



ROLE OF PSYCHOLOGICAL FACTORS IN IBD

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ABSTRACT:

Disorders of Gastro intestinal tract are common in the present era. They have increased to such an extent that they now include autoimmune disorders as well. Inflammatory Bowel Disease (IBD) is one such autoimmune disease. It is an idiopathic disease involving an immune response of the body to its own intestinal tract. Influence of psychological factors on IBD causation are stress(*chinta*), depression, anxiety (*udvega*) etc. The stress induces changes in GI function, such as increased intestinal permeability and visceral sensitivity and altered GI gut motility, which could lead to IBD symptoms. In today's fast-moving world, everybody is under a sense of urgency, stress or any other psychological influence. Our *shastra* says food should be consumed at the right time, in the right place, in a proper state of mind. In contrary to this, the dining table has now become a round table conference for discussing all the matters and exuberating the emotions during the intake of food. The way you are feeling when you eat has an impact on how you digest. So psychological factors have become a major cause of IBD. Different ways can be adopted to treat IBD as *Deepana*, *Pachana*, *Shodhana*, and *Rasayana*, following proper *Dinacharya*, *Rutucharya*, and *Sadvrutta*, *Ahara* should be consumed as per *Ahara Vidhi Vidhana*. Population based studies estimate the prevalence of IBD to 42 %. Considering the increasing rate of gastrointestinal disease across the world, the treatment approach through *Ayurveda* is the need of the hour. So in order to remove a disease from its root, the causative factor should be understood and ruled out completely. So in this study, analysis of role of psychological factors in IBD will be done.

Keywords: IBD, Stress, Psychological factors and *Manasika Bhava*.

INTRODUCTION:

Gastrointestinal disorder is any condition that occurs within the gastrointestinal tract which is commonly seen in the present era. Inflammatory bowel disease (IBD), one among the gastrointestinal tract disorders encompasses ulcerative colitis (UC) and Crohn's disease (CD). IBD is characterised by an unpredictable, chronic, relapsing, and remitting inflammation course of the gastrointestinal tract. ¹ IBD has emerged as a

global disease. The prevalence of IBD is known to be high in western countries, but now there are rising incidences and prevalence of the disease in India, which tops the Southeast Asian (SEA) countries.² The effects of IBD on a patient's life may be extensively detrimental due to the variety of severe symptomatology (i.e., frequent, bloody diarrhoea with the urgency of defecation and faecal incontinence, fatigue, abdominal pain, and weight loss), the early onset of the disease (between the ages of 15 and 30), the fluctuating feature of the disease course, and the lack of a cure.³ Stress, depression, and anxiety are three psychological factors that influence IBD causation. The stress induces changes in GI function, such as increased intestinal permeability and visceral sensitivity and altered GI gut motility, which could lead to IBD symptoms. According to *Ayurveda*, a number of *manasika bhavas* (emotions) are the underlying causes of numerous illnesses. Numerous *Manasika Bhavas*, such as desire (*kaama*), anger (*krodha*), greed (*lobha*), delusion (*moha*), jealousy (*irsya*), grief (*shoka*), anxiety (*udvega*), fear (*bhaya*), etc., disrupt the homeostasis of the body and mind by vitiating *Manasika dosha*, *Sharirika dosha*, and *Agni*.

METHODOLOGY:

Data will be collected from the *brihatrayee*, *laghutrayee* and other *Ayurvedic* classics, different contemporary modern books, research articles, relevant journals, periodicals, magazines and other digital media, internet, studies conducted on related works and other sources. The role of psychological factors on the IBD will be analysed.

REVIEW OF LITERATURE:

➤ **Inflammatory Bowel Disease (IBD)**

The inflammatory bowel disease (IBD) is an idiopathic disease involving an immune reaction of the body to its own intestinal tract. IBD has 2 major disorder which includes 1. Crohn's disease and 2. Ulcerative colitis.

1. Crohn's disease is a chronic inflammatory disease of the intestines. It primarily causes ulcerations of the small and large intestines, but can affect the digestive system anywhere from the mouth to the anus.

Signs and symptoms:

- Diarrhea
 - Constipation
 - Pain in the abdomen
 - Bloating after eating
 - Pain or bleeding with bowel movement
2. Ulcerative colitis is a chronic disease of the large intestine, also known as the colon, in which the lining of the colon becomes inflamed and develops tiny open sores or ulcers that produce pus and mucous.

Signs and symptoms:

- Abdominal discomfort or cramps
- Diarrhea
- Tenesmus⁴
- Rectal bleeding
- Passage of mucus

➤ **IBD and its understanding in Ayurveda.**

In *Ayurveda*, symptoms of IBD can be seen in *Grahani*, *pittaja atisara*, *rakta atisara*, *bhayaja atisara* and *shokaja atisara*.

According to *Ayurveda*, Crohn's disease can be compared to *Grahani* disease. In *Ayurveda*, "*grahani*" is actually an anatomical term to describe the small intestines (specifically the duodenum, ileum, and jejunum). Any vitiation or inflammation to this particular part caused by imbalanced doshas (*Vata*, *Pitta*, and *Kapha*) can cause a wide variety of symptoms similar to those of Crohn's disease. Like *muhur baddham* and *muhur dravam*, which means that stool is sometimes hard and sometimes liquid.⁵ "*atisrustam vibaddham va dravam*" means the stool is frequent, constipated, and liquid.⁶

Clinically, *Pittaja grahani* is characterised by watery stools, which is similar to Crohn's disease.⁷

• **Signs and symptoms of ulcerative colitis:**

In *Pittatisara*, the patient passes stool that is yellow, green, blue, or black, which is associated with *Raktapitta* and foul smell (*durgandha*). At the same time, the patient experience general symptoms such as thirst, burning sensation, sweating, fainting, abdominal pain, inflammation (*bradhna*), and suppuration (*paaka*) in the anus.⁸ While in *Raktatisara*, loose stool with blood along with thirst, pain, burning sensations in the abdomen, and inflammation in the anorectal region (*gudapaka*).⁹ The patients of *pittatisara* passes warm faeces with a foul smell and resemblance to mutton wash water (bright red in color). The patient is thirsty, fainting and burning sensation, fever and inflammation in the anorectal region (*gudapaka*).¹⁰ The patient of *Pittatisara* passes yellow, black, yellow or greenish faecal matter mixed with blood with a foul smell, associated with thirst, fainting, perspiration and burning sensation.¹¹ If the patient of *pittatisara* continuously consumes *Pitta* aggravating factors or food articles then subject will develop *Rakttatisara* (loose stool with blood) with symptoms of thirst and fever.¹² *Shokaja* or *Bhayaja Atisara* along with *Rakta* (blood), *Rakta* resembles *Kakananti* (*Gunja - Abrus precatorius*) in colour (bright red) either mixed with stool or without stool with foul smell or without smell and Faeces is eliminated with difficulty.

Table 1: Comparison of signs and symptoms of Ulcerative colitis with *Pittatisara*, *Raktatisara* and *Bayaja* or *Shokaja atisara*.

Signs and Symptoms of ulcerative colitis	<i>Pittatisara</i>	<i>Raktatisara</i>	<i>Shokaja or Bhayaja atisara</i>
1. Increased frequency of stool	++	++	
2. Blood with feces	+	++	+
3. Mucous discharge	-	+	
4. Urgency and tenesmus	+	+	
5. Loose consistency of stool	++	++	
6. Abdominal pain	+	+	+
7. Involvement of rectal mucosa	+	+	

➤ **PSYCHOLOGICAL FACTORS (MANASIKA BHAVA) IN IBD:**

Both depression and anxiety have been identified as significant experiences in inflammatory bowel disease (IBD).¹³ Stress has been shown to interfere with the digestive system's normal functions. The large intestine is particularly sensitive to stress, which tends to slow or even stop its activity and it is a major cause of constipation.¹⁴ This causes increased production of pro-inflammatory mediators, which will lead to inflammation of the mucosal layer. A variety of epithelial defects have been described in Crohn's disease and ulcerative colitis.

● **Psychological Involvement in IBD**

The mentality has a significant impact on IBD. The awareness of colon spasms is increased by stress and worry. Stress has an impact on the immune system, which may cause IBD. The ENS, ANS and CNS regulate the neural system of the GIT. The ENS controls blood flow in addition to motility, fluid exchange and fluid secretion. The vagal and sacral plexuses regulate parasympathetic nerve activity. This encourages sphincter relaxation and the sympathetic nervous system keeps sphincters contracting. The gut microbiota, according to gut-brain psychology is an essential component of the gut brain and communicates with the brain via the microbiota-gut-brain axis. Gut microbes are engaged in a number of normal mental occurrences and processes, they play a role in the pathogenesis of many neurological and psychiatric illnesses. The microbiota in the gut begin to disappear as a result of various stress factors, poor diet, and regimen, resulting in a variety of diseases, including IBD¹⁵.

● **MANASIKA BHAVA IN IBD**

Rajas and Tamas are the *Manasika doshas*. Disorders brought about by *Rajas* and *Tamas* are *kama*, *krodha*, *lobha*, *moha*, *irshya*, *mana*, *mada*, *shoka*, *chitta*, *udvega*, *bhaya* and *harsha*.¹⁶ There is no direct reference to *Manasika Nidana* in *Grahani Roga*. But in *Vimana Sthana Adhyaya*, poor digestion occurs due to increased emotional factors, like, *Krodha Lobha Irshya Shoka... Upatapta Manasa*, *Upatapta Manasa*(stress) leads to *Agnidusti* (*Mandagni*, *Vishamagni*, or *Tikshnagni*, collectively called *Grahani Dosha*), which leads to changes in bowel habits and abdominal pain.¹⁷ In the state of *chinta*, *krodha*, *bhaya*, *shoka*, *dukkha* and *shayyaprajagare*, the modest meal will not undergo the proper digestion even if the person is having *samaagni*.¹⁸ *Pittatisara* is brought on by an excessive consumption of sour, salty, pungent, alkaline, hot, and irritating foods, excessive intake of food as well as continuous exposure to the sun, fire, and hot wind and psychological factors of stress, anger.¹⁹ Continuous intake of *pitta* vitiating food by a *Pittatisara* patient leads

to *Raktatisara*.²⁰ Similarly *Acharya Charaka*, *Acharya Sushruta* also stated same.²¹ *Shoka* and *Bhaya* are the causative factors for the *shokaja* and *bhayaja atisara*.²² When *manas* is affected by *bhaya* and *shoka*, *vayu* and *pitta* liquify *mala* and expel it, resulting in *atisara*.²³

Management

The *Ayurvedic* approach to the management of diseases includes both preventive and curative aspects. Preventive aspects consist of *Dinacharya*, *Ritucharya*, *Sadvritta Palana*, and *Acharya Rasayana*. These practises have a positive influence on physical and mental health. Some social behaviour and conduct will have all of the qualities mentioned in *Acharya Rasayana* (rejuvenating regimens) therapy.²⁴ Curative aspects include *Daivavyapasraya chikitsa*, *Yuktivyapasraya chikitsa* and *Satvavajaya*.

DISCUSSION:

In present era, due to change in lifestyle, mankind are giving least importance to their diet and dietary rules. If Ayurvedic dietary guidelines are followed, many diseases can be prevented arising merely due to faulty dietary habits and maintain *Swastha* status of *Shareera* and *Manas*.

1. **Relation between manas and shareera:** *Sharirika* and *manasika doshas* are always inter related to each other. If one is affected the other is also affected. And one is *Adhara* and the other is *Adheya*, hence one can influence the other. Thus it is clear that somatic disorders have a Psychological backup. Due to *nidana sevena*- vitiates *vatadi shareerika dosha* and *Raja tama Manasa dosha*- takes *ashraya*(located) in *Hrudaya*(heart) and *Mastishka*(brain)- vitiates *Manovahasrotas*- produce *Manovyadhi*(mental diseases), if vitiates *rasavaha srotas* produce *shareeravyadhi* (physical diseases).
2. **Manasika bhava and agni:** persons consume food in the effect of *manasika bhavas* for long duration the *manasika bhavas* leads to vitiation of *manasika dosha* which in turn vitiates the *sharirika dosha* (*kama*, *shoka*, *bhaya* vitiates *vata dosha*; *krodha* vitiates *pitta dosha*). This process continues for longer period leads to *agnimandhya*(diminished *agni*). *Hrudaya*(heart) is the location of *manas*, due to the *manasika dosha* *hrudaya* get affected. As *hrudaya* is *moolasthan* of *rasavaha srotas* also, if there is *hrudhaya dusti* it may lead to improper formation of *rasa*. When the genesis of *rasa* gets hampered invariably *ama* is formed.
3. **Manasika bhava in IBD:** *Manasika hetu* (psychological factors) causes the vitiation of *Dosha* and *Agni* which causes *Agnimandya* (loss of digestive fire) and that leads to *Avipaka* (improper digestion) and in this stage even light diet cannot be digested. It remains as it is in *Amashaya* and produces *Shuktatva* (fermented/acetonus), which leads to formation of *Ama* (*Annavisha*-toxins). This *Annavisha* produces *Ajirna* (indigestion). Hence, once *Agni Dushti* occurs it results in *Avipaka*, *Ajirna* and this further damages the *Agni*. *Agnidushti* causes *Shuktapaka* of food, it further disturbs the *Agni*. Thus, *Amavisha* disturbs the *Grahani* and *Atisara*.
4. *Grahani* basically caused by the *Durbalagni* (diminished *Agni*) leads to *Rasa kshaya* i.e. reduced circulating nutrition place in *shareera*(body) there will be *Uttarottara dhatu kshaya* (progressive or subsequent *dhatu* decreased) i.e. *Rakta*, *Mamsa*...because adequate nutrition is required for normal metabolic functions. In *Grahaniroga* due to the impaired *agni* the food which has been consumed by the individual will not get

digested properly. It remains as it is in *Amashaya* and produces fermented, which leads to formation of *Ama / Annavisha*(toxins). It disturbs the *grahani* causes the *grahani roga*.

5. Due to excessive intake of causative factors like *shoka*, *bhaya* and *krodha* leads to the *vata* and *pitta dosha* vitiation leads to the *Agnimandhya*, due to its *drava*(fluidity) properties *purishavaha* and *udakavaha srotodusti* occurs. Further leads to breaks the stool due to its hotness, fluidity and laxatives properties leads to *pittatisara*. Further excessive intake of *pitta* vitiating food and drinks causes the vitiation of *rakta dhatu* leads to *raktatisara* (loose stool with blood), *bhayaja* and *shokaja atisara*.

TREATMENT

Mani Dharana and *mantra* chanting are both a part of the treatment known as *Daivavyapasraya Chikitsa*. There was significant limbic deactivation and brain region deactivation during "OM" chanting.²⁵ These treatments frequently lower stress levels, boost self-esteem, and promote mental health.²⁶

The *manasika bhava* like *krodha* aggravates the *pitta dosha*. *Krodha* via *teekshna* and *ushna* vitiates the *pitta dosha*. For that we will treat with *sheetala upacharas*, which are opposite in *gunas*.

The underlying cause of this illness is *angimandya*. It is important to first identify the signs of *Ama* and *Pakva avastha* in *grahani* and *Atisara*. This is first line of defence. The fundamental idea to keep in mind is whether the *Grahani* or *Atisara* is *ama* (undigested) or *pakvavastha* (digested). In case of *Amavasta Langhana* (fasting) is recommended followed by *yavagu pana* with *Deepana* and *Pachana* medications like *Shunti*, *Chitraka* etc.

There are five methods in *Satwawajaya Chikitsa*: *Jnana*, *Vijnana*, *Dhairya*, *Smriti*, and *Samadhi*. *Jnana Chikitsa* is assisting the patient in discovering his own awareness. One's thoughts, feelings, beliefs, and experiences with regard to oneself are covered in this issue. These activities will lead to higher levels of accountability, behaviour control, and emotional growth.

Vignana provides *Shastrajnana*, which provides direction, in order to better understanding of the nature of illness and create coping mechanisms. Here, patients can learn about potential emergencies, their effects, and risk factors. *Dhairya Chikitsa* upholds mental equilibrium. In this method, the patient's confidence is increased and any unfavourable beliefs is identified. Interpersonal interactions so get better, and coping abilities get better. The hidden tensions that were the primary initiator of an emotional illness are understood and explained through *Smriti Chikitsa*. *Samadhi* is attained through meditation when the mind is in control. Practice of *samadhi* helps to manage deeper mental thoughts that are the root of illness.

CONCLUSION:

The abdomen is the sounding board of the emotion and more than any other system reflects disturbances in the emotional sphere. Hence it is that from mouth to anus occur a variety of symptoms included within the digestion, "functional disorders of the gastrointestinal tract". Hence, it can be concluded that *Grahani Roga and atisara* as a psychosomatic disease, since stress factor have a role in its pathophysiology. As Psychology also plays a great role in maintaining the health of a person. An abnormal psychology of a person in terms

of anxiety, anger, greediness, etc. would affect the physiology of the digestion, by that; they are disturbing the homeostasis, which interns *Grahani*. In contemporary science only symptomatic treatment & assurance is given to the patient. Since *Ayurveda* treats the *Rogi* as a whole entity the mental state of a person is taken into consider before treatment.

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