

### **Review Article**

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# Understanding of various Colitis in terms of Ayurveda

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### ABSTRACT

With gradual progress of medical science and its implementation, many infectious diseases are controlled, but at the same time with gradual switch over to modern life style and diet pattern human being is gifted with so many life style oriented and psycho somatic disorders. Ulcerative Colitis is one among those diseases, here no specific etio-pathological factors of the disease has been established still the role of psyche is accepted for manifestation or aggravation of the disease. On the basis of the presentation and pathogenesis; the disease can be correlated with disease *Atisaara/Pravaahika* narrated in *Ayurveda*. Gastro intestinal tract involvement is always there, in IBS, but role of psychological factor is also considered equally since ever. In *Ayurveda* for the disease *Atisaara/Pravaahika*, role of *Mana* as etiological factor and the whole *Samprapti* formation is elaborated.

Keywords: Pravahika, Colitis, Agni, Mana.

### INTRODUCTION

In one hand, with the gradual progress of medical science, so many infectious diseases are become possible to control; while in other hand with modernization of life style and diet pattern, fast and competitive life & *No Time Syndrome* are inevitable gifts of the era, which cause stress to every one, and this situation has become red carpet for many life style and psychosomatic diseases.

Stress generated due to tough competition, perfection and over ambitions develop some unwanted emotions like *Krodha*, *Udvega*, *Irshya*, *Moha*, *Shoka*, *Lobha* etc. to the person, and this lead to some alteration at psycho-neurological or hormonal level in the body which make a sort of physiological changes and finally leads to develop one or another life style or psycho somatic disorders like, Diabetes, HT, Heart disease, acid-peptic disorders, Gut related disease like IBS, various type of colitis especially inflammatory Bowel Diseases (IBD) etc. Incidence of IBD is increasing day by day especially in higher socioeconomic groups.

In regions with a high prevalence of IBD, it is estimated that developed countries like America about 1 million individuals have IBD<sup>1</sup> with about 30,000 new cases reported each year. The disease tends to occur in higher socioeconomic groups and in white-collar compared with blue-collar occupations <sup>[1]</sup>.

It is known that the disease is considered among psychosomatic diseases. Basically, it deals with inflammation of large intestine. Passage of stool frequently with mucus, having strain and abdominal discomfort are the chief symptoms. There are various types of colitis but among those only Auto immune types of colitis especially Ulcerative colitis comes under actual inflammatory bowel diseases, which is distinguished from IBD of established origin such as viral, bacterial and parasitic infections, diverticulitis, radiation colitis, drug or toxin induced enterocolitis and vasculitis of intestinal tract. These all mimic clinical presentation like colitis.

**Colitis:** Basically, the term refers to inflammation of colon commonly known as muco-colitis or colon spasm. Persistent abdominal pain, nagging or burning character and may be most marked after a bowel evacuation. There are attack of obstinate constipation during which the stools may be hard, scybalous and ribbon like, alternating with attack of diarrhea, bought on by nervous causes (Resembles to symptoms of *Bhayaj Atisara*) or by slight dietetic errors. During the attack of diarrhea mucus may be passed in masses but not blood. This is primary a nervous disorder and attacks are caused by over work and worry <sup>[2]</sup>.

**Ulcerative colitis:** It is an inflammatory disease limited to the colon and affecting only mucosa and sub mucosa which begins within the rectum and extends to a variable proximal level <sup>[3]</sup>. It has been described as a clinical entity for over 100 years. Prevalence of the disease is global in distribution. The incidence is

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Assistant Professor, Departemnt of Roga Nidana & Vikruti Vijnana, I.P.G.T. & R.A., G.A.U., Jamnagar, Gujarat-361008, India *Email:* darshnapandya[at]rediffmail.com, darshnapandya73[at]gmail.com about 4 to 12 per 100000 populations and the incidence of the condition had risen in recent decades. (Might be due to increased stressful life) **Etiology of the disease is yet to clear.** As such IBD is currently considered as an inappropriate response to either the endogenous microbial flora within the intestine with or without some component of auto immunity. However, no immunologic alterations specific for IBD have yet been found.<sup>[4]</sup>

**Psychological factors** can contribute to worsen the symptoms. Major life illnesses such as death in the family, divorce, interpersonal conflict or other major loss are associated with an increase in IBD symptoms. The same kind of factors Maharshi Sushruta has narrated as causative factor for *Shokaj Atisaara* (diarrhea develops due to psychological trauma). <sup>[5]</sup> Acute daily stress can worsen bowel symptoms even after controlling for major life events. IBD patients have been hypothesized to have a characteristic personality that renders them susceptible to emotional stress.

### **Common features:**

The symptoms of Ulcerative colitis depend upon the extent and severity of inflammation. Patient with proctitis have rectal bleeding (as mentioned by *Shushruta*)<sup>[6]</sup>, tenesmus (resembles to symptom of Pravahika) <sup>[7]</sup> and the passage of muco-pus (resembles to one of symptom of Pravahika). The consistency of stool is variable, many patients with proctitis are constipated, the greater the extent of colon involved the more likely the patient is to suffer from diarrhea. Abdominal cramping is common. As the severity of inflammation increase, the patient is more likely to suffer from systemic symptoms like low grade fever, malaise, sign of dehydration, tachycardia, etc.<sup>[8]</sup> (similar to symptoms of *Pittaj* Atisara).

These above mentioned symptoms of IBD are very much similar with sapravahana, sashleshma- sarakta malapravriti, udara shula, aadhmaana, along with systemic symptoms like daurbalya, sushka mukha, pain in various joints etc. symptoms of Atisara / Pravaahika, narrated in Ayurvedic classics. So etiology and pathogenesis of IBD and allied diseases can be understood on the basis of Samprapti of Atisara and Pravahika. Inflammation of colon and development of ulcer is always there in pathogenesis of IBD.

On the basis of organ involvement, disease presentation, causative factors and disease pattern the disease colitis and especially ulcerative colitis can be correlated with Bayaj and/or Sokaj Atisara, Raktaj Atisara, Raktaj Pravahika etc. narrated in Ayurveda. So if the disease is to be interpreted in Ayurvedic parlance; its pathogenesis may be understood on the basis of pathogenesis of Atisara and pravahika. With this consideration author has tried to explain pathogenesis (samprapti) of Atisara & Pravahika.

There is no separate chapter given for disease *Pravaahika* in any of three prime texts of *Ayurveda*. Symptoms of *Atisaara* cause by Vayu / Kapha pre dominance are more resembles with the symptoms of *Pravaahika*. As well as line of treatment of both the condition is also same. <sup>[9]</sup>

If one go through some what detail regarding this description, it seems clear that in Ayurvedic classics there are only two separate chapters described regarding increased frequency of defecation, (i) *Grahani* and (ii) *Atisaara*. On the basis of those it can be understood that the conditions related to small intestine abnormality and leads to increased frequency of defecation are described under the pathogenesis of *Grahani*, while the conditions related to large intestine pathogenesis and leads to increased frequency of defecation are considered under the title of *Atisaara*. Here in *Atisaara* and *Pravaahika* the organ involvement is of large intestine only, and this may be the probable reason that why in *Bihattray* disease *Pravaahika* is integrated under the chapter of *Atisaara* and not given separately.

Due to having similarity in majority symptoms and treatment, pathogenesis of *Atisaara* can also be adopted for *Pravaahika* with little changes.

For all the disease of Gastro intestinal tract vitiation of *Prana – Samana – Apana Vaayu, Pachaka Pitta* and / or *Kledaka Kapha* will be there, and those play major role to hamper the function of *Agni*. While narrating basic pathogenesis of *Atisaara*, main two things has been pointed out, i.e. impairment of *Agni* and disturbed status of Psyche.<sup>[10]</sup> Means role of psyche is given due importance in the disease pathogenesis of digestive system. Same way involvement of psyche in Gut related disease; especially IBD & IBS has been accepted. As per nature the disease Atisara is narrated as acute disease, <sup>[11]</sup> and so it should be treated carefully. Again being as psychosomatic in origin *Shokatisara* is difficult to treat <sup>[12]</sup> same way disease ulcerative colitis also runs in long course, frequent remission and relapse occurs and leads to develop critical condition for the patient. If it develops in acute condition can be fatal for the patient.

### Role of Ama in the disease development:

It is known that in initial stage all diseases are in *Saama* stage. Impaired *Agni* and disturbed psyche both leads to production of *Ama*. <sup>[13]</sup> Production of *Ama* is of two type;

- 1] Acute
- 2] Chronic.

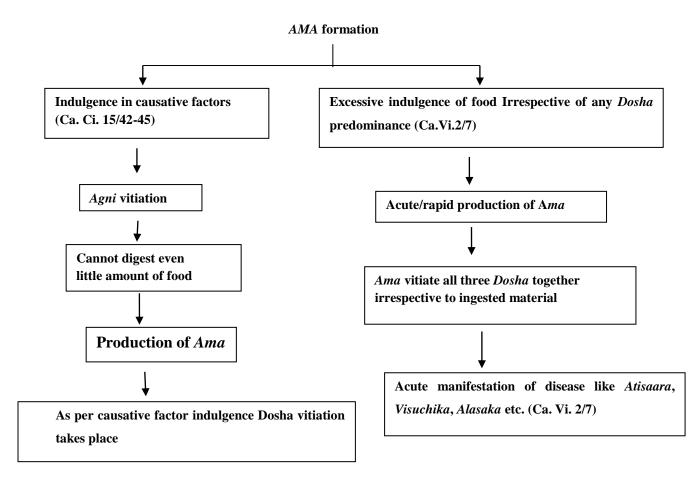
In acute condition where *Nidana Sevana* are very strong, (may be somatic, may be psychic) directly lead to provocation of *Ama*, which is is potential enough to provoke all three *Dosha* at a time and develops various diseases <sup>[14]</sup> and in this kind of pathogenesis the role of *Agni* come later than *Ama*. The matter can be understood clearly by given flow chart.

### Pathogenesis:

For the manifestation of disease *Atisara* and *Pravahika;* the role of impaired *Agni* and impaired *Mana* has been clearly accepted in *Ayurvedic* classics. Detail pathogenesis of disease *Pravaahika* can be understood as mentioned below. (Figure 1).

#### Dosha:

- The seat of Samana Vaayu is near to Agni and its place of movement is Ama-Pakwashaya, as well as if it provokes, is able to produces Atisaara. <sup>[15]</sup> Along with Praana and Apaana Vaayu; Samaana Vaayu maintains Agni status. <sup>[16]</sup> So taking in to consideration this statement vitiation of Praana Vaayu should also be considered with Apaana and Samaana Vaayu. Here Vaayu provokes by its Ruksha and Chala property.
- *Kledaka Kapha* provocation and its accumulation in large intestine should also be considered Here keeping in view the function, mucosal layer of large intestine may be considered as *Kledaka Kapha*. If excessive *Guru* and *Pichchhila* property food is taken then it will impair *Agni* and increase *Kleda* in large intestine. Again commentator *Vijaya Rakshita* has clarified it further that, here accumulation of *Kapha* is just symbolic, *Pitta* or *Rakta* can also be accumulated in place of *Kapha* and it can directly leads to vitiation of *Pitta* and *Rakta* too.<sup>[17]</sup>



**Dushya** involvement: vitiation of *Apa Dhaatu* (watery substance) is accepted, further more in acute condition of the disease, symptoms of *Rasa Kshaya* are also found; so *Jala* and *Rasa* should be considered as *Dushya*. Furthermore, as a part of progress of the disease when excessive mucus loss happens and chief Dosha of the disease *Vaayu* takes place in *Rakta Dhatu* of large intestine and creates ulcers <sup>[18]</sup> there, then symptoms like blood with stool, severe pain etc. found in the patients. So in this condition involvement of *Rakta* Dhatu should be considered.

### Involvement of Srotas:

- Taking in to consideration symptoms of the disease like defecation with strain, mucus passage along with feces etc. involvement of *Purishavaha Srotas* must be considered.
- Same way involvement of *Annavaha Srotas* is obvious. Further, vitiation of Watery contents, *Rasa* and *Rakta Dhatu* is considered, concerned *Srotas* must be included.

# Involvement of Agni:

Due to indulgence of *Dosha* specific *Nidana*, impairment of *Agni* occurs and it leads to expulsion of watery stool. <sup>[19]</sup> While in other condition, without indulgence of specific *Dosha* etiological factors; direct *Ama* production and symptoms manifestation happens and acute conditions are developed, <sup>[20]</sup> in both the condition *Agni* involvements is there.

### Factors those influence Agni status:

There are many factors those influence status of *Agni* in the body, but in nut shell it can be summaries as below:

- 1. Improper quality, quantity or time for taking food. [20]
- 2. Suppression of natural urges. [21]

3. Involvement of psychological factors like anger, grief, etc. <sup>[22]</sup>

### Role of psyche to disturb status of Agni

- In spite of following rest of all customs for taking food, if person's mind is affected with any of unwanted/ negative emotions like tension, anger, fear, grief etc., in this situation even quality food or proper amount food will not be digested and Ama formation will take place at the level of *Jatharagni* or *Dhaatvagni*, is said as root cause of all most all kind of endogenous diseases. <sup>[23]</sup>
- In Ayurvedic classics psychological factors are mentioned as etiological factors in almost all the diseases including Atisara and Grahani. More over further specification is, over indulgence in sex, grief and fear provoke Vaayu while anger provokes Pitta.<sup>[24]</sup> This Dosha annoyance may disparate Agni directly or indirectly.

Keeping in view present era life style it is obvious that no one can prevent himself completely from above mentioned factors and so Agni vitiation is also obvious.

# Role of psyche to increase defecation:

Every Acharya have directly or indirectly accepted role of psychological factors to increase defecation. Acharya Charak has paid equal weightage to Psyche in the development of *Atisaara* pathogenesis as much he paid to Agni<sup>[25]</sup> and again described *Bhayaja Atisara* (diarrhea due to fear) as separate type of *Atisaara*. Means altered status of psyche can cause development or aggravation of the disease. Further Acharya Sushruta while describing pathogenesis of *Shokaja Atisara* (diarrhea due to psychological trauma) he narrated that sudden and excessive emotional shock directly irritates blood along with Watery content of body and both the things come out with or without feces. This condition is very much difficult to treat <sup>[26]</sup> as psychological involvement is more than somatic cause. Again Maharshi Vagbhatt has elaborated pathogenesis of psychogenic diarrhea (*Bhayaja Atisara*) as

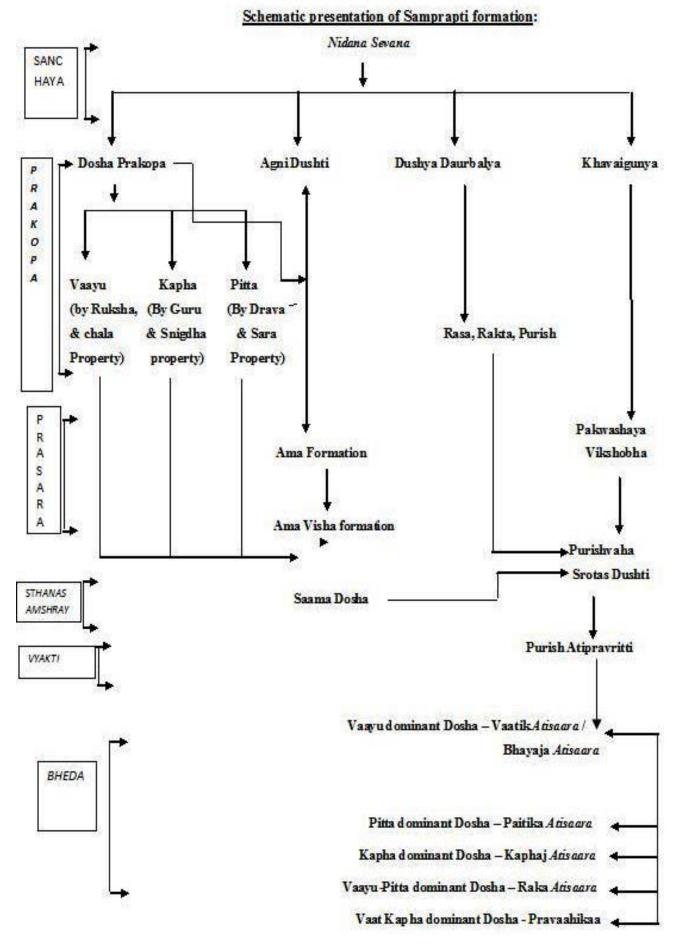


Figure 1: Schemantic presentation of Samrapti formation

very clearly that due to excessive impulsion of negative emotions like fear or stress direct annoyance takes place in person's mind, it increases Vayu get mixed with Pitta, dilutes the feces, and makes excessive and watery expulsion of feces repeatedly. <sup>[27]</sup> The same pathogenesis takes place in diarrhea occurs due to stress or grief. This immediate reaction occurs due to acuteness of *Vayu*.<sup>[28]</sup> Above both the conditions indicate direct involvement of Autonomous Nervous System in this pathogenesis.

If one goes through Vagus N. distribution to GIT, it is very clear that cranial parasympathetic is transmitted almost entirely through vagus nerve. Sigmoid, rectum and anal region of the large intestine are better supplied with parasympathetic fibers. This fiber function especially to execute the defecation reflexes. Increased unwanted emotions especially grief, shock etc. causes excessive stimulation of parasympathetic Nerve, lead to greatly excites motility and secretion of water in large quantity along with electrolytes in addition to normal viscid solution of alkaline mucus. This acts to cause rapid movement of the feces toward the anus and result in Diarrhoea.<sup>[29]</sup> Stress increases colon permeability; susceptibility to reactivation by stress required CD4<sup>+</sup> lymphocytes, in that way stress reactivated experimental colitis by facilitating entry of luminal contents that activate previously sensitized CD4 cells in the colon.<sup>[30]</sup> Short term moderate stress can enhance the response of the colon to chemically induced inflammation. In this way chronic stress can fundamentally change the responsiveness and output to the periphery of the central stress circuits. [31]

#### CONCLUSION

Inflammatory Bowel disease can be correlated with the disease *Atisaara* and */Pravaahika* so causative factors as well as the line of treatment can also be planned accordingly. The disease manifestation occurs in two different manner i.e. acute and chronicas well as on the Dosha pre-dominance i.e. Vaayu dominant (more tenesmus & less mucus) and Kapha dominant (more mucus with mild tenesmus). If Pitta involvement is in initial stage than blood with defecation will be there from very beginning; other wise when Vaayu enters in Rakta dhaatu and creates wound locally then bloody diarrhea will be there. Altered status of psyche plays an important role in development and in aggravation of the disease.

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