

## EFFECT OF SHADDHARAN CHURNA IN IRRITABLE BOWEL SYNDROME (IBS): A CASE STUDY

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### ABSTRACT

The cause of irritable bowel syndrome (IBS) is not fully known in modern medicine, but varieties of factors play a role. The diagnosis of IBS depends mostly on a complete history taking and physical examination of patient. Such type of patient is not completely manageable with modern drugs such as anti-diarrhoeal, anti-cholinergic, anti-spasmodic, anti-depressants, and antibiotic, but it provide temporarily relief up to some extent. For the search of better care and cure patients are inclined towards other system of medicine including Ayurveda. As disease entity IBS is correlated with *Grahani roga* of Ayurveda, which is a functional disorder of gastro-intestinal

tract. It is characterized by chronic or recurrent abdominal pain associated with altered bowel habits. A case of IBS was diagnosed based on Rome III criteria and *Saddharana churna* was given in a dose of 5gms bid after meal with lukewarm water for a period of 63 days with 21 days of follow ups. The case was assessed on subjective and objective parameters for three successive follow ups on every third week. There were significant changes observed on cumulative score of Rome III, mucus present in stool and CRP. No unwanted effects were noted during the trial period. It is safe & effective drug for management of IBS.

**KEYWORDS:** Ayurvedic, Herbal drug, IBS, GIT disorders, *Grahani roga*.

## INTRODUCTION

Irritable Bowel Syndrome (IBS) is a major health problem of adult age group worldwide. It is the most common functional gastrointestinal disorder with no organic cause imparts significant healthcare burden in developed as well as developing nations. The recent data indicates that a community prevalence of IBS ranging from 3%-22% with wide variations between countries. IBS affects 15-20% of Indian population. It occurs more often in women than in men and it begins before the age of 35 in about 50% of people.<sup>[1]</sup>

It is characterized by chronic abdominal pain; discomfort, bloating, and alteration of bowel habits without any detectable structural pathology of lower GIT. Apart from the above symptoms, the patient may also experiences dyspepsia, increased flatulence, belching, heartburn, nausea and vomiting symptoms of upper GIT. Based on clinical features of IBS, it may be correlated with Grahani roga of Ayurveda up to some extent, which is described as “*Atisrishtam vibadham va dravam tadupdishyate*”.<sup>[2]</sup>

Currently, there is no biochemical, histo-pathological or radiological diagnostic test for IBS, it is only diagnosed on the basis of history taking and symptom assessment. The majority of gastroenterologists believe that a symptom-based diagnosis, such as that based on the Rome III criteria, without red flags is enough for the diagnosis of IBS and that no further investigations are needed. Treatment strategies for IBS management may include both non-pharmacologic such as assurance, psychotherapy, fiber supplement etc. and pharmacologic approaches such as use of anti-diarrheal, anti-cholinergic, anti-spasmodic, anti-depresants, anti-biotic etc.. But these measures are not satisfactory and patients of IBS were moving here & there for the search of effective treatment.

Ayurveda has described number of formulations for the mangement of GIT disorder, in which ‘*Shad-Dharana Churna*’ (powder of six herbs) is given to this patient for a period of 63 days with follow ups of 21days interval. The selected Ayurvedic formulation is described by Sushruta in context of *Amashayagat vata*<sup>[3]</sup> in Sushruta Samhita.

**Shaddharan churna** is a promising herbal drug formulation, mentioned in Sushruta samhita for the management of Amashayagatavata.<sup>[4]</sup>

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**MEDICAL CASE HISTORY**

The summarized form of medical case history of the patient was as follows: Mrs Vimla Devi, a 55 years old housewife, was brought to us at the Kayachikitsa OPD, MRD No.424027, S.S. Hospital, IMS, BHU with complaints of feeling of discomfort in abdomen, mild pain in abdomen, constipated bowel habit, mucoid stool, reduced appetite since last 4 months. According to patient before 4 months she had complaint of gas formation, altered bowel habit and reduced appetite. She took treatment for this from local doctor as well as well-equipped hospital but she got no any relief in clinical & laboratorial outcome and expenses lot money during this period. But she did not get any significant improvement. For the search of better management and advice by someone she came S.S. Hospital, Kayachikitsa OPD, IMS, BHU.

Patient has no H/O DM, HTN, Hypothyroidism, TB or any allergy, no H/O worm infestation, haemorrhoids or trauma. No H/O any chronic inflammatory condition likes RA, carcinoma. No H/O jaundice.

We carefully examined all the reports made available to us pertaining to the investigations and treatment done till date in this case. All the routine investigations were done. There was no place for diagnostic confusion as per the clinical picture and the investigation reports were in favour of diagnosis of irritable bowel syndrome. She was treated by allopathic gastrologist's doctors but she & family members were not satisfied.

**Chief Complaints**

Feeling of discomfort in abdomen, constipated bowel, reduced appetite since last 4 months.

**Physical Examination**

General condition- Ill looking

B. P.: 130/84mm of Hg.

PR: 88 regular, full bound

Temperature: 98.40 F

Respiration: 16/min

Tonsils: Normal (not enlarged)

Tongue: Uncoated

Thyroid: Not enlarged

Jugular venous pressure: Not raised

**Personal Details**

Build - lean

Height - 5.1''

Weight - 55 kg

Personal history:

Diet: mixed

Appetite: reduced

Bowel habits: altered bowel habit

Menstruation history- normal & regular

Menstrual cycle- menopause, No abnormal vaginal bleeding and discharge

Micturition habit: normal frequency, quantity and absence of sediments.

Sleep: disturbed

Marital status: married

Addiction: no addiction

Family history: no any history present

Pallor: Absent

Icterus: Absent

Clubbing: Absent

Cyanosis: Absent

Lymph node: Not palpable

Edema: Absent

Lymphadenopathy: Not noticeable

Local lesion: Absent

**Systemic Examination**

**CNS:** Well oriented to person, place and time with intact higher mental function (memory, speech & intelligence) Motor- Normal DTR, Plantar-flexion Sensory- Intact sensory function (touch, pain, temp. pressure)

**CVS:** Normal apex beat in 5th ICS, no murmur found.

**R/S:** Inspection-B/l symmetry with normal movement of chest having no any scar. No Abnormal pulsation

Palpation-Not any tenderness

Percussion- Normal resonating note.

Auscultation- b/l equal air entry. No any abnormal sound present.

**P/A:** Normal scaphoid shape of abdomen with no any scar mark or venous engorgement. Abdomen is soft, non-tender, no organomegaly.

### **Rome III Criteria (2006)**

#### **Gradation of Symptomatology**

1. In the last 3 months, how often did you have discomfort or pain anywhere in your abdomen? 5 More than one day a week
2. For women: Did this discomfort or pain occur only during your menstrual bleeding and not at other times? 0 No
3. Have you had this discomfort or pain 6 months or longer? 1 Yes
4. How often did this discomfort or pain get better or stop after you had a bowel movement? 3 Most of the time
5. When this discomfort or pain started, did you have more frequent bowel movements? 1 Sometimes
6. When this discomfort or pain started, did you have less frequent bowel movements? 2 Often
7. When this discomfort or pain started, were your stools (bowel movements) looser? 1 Sometimes
8. When this discomfort or pain started, how often did you have harder stools? 3 Most of the time
9. In the last 3 months, how often did you have hard or lumpy stools? 1 Sometimes
10. In the last 3 months, how often did you have loose, mushy or watery stools? 1 Sometimes

Scoring of Rome III criteria at the time of registration:  $5+0+1+3+1+2+1+3+1+1=18$

#### **Investigation (At the Time of Case Registration)**

CBC: Normal Limit

RFT: normal limit

LFT: normal limit

CRP: 3.4 mg/dl

Stool R and M: ova and cyst- mucous present

Stool occult blood- absent.

Urine (R/M): WNL

**Treatment history:** H/O PPI's, Laxatives, anti-spasmodic and Antipsychotics.

**Treatment (at the time of case registration):** After thorough physical & systemic examination along with laboratorial investigations.

*Shaddharan churna* 3gm bid was given with lukewarm water.

**Diet:** Patient was advised to restrict fried, spicy, raw, heavy and oily food items.

**Result:** The treatment response was assessed on the basis of clinical symptomatology as per Rome III after a course of medication and mild improvement was found in the associated symptoms.

**In first follow up (after 21 days)** it was found that she got 25% improvement. The improvement in term of the patient's view in clinical symptoms was as follows: -

- Reduction in gas formation
- Improvement in desire of intake of food
- Improvement in bowel function

Likewise Rome III scoring as described above respectively after first follow up:  
 $5+0+1+2+0+0+1+3+1+1=14$

After thorough interrogation and physical and systemic examination the following medicines advised for another 21 days:

Treatment Advised:

*Shaddharan Churna*- 3 gm bid after meal with lukewarm water.

**In Second follow up (after 21 days)** it was found that she got 50% improvement in clinical symptoms. The improvement in term of the patient's view in clinical symptoms was as follows: -

- Reduction in fullness of abdomen
- Improvement in desire of intake of food
- Improvement in bowel function
- Improvement in weakness

After physical and systemic examination the following medicines were advised for 21 days:

Treatment advised:

*Shaddharan Churna*- 3 gm bid with luke warm water.

Likewise Rome III scoring as described above respectively after complete study is also reduced; i.e.  $3+0+1+2+0+1+0+1+0+0=6$

### Investigations (after completion of therapy)

CBC: normal limit

RFT: normal limit

LFT: normal limit

CRP: 1.4 mg/dl

Stool R & M: ova and cyst- mucous absent

Stool occult blood- absent.

Urine (R/M): WNL

### DISCUSSION

No doubt, modern system of medicine is capable of offering reasonably effective treatment for so many diseases. The diagnostic tools to find out disease causing factors are also equally good. But in cases of IBS neither the investigations nor the treatment helped much for considerable period of time. At the same time patient was not satisfied with modern management. In this case we observed that the given Ayurvedic formulation was significantly reduced the symptoms of IBS like fullness of abdomen, altered bowel habit, reduced appetite and improper digestion of food. *Shaddharan churna* is combination of six herbal drugs i.e. *Chitraka*, *Haritaki*, *Kutaja*, *Patha*, *Katuki* & *Ativisha*. Improvement in G.I.T symptoms are probably due to *deepana-pachana*<sup>[5-8]</sup> property of *Chitraka*; Its main ingredient is plumbagin and it is used in treatment of diarrhoea and dysentery.<sup>[9]</sup> *Kutaja* acts as *Samgrahi* and *Amapachana* due to *Tikta rasa*. It is used in diarrhea, haemorrhoids etc. (B.P.<sup>10</sup>) and also Promotes digestion and dispels natural toxins.<sup>[11]</sup> *Patha* used in abdominal pain,<sup>[12-13]</sup> diarrhoea, vomiting. It is *Grahi* in nature (B.P.<sup>[14]</sup> C.Su.27).<sup>[15]</sup> *Kutaki* is *Deepana* and liver stimulating drug and helpful in *Amapachana*. (B. P.)<sup>[16]</sup> It has been found effective in cases of colitis.<sup>[17]</sup> *Ativisha* is the best among *Deepana*, *Pachana* and *Samgrahik* drugs as per Charaka (C.Su.25,<sup>[18]</sup> B.P.)<sup>[19]</sup> The *Haritaki churna* stabilizes the gut system by improving the gut musculature and purgative action.<sup>[20-21]</sup> Thus, we can say that the given Ayurvedic drugs are effective & completely safe and it can be used patients of IBS.

### CONCLUSION

We finally conclude that Ayurvedic formulation *Shaddharna churna* have capacity to normalize associated clinical symptoms and laboratorial parameters pertaining to this case of

IBS. It provides leads for its use in day to day clinical practice of Ayurveda in cases of IBS and emerged as a promising drug for future research in the area disorders of gastrointestinal tract including IBS.

**Drug Sources:** 1. *Shaddharan Churna* (Bhaishajyaratnawali).

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