) of Kayachikitsa and Manasaroga Department of SDM College of Ayurveda and Hospital, Udupi (SDMAHU) presenting with the complaints of frequent passage of loose stools 10 times per day and 4-5 times per night and occasional constipated stools along with abdominal pain and weight loss. He was apparently healthy till the age of 11 years. After that due to various life circumstances, he was in mental stress continuously. Then he started having the symptoms of bloating of

abdomen, burning sensation in the epigastric region, nausea and vomiting.

Since the last 3 years, the bloating of the abdomen has increased along with passing of motion for about 5-8 times a day which was loose in consistency and sometimes alternating with constipated stools. For all these complaints he had consulted a gastroenterologist and taken Tab. Mesalazine 1.6 gm TID, Tab. Prednisolone 40 mg OD, Mesalamine suppositories 500 mg BD, Tablet Pantoparazole 500 mg OD for 6 months before coming to our hospital with no relief. These symptoms went on worsening and he also had side effects from the medicine i.e., formation of ulcers at mucosa of various parts of gastrointestinal tract for example terminal ileum, rectum etc. So, after he got information about this hospital from his relative, he came to get admitted at SDMAHU.

Patient was hyposthenic, under-nourished and pallor was present. His pulse rate was 76 beats per minute, respiratory rate was 22 per minute and blood pressure was 110/70 mm of Hg. He weighed 53 kilograms before admission and 68 kilograms one year before that. His body mass index (BMI) was 18.33. Abdomen was soft and tender at all abdominal regions. Stool routine examination showed undigested food particles in it. He was non-vegetarian having a reduced appetite. His micturition was reduced, hardly 1-2 times per day with less quantity. His sleep was disturbed.

His blood investigations showed that his hemoglobin level (Hb) was 9 g/dl, erythrocyte sedimentation rate (ESR) was 34 mm/hour, and packed cell volume (PCV) was 25.7%. His HIV and HBsAg tests were negative.

Treatment

Patient was treated with internal medicines, *Basti*, *Shirodhara* and Ayurveda psychological counselling.

The following oral medicines were administered for 51 days:

- *Sankha Vati* one tablet three times a day before food with lukewarm water
- *Mustakarishtha* (10ml) and *Kutajarishtha*(10ml) with 20 ml of water after food three times a day
- *Bilvadi Vati* one tablet three times a day after food with normal water
- *Dadimastaka Choorna* one teaspoon twice a day after food with honey

- *Panchamrita Parpati* 125 mg twice a day before food with normal water
- *Kalyanak Ghrita* one teaspoon once a day before food at morning with lukewarm water

The following *Panchakarma* procedures were done for 16 days:

- *Pichha Basti* followed by *Matra Basti* in which *Pichha Basti* had these constituents:
 1. *Mocharasa (Salmania malabarica (DC.))* -50 gm
 2. *Godugdha* (Cow milk) -2 litres
 3. *Goghrita* (Cow ghee) -80 ml
 4. *Tila Taila (Sesamum indicum L.)* -20 ml
 5. *Yesthimadhu Kalka (Glycyrrhiza glabra L.)* -40 gm. While *Matra Basti* was given with *Yesthimadhu Taila*.
- *Shiro dhara* with *Ksheera Bala Taila*

RESULTS

The assessment was done with a scale prepared based on the cardinal symptoms of *Grahani*, which was also reviewed by experts in the same field. Assessments were done before starting the treatment (0th day), after the

completion of *Panchakarma* treatments (21st day) and on follow up after 1 month of discharge. After treatment of patient in IPD for 21 days the different values of blood investigations improved. Results were as: Hb- 10.5 gm%, PCV -32.8%. The patient reported gradual improvement in altered bowel habits, stool with mucus, pain in abdomen, indigestion, heaviness in abdomen, exhaustion, weakness. At the time of discharge, he had gained 2 kgs of weight. The changes observed in the signs and symptoms were assessed by adopting suitable scoring methods and the objective signs by using appropriate clinical tools. On assessing clinically on 21st and 51st day after the treatment there were 50% and 75% relief in altered bowel habits, 50% and 75% relief in distension of abdomen, 50% and 100% relief in anorexia, 50% and 100% relief in weakness, 66.6% and 100% relief in thirst, 50% and 100% relief in exhaustion, 66.6% and 100% relief in gurgling sound in abdomen, 50% and 100% relief in passing mucus in stool respectively. (Table 1) (Figure 1)

Table 1. Grading of the clinical features before and after the treatment						
Clinical Features	Grading		BT	AT		
				21 st day	51 st day	% Relief
<i>Muhurbaddha Muhurdrava Mala</i> (Episode of constipated & loose stools)	Passing normal consistency stool (1time/day)	0	4	2	1	75%
	Passing stool irregular (1-2 times/day) without pain	1				
	Passing stool irregular (2-3 times/day) with pain	2				
	Passing stool irregular & just after meal (3-4 times/day) with pain	3				
	Passing stool irregular & just after meal (>4times/day) with pain	4				
Distension of abdomen (<i>Anaha</i>)	No complaint	0	4	2	1	75%
	Rarely complaint once in a week	1				
	Distension of abdomen after taking meal up to 1 hour	2				
	Distension of abdomen after taking meal up to 1-3 hours	3				
	Distension of abdomen after taking meal up to 6 hours	4				
<i>Aruchi</i> (Anorexia)	Taking normal diet with interest	0	2	1	0	100%
	No interest in taking normal diet	1				
	Food taken forcefully	2				

	Food not taken even after forcing	3				
Balakshaya (Weakness)	No weakness	0	2	1	0	100%
	Weakness but performs day to day activities	1				
	Weakness & difficulty in performing day to day activities	2				
	Not able to get up from bed	3				
Trishna (Thirst)	Normal thirst	0	3	1	0	100%
	Mild thirst, takes water frequently	1				
	Thirsty all the time and takes water in adequate amount	2				
	Excessive thirst, never satisfied after taking a good amount of water	3				
Klama (Exhaustion)	No exhaustion	0	2	1	0	100%
	Exhaustion with moderate work	1				
	Exhaustion with mild work	2				
	Exhaustion without effort	3				
Antrakunjana (Gurgling sound in abdomen)	No complaint	0	3	1	0	100%
	Occasionally	1				
	2-3 times/day before passing stool	2				
	Persistent	3				
Apakya Malapravritti (Passing mucus in stool)	No visible mucus in stool	0	2	1	0	100%
	Visible mucus in the stool	1				
	Passage of mucus with frequent stool	2				
	Passage of large amount of mucus in stool	3				

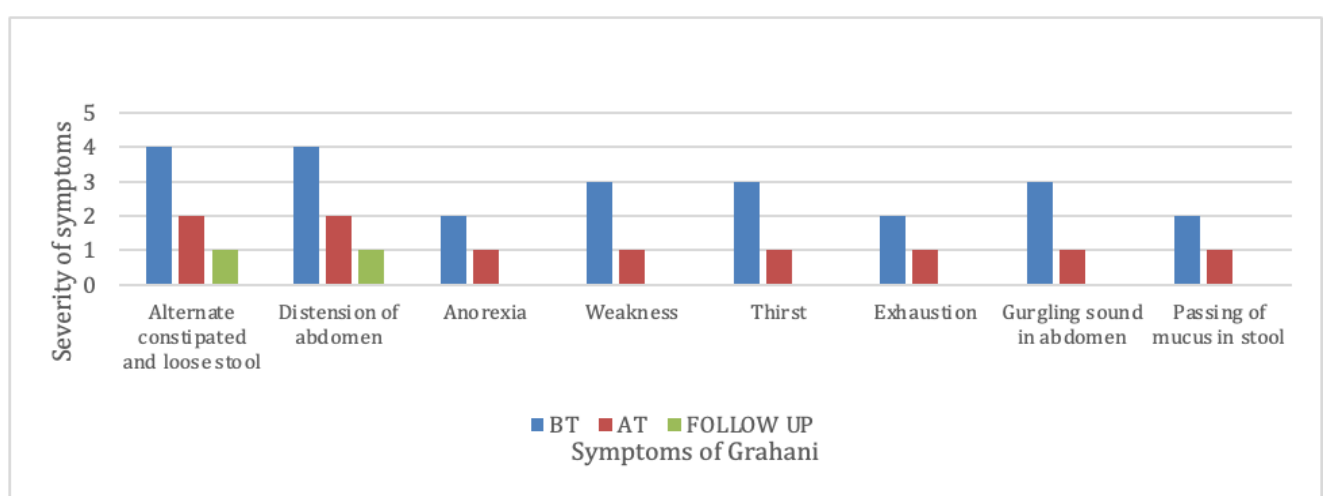


Figure 1. Graphical representation of improvement in symptoms during the course of treatment.

Index: BT-Before Treatment, AT- After Treatment

DISCUSSION

As per the Rome III Diagnostic Criteria for IBS since loose or watery stool was present in more than or equal to 25% of bowel movements and hard or lumpy stool was present in less than 25% of bowel movements in the patient, it was diagnosed as Diarrhea predominant IBS (IBS-D).¹⁹ While due to the presence of all the classical symptoms of *Grahani Dosh*, *Grahani* was diagnosed according to Ayurveda.²⁰ *Agnimandya* characterizes *Grahani Dosh*. Therefore, the use of drugs with *Deepana* and *Pachana* (digestion and metabolism enhancing) properties along with *Laghu*, *Supachya Ahara* (easily digestible food) is mandatory for its management.²⁰

In *Mustakarishtha*, *Mustha* (*Cyperus rotundus L.*) is an *Agrya Dravya* for *Sangrahi*, *Deepana* and *Pachana* action. It also pacifies the *Koshta Gata Vata* (flatus) and relieves the distension of the abdomen.²¹ *Kutaja* (*Holarrhena antidysenterica Wall.*) in *Kutajarishtha*, with pungent properties, contains alkaloids like Kurchi bismuth iodide, conessine and used to improve bowel complaints. It also acts as an anti-diarrheal and anti-dysentery agent.²² *Udarashoola* is most common indication of *Shankha Vati*.²³ *Dadimashtaka Choorna* and *Panchamrita Parpati* improves the taste, digestion, decreases the frequency of bowel due to its the virtue of *Pachana* and *Sangrahi* action and there by relieves the bowel complaints.^{24,25} *Bilvadi Vati* is useful in diarrhea, dysentery, dyspepsia, gastralgia, palpitation, seminal weakness, urography, vomiting, intermittent fever, swellings and gastric irritability in infants.²⁶ *Kalyanaka Ghrita* helps to protect neurons against neuronal damage caused due to oxidative or nitrosative stress sources in the brain, hopefully resulting in remission of depression or anxiety symptoms.²⁷

In this study *Pichha Basti* was selected for the treatment of *Grahani* (IBS). *Pichha Basti* is named so because of its *Picchil* (slimy) property. Because of this property it has an ulcer healing effect. Moreover, it is *Agnideepak* and *Sangrahi* due to its contents.²⁸ *Yashtimadhu* is *Vranropak* (wound healing) and *Vatanulomak* (evacuating the flatus,

urine, stool properly).²⁹ IBS is a psychosomatic disorder so we selected *Shiro Dhara* for treatment, which is known for its stress relieving effect. Patient had been having stress since his childhood after his father expired and he had to help to run the family. When *Ksheera Bala Taila* is poured in a continuous stream over the forehead it can be speculated that it might have the physio-psychological effects of relaxation due to somato-autonomic reflex through thermosensors in the skin or hair follicles via trigeminal cranial nerve.³⁰ Patients were also psychologically counselled in alternate days. So, all the major *Lakshanas* (symptoms) like "*Muhur Muhur Mala Pravritti*, *Muhur Badda Muhur Drava Mala Pravritti*, *Amayukta Mala Pravritti*, *Udarashoola*" were subsided.

CONCLUSIONS

Based on the result of this study, Ayurveda treatment is found to be effective in relieving symptoms like *Muhurbaddhamuhurdrava Mala* (alternate passage of constipated and loose bowel), distension of abdomen in *Grahani*/ IBS. There was no adverse drug and procedure reaction seen during the period of study. Further studies should be carried out with multicentric large sample sizes in comparison with a standard control drug in order to obtain more valid data on the effect of this treatment in management of IBS.

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Consent: The consent was signed by the patient and the original article is attached with the patient's chart.