

AN APPRAISAL OF IRRITABLE BOWEL SYNDROME WITH VATIK GRAHANI ROG OF AYURVEDA

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ABSTRACT

In today modern life style, stress has becoming an inescapable part of our daily routine work. Stress is chain of non-specific physical and psychological events triggered anytime; sustained stress leads to increased risk for a variety of illness like hypertension, ulcer, irritable bowel syndrome (IBS), heart disease, depression, insomnia, irritability, asthma, headache, and many minor illnesses. Among all these, IBS is a very common GIT disorder in our society. Most of the patients attending gastroenterological clinic for G.I complains are suffering from IBS. It is chronic disease in nature; diagnose on symptoms based criteria. Signs and symptoms of IBS vary periodically from mild to severe and finally stern enough to hamper social life of patients. Till

date no appropriate treatment for these patients is available. In Ayurvedic phrase, the famous GIT disorder grahani's subtype vatic grahani share the symptoms of IBS. Vatic grahani is a not only mandagni janya vikar, but also initiate due to mansik dosha. The unsuitable ahara and vihar leads to mandagni and derangement of natural function of saman vayu and apana vayu which is finally responsible for the expression of IBS symptoms. Therefore, the successful management of IBS can be achieved by ayurvedic principle of vatic grahani chikitsa. The drugs with deepan, pachan, vatanuloman and medhya properties or with their combination cure the IBS in most effective way.

KEYWORDS: Stress, IBS, GIT, Vatic Grahani, Mandagni.

INTRODUCTION

Irritable bowel syndrome is a functional bowel disorder in the absence of any structural pathology^[1,2]. The intermittent nature of symptoms without evidence of physical deterioration and the relation to stress suggest the diagnosis. Abnormal psychiatric features are recorded in up to 80% of IBS patients. However, no single psychiatric diagnosis predominates. Main clinical symptoms^[1,2] are abdominal pain and altered bowel habit. The most common pattern is constipation alternating with diarrhoea which may be associated with altered stool frequency or altered stool form (thin, hard, firm or soft). The other symptoms commonly associated with IBS include passage of mucus, abdominal bloating, feeling of incomplete evacuation, and relief of pain after defecation. IBS is a motility disorder involving the entire hollow GIT, IBS creates a symptom complex with both upper and lower GI symptoms. Psychological stress exacerbates gastro-intestinal distress in IBS patients with a great degree than in the normal individual. IBS can be classified^[3] as either diarrhoea predominant (IBS-D), constipation predominant (IBS-C) or IBS with alternating stool pattern (IBS-A) or pain predominant or complex IBS. In some individuals, IBS may have an acute onset and develop after an acute gastroenteritis, termed as "post-infectious IBS" (IBSPI)^[4]. The exact cause of IBS is unknown, but several hypotheses have been proposed. The risk of developing IBS increases six fold after acute gastrointestinal infection. The risk factors are abnormalities in the gut flora, decreased immunity, young age, prolonged fever, anxiety and depression. The most common theory is that IBS is a disorder of the interaction between the brain and the gastrointestinal tract, suggesting the role of brain-gut "axis". For the diagnosis and treatment of functional gastrointestinal disorders (FGIDs), the "Rome process" is an international effort to create scientific data to help functional GI disorder such as irritable bowel syndrome, functional dyspepsia and rumination syndrome so proper analysis can be achieved by ruling out other disease having common symptoms with IBS^[5,6]. The Rome IV^[7] criteria for functional GI disorder are:

“Recurrent abdominal pain on average at least 1 day a week in the last 3 months associated with two or more of the following:

1. Related to defecation
2. Associated with a change in a frequency of stool
3. Associated with a change in form (consistency) of stool.

Symptoms must have started at least 6 months ago.”

This Rome IV criterion has begun to shift away from current term “functional G.I disorder” towards disorder of gut brain axis^[8].

AYURVEDIC ASPECT OF IBS

Before chalking out the plan of IBS management and its evaluation, there is need to understand IBS in terms of Ayurveda. In Ayurvedic literature, G.I Disorders have been vividly and significantly conceived with grahani, atisar, pravahika and pakavashayagat vata etc. It is not possible to find an exact synonym of IBS in Ayurvedic literature; only few of the disorders absolutely have some clinical symptoms which are also observed in the patients of IBS. There are a considerably good number of sign and symptoms in vatic grahani, one of the classification of grahani, which are attribute of IBS also.

In ayurvedic literature, grahani is one of the symptom of saman avrit apan vayu^[9]. Therefore IBS can be considered as a disorder where there is a derangement of vata in GIT especially of saman vayu & apan vayu leading to symptoms of pain in abdomen & altered bowel habits. The emotions like shoka, bhaya, krodh, kama etc. lead to mansik dosha prakopa (rajas, tamas) which develop the sharirik dosha prakop (tridosha). In the tridoshas, mainly prakupit kapha is able to cause mandagni^[9]. Thus mansik dosha and agni dusti (mandagni) leads to indigestion. From previous explanations inference can be drawn that the disturbances in mental health directly affect the gastrointestinal tract. In the presence of mandagni, the food never digests completely and this undigested food after getting fermented turns into poisonous substance termed as 'ama' (intermediate product of metabolism which act as reactive antigen)^[10]. In ordinary parlance 'ama' means undigested or partially digested food that is noxious to the body. This ama mix with purish is known as sama purish which passes in the patients suffered from grahani rog. This ama coalesces with faulty saman and apan vayu is accountable for the irregular gut motility. The classical Ayurvedic texts have vividly described the disease grahani.

Grahani

In Ayurvedic literature, the organ 'Grahani' is described as an organ of digestion. Some acharyas defined grahani considering its functional aspects, while few others considered anatomical aspect.

“Grihanati jatharagni iti Grahani”; It means the site, which keeps or contains the jatharagni, is known as grahani^[11].

According to Acharya Charaka^[12], grahani is the seat (adhithana) of agni and is located above nabhi (umbilical region). It is supported and nourished by the strength of agni,

normally; it receives the ingested food, which is retained in it by restraining the downward movement (grahanati). After digestion it releases the food through sides of lumen to next ashaya i.e. pakwashaya. In abnormal conditions due to weakness of agni, it gets vitiated and releases food in undigested form.

According to Acharya Sushruta^[13], the sixth kala described as pitta dhara kala is situated between amashaya and pakwashaya, and it is stated to be grahani. It is assumed that pitta dhara kala is not only limited to laghvantra but also extend up to the brihadantra, yakrita and agnyashaya. The pitta (digestive enzymes) formed in yakrita (liver) and agnyashaya (pancreas) pour into duodenum of small intestine. kala is the 'fine structure' that separates the dhatus from their ashayas. So we can say pitta dhara kala is secretory epithelium of GIT and hepatobiliary tract. Its main function is to provide pachaka pitta, and to retain the food in this part, upto its digestion, and separate Sara from kitta. According to the Ayurvedic concept it is the pitta or agni which digests the food materials secreted from pitta dhara kala. According to modern physiology this function is carried out by the digestive enzymes and the hormones like secretin, pancreas enzyme, cholecystokinin, enterokinase, lipase, amylase, invertase, urogastrone. enterogastrone present in the secretions of the internal mucosa of small and large intestine and of the some other organs, like liver and pancreas^[14]. The present description in the context of the pitta dhara kala drawn attention to the covering membranes of small intestine composed of columnar epithelium with striated border and covering membrane of large intestine able to provide various enzymes and a surface on which various kind of digestive reaction occur. After digestion absorption of the digested ahara rasa takes place through these membranes.

Acharya Vagbhata^[15] explained four different functions of grahani

- a. Dharana (Ingestion)
- b. Pachana (Digestion)
- c. Vivechana (Dissemination & Assimilation)
- d. Munchana (Defecation)

These above four functions clearly explain that grahani is mucous membrane of whole gastrointestinal tract starting from mouth and ends up to large intestine.

Role of vayu in grahani

There are five types of vayu namely prana, udana, vyana, samana, apana^[16]. Out of these five, samana vayu and apana vayu play main role in pathogenesis of grahani rog. The visesha

sthana of samana vayu is said located near the agni and also said to move in kosta (alimentary tract and other abdominal viscera). Samana vayu also moves the food nearer to agni (vayuaprakarshate) and thus by churning conducted by samana vayu, along with agni digests the food. Saman vayu withholds the food in the alimentary tract for sometimes and separates the essence and wastes (from the food) and eliminates the waste product. The visesha sthana of apan vayu is seated at testicles, urinary bladder and penis, thighs, groins, anus. It releases faeces placed in the malashaya (rectum). Thus the role of samana and apan vayu can be linked to the functions of enteric nervous system and also to the autonomic nervous system. The whole GIT has two types of nerve supply i.e. intrinsic nerve supply and extrinsic nerve supply^[17].

Intrinsic nerve supply or Enteric nervous system (E.N.S): The whole GIT from oesophagus to anus is supplied by two plexus which is as follows:

- 1) Auerbach's plexus (myentric plexus) present between the circular muscle layer & longitudinal muscle layer. The motor nerve fiber of these plexus release neurotransmitter acetylcholine, serotonin, substance P accelerate the gut motility. The inhibitory neurotransmitter vasoactive intestinal polypeptide (VIP) decreases the gut motility.
- 2) Meissner's plexus present between the sub mucosal layer & muscular layer. Motor nerve fibers of these plexus regulate secretory function of GIT

Extrensic nerve supply: Comes from Autonomic Nervous System (ANS). The sympathetic motor nerve fiver release neurotransmitter noradrenalin which inhibit the movement & decreases the secretion of GIT. The parasympathetic motor nerve fiber release neurotransmitter acetylcholine which accelerate the movement & increases the secretions. Any change in psychological state (CNS) of the individual like anxiety, depression, and compulsive disease directly affect the ENS^[17]. Therefore we say our gut has its own mini brain.

By these nervous system small intestines perform movements like mixing movement, propulsive movement, migratory motor complex & movement of villi. Large intestine movements are mixing movement (segmentational contraction), propulsive movement mass peristalsis, and gastro colic reflux^[18]. The secretory and motor function of whole GIT comes under ENS (saman vayu and apan vayu). The function of these vayu is the GI activities come under ENS and ANS. One of the symptoms of vatic grahani manasah sadnam shows the involvement of CNS which ultimately affect the ENS of gut.

Resemblance of Vatik Grahani with IBS

There are so many symptoms of vatic grahani which are common to IBS although vatic grahani shows some other peculiar symptoms also. The common clinical signs and symptoms are listed in below mentioned table no 1:

Table 1: Showing the common symptoms of Vatik Grahani and Irritable Bowel Syndrome

Vatik Grahani ^[9]	Irritable Bowel Syndrome ^[1,2,19-21]
Tashya annam pachyate dukham	Functional dyspepsia
Suktapakam	Fermentation leads to hyperacidity
Kantha ashaya sophā	Gastro esophageal reflux diseases
Parshava ruja	Pain in abdomen flanks
Uru vankshan ruja	Pain in groin and lower limbs
Visuchika	Diarrhoea predominance
Hritpida	Non Cardiac chest pain
Karsyadourvalyam	Weight loss, Fatigue, Weakness
Vairasyam	Distaste of mouth
Parikartika	Pain due to hemorrhoids present in 30% of cases
Manasha sadanam	Psychological disorder associated with disease mainly dysthymia and depression
Jeerne jeeryati cha adhmanam	Distention of abdomen after taking small amount of food & after digestion of food
Vata gulma, Hrida roga Pleeha asanki	Preoccupation with the hypochondriatic ideas for these disease
Chirat dukham	Stool passes with tenasmus
Dravam, Sushkam tanu Amam	Lumpy & hard stool/mushy watery stool
Sabdaphenvata	Excess gas formation
Punah-punaha srajet varcha	Increased frequency of stool

Other symptoms of vatic grahani: The exclusive symptoms of vatic grahani include Kharangata (Roughness of body), Kshuta (increase of hunger), Trishana (Thirst), Karnyo swana (Tinnitus), Grivaruja (Pain in neck), Griddihah sarvarasanam (craving for all kinds of taste), Kas and swas^[9].

Various routes for pathogenesis of vatic grahani

The pathogenesis of vatic grahani may follow three different routes depending upon its etiological factors (nidan). The following three nidan lead to pittadharakala dusti which finally generate vatic grahani are as follows (refer fig. 1):

1. Mithya Aahara, Vihar (swatantra grahani)
2. Aatisar (partantra grahani)^[13]
3. Kam bhaya shok (manshik vikar janya grahani)

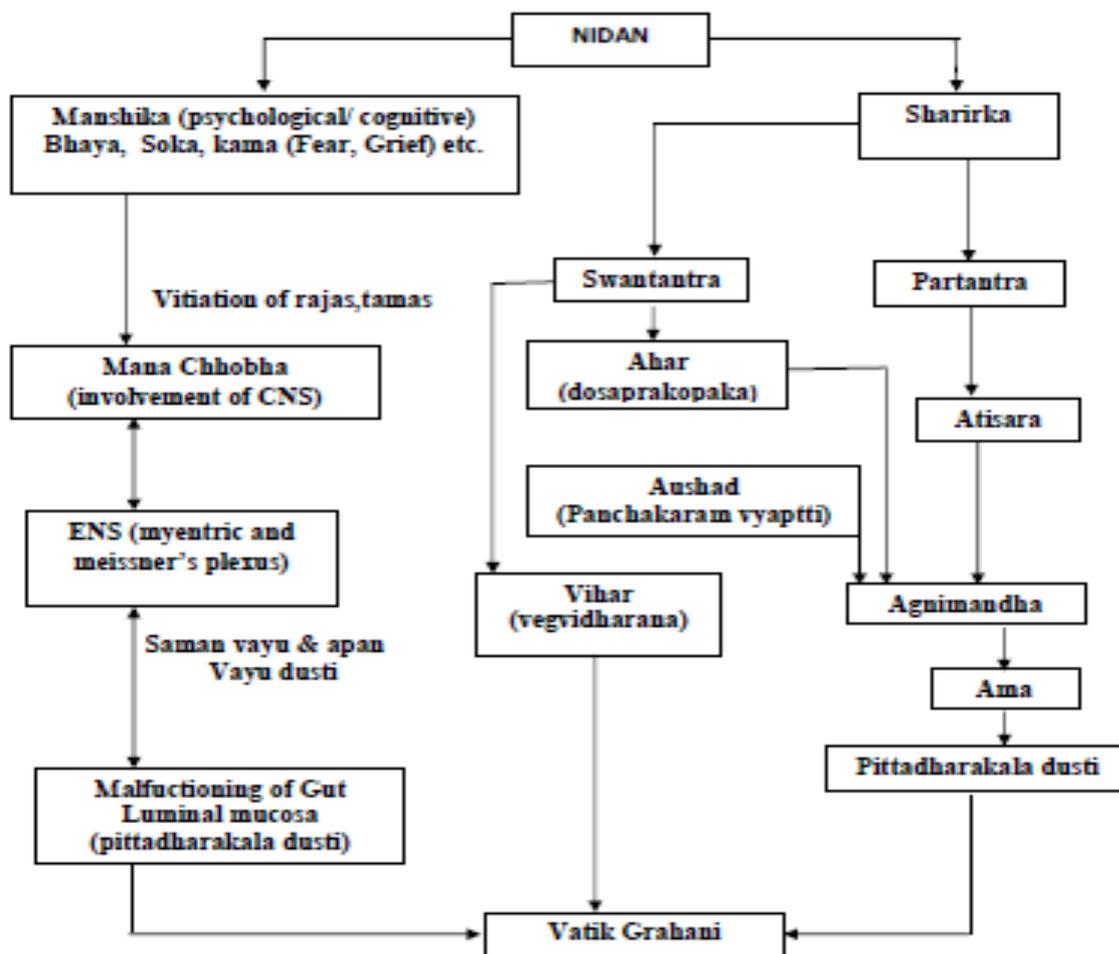


Figure 1: Flow chart indicating pathogenesis of Vatik Grahani vs IBS

Etiopathogenesis of Vatik Grahani Vs IBS

Dosa	:	Tridosha (vata predominant)
Dushya	:	Anna, rasa, purish
Srotas	:	Annavah, purishvah
Shrotodusti	:	Sanga, atipravritti
Samutthaan	:	AmaPakwashyotha
Adhistan	:	Grahani

MANAGEMENT OF VATIK GRAHANI (IBS)

Vatik grahani is psychosomatic disorder therefore its management requires to sustain with the equilibrium of both manshik (psychic) and sharirik (somatic) doshas. Hence the treatments for vatik grahani should be able to maintain the balance of both doshas. The synergistic effects of drugs and therapeutic procedures given to patient shows very excellent and

significant results in the treatment of vatic grahani. The treatments for vatic grahani are given below.

Psychic treatment

The effective patient–provider relationship, education, reassurance, is required to be established for alleviating the fear of patient about the disease^[22]. It should be explained to the patient that this disease is a long lasting one and relapsing in nature. Recurrences will occur depending upon the stressful situations. It also must be explained that this disease will not reduce the life span of the patient in any way. By and large, a caring and reassuring psychological support which aims at identifying stressful precipitating factors is minimum required. The main treatment involves the use of medhya drugs^[23] with/without therapeutic procedures like shirodhara^[24-26].

Somatic treatment

Following principles of treatment are used in the management of vatic grahani roga follows

- Shodhana (mainly by vasti chikitsa^[26-27] and virechan): If ama dosa is hidden or situated in pakvasaya it should be excreted by purgation with deepan (appetizer).
- **Shamana** : If rasa is associated with ama has circulated into the whole body it should be treated by langhan, deepan, pachan, grahi, tridosha shamak measures and medhya drugs

Diet Regime and Lifestyle Management

Following ahara and vihar are generally recommended in literature for the management of vatic grahani.

Pathya Ahara

Pathya ahara should be nutritious, easily digestible and sattvika diet has always been recommended. Over eating and consumption of rajasika-tamasika diet should be avoided. The addition of more fibers to the diet and a reduction in refined carbohydrates is suggested. Although unprocessed bran is considered by some to be laxative, it is in fact a stool-bulking agent. It turns small hard pellet stools into large soft ones which are more easily passed and which move through the intestinal canal at a respectable rate instead of being held up for days in a colon that has lost its tone. Fruit and vegetables are generally rich in fibres but may well act by increasing the bacterial population in the bowel. Vitamin and mineral supplementation can be a useful. Vitamin ‘C’ aids normal bowel function. e.g. apple, grapes, pears, orange, lemon, plum etc^[28]. The other pathya ahara includes Sashti Shali, Jirna Shali, Masoora,

Tuvari, Mudga Yusha, Lajamanda, Vilepi. Changeri, Rambha, Kamalakanda, Jambu, Kapittha, Dadima, Aja or Gavya Dugdha, Dadhi, Takra, Ghrita and Tila taila.

Apathya Ahara: Atishita Jala, Dushta Jala, Guru, Snigdha, Drava, Ati Ruksha, & Saraka substances, Viruddha Bhojana, Rasona, Patra Shaka etc.

Pathya Vihara: Nidra, Vishrama, Activities making mind happy.

Apathya Vihara: Vegavidharana, Chinta, Shoka, Bhaya, Krodha etc.

CONCLUSION

Ayurvedic science is very much concerned about conservation of health and complete eradication of disease. It is not always vital to name a particular disease and not all disease can be given the explicit nomenclature. It is the unbalanced doshas that cause different diseases locating on the site of their aggravation and localization. A physician should try to examine and understand a disease by its symptoms and then go for its management to get better results. Instead of trying to find an exact synonym of IBS, we may attempt to find the most possible correlation so that the doshic involvement in this clinical entity could be done at the level of etiology or etiopathogenesis or at the level of symptomatology. Since most of the vatic grahani symptoms are common to IBS so principles of management of vatic grahani are applied to treat the IBS. Therefore psychological (manshik) and somatic (sharirik) both treatments are needed to be used judiciously in IBS patients. In ayurvedic treatment of IBS, deepan, pachan and vatanuloman drugs with therapeutic procedure like vasti chikitsa relieve the somatic symptoms directly. The medhya drugs with therapeutic procedure like shirodhara subdue the stress and anxiety by calming the patients which regulates the functions of ENS.

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