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Review Article

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# CLINICAL AND DIAGNOSTIC INTERPRETATION OF TYPES OF ATISAAR W.S.R. TO DIARRHOEA

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#### **ABSTRACT**

Atisaar in modern science closely corelated with watery diarrhoea. Ayurveda describes atisaar which means ATI (excessive) and SARANAM (flow) i.e watery stool passes in excessive volume and frequency both. According to mythology Atisaar was initially originated due to eating of cow and bull's meat. Due to Guru and ushna guna diet like COW and Bulls meat there occurs agnidushti. Some mansika Doshas like Bhaya, Shoka are develop Atisaar. Krimi is an important causative factor of Atisar. In Ayurvedic science main cause of Atisaar is agnidushti. Main site of agni is Grahani. It is situated in between amashaya and pakwashaya. In the condition of mandagni digestion of food particle not occurs completely. This leads to formation of Ama. Ama is considered like toxins or pathogens which is responsible for etiology of all diseases. As In samyawashtha of Apana Vata is responsible for defecation, micturition, and nishkramana

of Shukra and *Artva*. so consumption of *Ama* leads Nidan thus *Vata* gets vitiated due to the Mala function of *Saman -Apan vata* which resulted *manda jathar agni*, *koshtha shunyata* overall increases *dravata* of stool in *pakwashay* and causes *Atisaar*. *Atisaar* involve vitiation *strotasa* such as, *annavah*, *udakvaha*, *malavaha*. In the case of *Atisaar* (Diarrhoea) the proper diagnosis is very important because, Diarrhoea is the very burning problem worldwide. And actual diagnosis is the key of actual treatment or management. There are two criteria to make out clearcut diagnosis – 1. Clinical 2. Laboratorial. This paper will explain above diagnostic review.

**KEYWORDS**: *Ayurveda*, *Atisara*, Diarrhoea, *Agnidushti*.

#### INTRODUCTION

Diarrhoea is a very common disorder. Dietary habits, stomach infections and unhygienic conditions are major causes of diarrhoea. *Ayurveda* described diarrhoea as *Atisaar* which means Ati (Excess) and SARANAM(flow), condition where watery stools passed in excess with high speed. The general symptoms involve dryness of mouth, discolouration of body, uneasiness, disturbed functioning of *vayu*, and dehydration, etc. It can be Acute or Chronic. Diarrhoea is the very burning problem especially in developing countries. If it affects millions of children and amongst people worldwide. *Ama* and *vata* are the major pathological factors of diarrhoea. As per ayurveda consumption of *Ama* leads Nidan thus *Vata* gets vitiated due to the Mala function of *Saman -Apan vata* which resulted into *manda jathar agni koshtha shunyata* overall increases *dravata* of stool in *pakwashay* and causes *Atisaar*. *Atisaar* involve vitiation *strotasa* such as, *annavah*, *udakvaha*, *malavaha*, this article described detailed perspective of ayurveda towards Diarrhoea. As Ayurveda is ancient science and described detailed About Nidan (Causes) of Atisaar(Diarrhoea), Samprapti(Pathogensis) of Atisaar which is most important for appropriate diagnosis and appropriate treatment. So Article shows Ayurvedic Approach towards Diarrhoea.

# Nidan (In ayurveda)

गुर्वतिरिनम्धरक्षोष्ण द्रवस्थूतातिशीतलैः ।विरुद्धाध्यशनाजीर्णैरसात्मैश्चापि भोजनैः ॥ स्नेहाद्येरितयुक्तेश्च मिश्यायुक्तेर्विषाद्भयात्। शोकादुष्टाम्बुमद्यातिपानात् सात्म्यर्तुपर्ययात्। जतातिरमणैर्वैगविद्यातैः कमिद्रोषतः ।नणां भवत्यतीसारो लक्षणं तस्य वक्ष्यते ॥ (स.उ.४०/३-४)

# Aharaj Nidan

Diarrhoea is caused by heavy, excessively fatty, Rough, hot, liquid, and solid excessively cold, intake of incompatible food items, eating when previous food is not digested, improperly cooked and unsuitable food, excessive and faulty use of unction etc poison, excessive drinking of water and defective wine.

#### Viharaj nidan

Jalatiraman(excessive sporting in water) vegvighat(suppression of urges and infestation of helminths), Rutu astyam viparyayat (contrariety of suitability and seasons).

#### Mansik nidan

Shok(sorrow), bhay(fear)

# Agantuj nidan

*Krimi doshat*(pathogens), *shok*(sorrow), *bhay*(fear).

#### **CAUSES**

#### IN MODERN

# A] Watery diarrhoea causative factors

**1. INFECTIOUS** -Enterotoxigenic Escherichia coli (ETEC), Enteropathogenic Escherichia coli (EPEC), Staphylococcus aureus, Vibrio cholerae, Clostridium perfringens, Rotavirus, Adenovirus.<sup>[2]</sup>

#### 2. NON INFECTIOUS

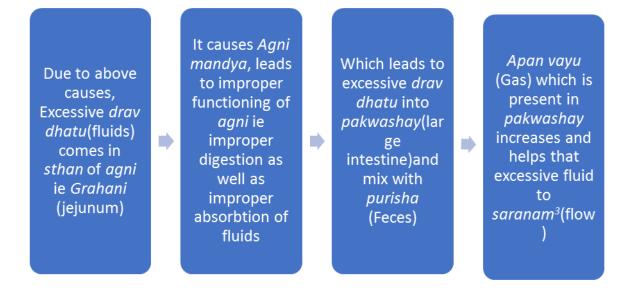
Food intolerance, Drugs, Inflammatory bowel disease, Thyroid disease.

In ayurveda causes are very specific than modern, because in *ayurveda nidanparivarjan* is first step in treating disease. which means avoid known causing factors, so to prevent disease and to stop recurrence of it.

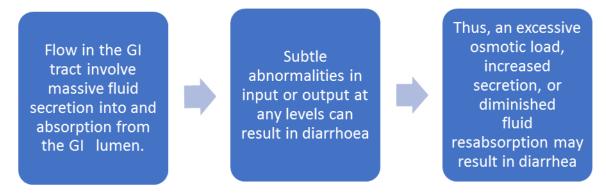
Modern science has mentioned number of causative organism for diarrhoea like bacteria, virus, parasite. All of There can be correlated to Krimi described in Ayurveda. Further ayurveda has mentioned Kleda as one of the cause of krimi "*kledat sanjayate krimi*". Kleda produces Krimi. which also play major role in Atisaar. Thus, ayurveda proves its more clarified aspect regarding the causes manifesting the disease

#### **PATHOPHYSIOLOGY**

# Samprapti-In Ayurveda



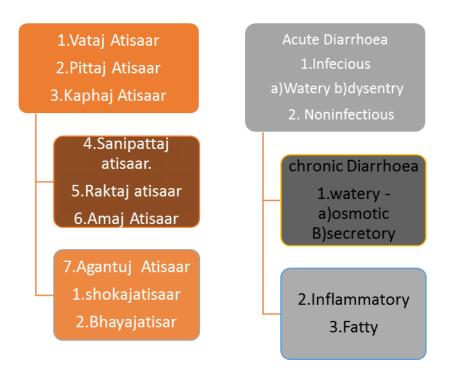
# **According to modern**



In ayurveda pathophysiology of *atisaar* is very descriptive which helps to treat disease from its root cause, where as in ayurveda "Samprapti bhang" itself called as treatment i.e *chikista* of disease so it's very important to know detailed Samprapti of disease. Where as in modern there is no big role of pathophysiology, symptomatic relief is important so simple pathophysiology of diarrhoea is given.

#### TYPES OF ATISAAR AND ITS CORRELATION WITH MODREN

In Ayurveda There are 7 types of *Atisaar*. And in Modern there are 2 Main types.



Samprapti of *Vataj* And *Pittaj Atisaar* are closely correlated to Pathophysiology of secretory diarhhoea.

# vataj atisaar

vayu gets vitiated and agni is diminished.

In this state the vitiated vayu carrying carrying urine and sweat

To the colon that urine and sweat liquifies the stool and causes diarrhoea<sup>4</sup>

# Secretory diarrhoea

Abnormal secretion of water and electrolytes into the small bowel

Absorbtion Na by the villi is impaired

Incresed fluid secretion and loss water and Na as watery stools causes Diarrhoea<sup>5</sup>

From above we can closely correlate the pathophysiology of these *Vataj atisaar* and secretory diarrhoea is same. *Pittaj Samprapti* also closely related to secretory diarrhoea. But As in *ayurveda* Causes of *Vataj* and *pitaj atisaar* are specifically mentioned. Which is most important in Diagnosis as well as in treatment.

# **Diagnostic And Treatment significance**

### 1) Clinical

#### Nidan of Vataj Atisaar

When a person is exposed excessively to wind, sun and physical exercise, takes rough, little or deficient food, indulges in sharp things, wine and sex and holds up the urges.<sup>[6]</sup>

#### Nidan of Pittaj Atisaar

When a person takes sour, salty, pungent, alkaline, hot, and irritant things excessively, is afflicted by constant exposure to fire, scorching sun and hot winds and psychologically stressed with anger and envy.<sup>[7]</sup>

# • LAKSHANAS of Vataj and Pittaj Atisaar

*Vataj Atisaar* – The patient of vatik diarrhoea suffers from colic, retention of urine, gurgling sound in intestines, prolapse ani, slackness in waist, thigh, and for-leg and passes **stool appearance**- frothy, little, rough, and darkish stool with flatus.

*Pittaj Atisaar* \_ In diarrhoea due to *Pitta*,the patient with perspiring body and afflicted with thirst, fainting, burning sensation, inflammation, and fever passes **Stool appearance** -foul smelling, hot, resembling meat wash, broken,much irritant and yellow, blue, or reddish in colour.

Where as symptoms of secretory diarrhoea is not specifically mentioned, symptoms of Chronic Diarrhoea mentioned where as no specific symptoms of secretory diarrhoea is present.

2) Laboratory investigation – Here fecal osmotic gap, Occult blood test, Microscopic Examination of stool helpful for Confirmation of Clinical Diagnosis.<sup>[8]</sup>

# Kaphaj Atisaar closely related to Dysentery

# kaphaj atisaar kapha being heavy,sweet,cold and

unctuous in nature while moving down extinguishesh the *agni* andfurther due to water nature affects the colon with excessive fluid

patient passes stool as unctuous, white, slimy, ama (undigested food), heavy, mixed with mucus, frequent colic pain, in little quantity and with tenesmus, nausea, heaviness in abdomen<sup>9</sup>

# Dysentery

Results from viral ,baterial,or parasitic infections

These pathogens typically reach the large intestine after entering orally through ingestion of contamineted food or water.

presence of blood or mucus or pus depends upon pathogen,colicky pain,the frequency of urges to defecate large volume of liquid feces ejected,tenesmus,nausea,vomitting <sup>10</sup>

*kaphaj atisaar* is closely similar to dysentery, only difference is that bloody diarhhoea is not mentioned in *kaphaj atisaar*.

### **Diagnostic And Treatment significance**

**Clinical** -As Lakshanas(symptoms) explained above.

**Laboratory investigation**—Microscopic examination of stool<sup>[11]</sup>, Jal nimajaan pariksha in ayurveda.

Sanipattaj atisaar is closely related to Malabsorption diarhhoea.

# • Sanipattaj atisaar

वराहरुनेहमांसांबु सदशं सर्वरूपिणम् । कृच्छुसाध्यमतीसारं विद्यादोषत्रयोभ्दवम्॥(मा.नि.३\८)<sup>[12]</sup> *Varahsenhmansambu* i.e **fat** is excreted through feces, that is called as Steatorrhea and *atisaar* is present with all doshas *lakshana* that include Abdominal pain, Abdominal distension, Bloating, Gas, Nausea and vomiting, undigested food in stool.

#### **Malabsorbtion Diarrhoea**

Having symptoms like, Abdominal pain, Gas, Bloating, Abdominal distension, Nausea, Vomiting, Diarrhea, **Steatorrhea**(Fatty stools), undigested food in stool, nutritional disturbance.<sup>[13]</sup>

# Diagnostic and treatment Significance

**Clinical** -As lakshanas are explained above.

**Laboratory investigation** – Test for Malabsorption. for clinical diagnosis confirmation. [14] *Amaj* Atisaar is Closely related to Osmotic Diarhhoea.

Dosas excited by Ama type of indigestion and vitiated thereby agitate bowels

And pass the feces down mixed with Residual food

Residual food of many colours and many times with gripping<sup>15</sup>

water and electrolytes move rapidly across the epithelium of small bowel mucosa to maintain osmotic balance

Diarrhoea can occur when a poorly absorbed osmotically active substance is ingested

fluid fail to dilute the poorly absorbed substastance thus poorly absobed food is excreted as it is<sup>16</sup>

# Diagnostic and treatment significance

#### Clinical

Residual food excreted through feces.

Laboratory investigation- Fecal osmotic Gap test for clinical diagnosis confirmation. [17]

Agantuj Atisaar is specially mentioned in ayurveda which occurs due to Manas Hetu(Psychological Cause)

Including following types

1.भयज अतिसार :-भयेन क्षोभिते चित्ते सिपत्तो द्वावयेच्छकृत् ।वायुस्ततोऽतिसार्येत क्षिप्रमुष्णं द्ववं प्लवम् ॥वातिपत्तसमं तिङ्गैराहु .... (अ. ह. नि. ८/१२-१३)

2.शोकज अतिसार :-तैस्तैर्भावैः शोचतोऽल्पाशनस्य बाष्पावेगः पिक्तमाविध्यजन्तोः ॥कोष्ठं गत्वा क्षोभयत्यस्य रक्त तच्चाधस्तात् काकणन्तीप्रकाशम्।वर्चोमिश्रं निःपुरीषं सगन्धं निर्गन्धं वा सार्यते तेन कृच्छूत्॥शोकोत्पन्नो दुश्चिकित्सोऽतिमात्रं रोगो वैद्यैः कष्ट एष प्रदिष्टः।(सु.उ.४०/१३-१४)<sup>[18]</sup>

In person aggravated with so many factors and with meagre Diet, the emotion of grief reaching the Abdomen affects digestive fire and in turn Agitates blood which, like gunja, is passed down frequently mixed with stool or without it, with or without smell with difficulty. According to modern Anxiety induced diarrhoea, is mentioned but there is no detailed explanation.

Ayurveda also specially mentioned Avastha (Stages) of Atisaar which are really important for Diagnosis of Atisaar. Amaj Atisaar and Pakva Atisaar.

*Amaj Atisaar*- If feces combined with these dosas sinks down in water, has excessively foul smell and is passed frequently in small quantity is known as Ama Atisaar (Immature).<sup>[19]</sup>

*Pakvaj Atisaar* \_If the same features but opposite are found along with lightness, the feces should known as *Pakva* (mature).<sup>[20]</sup>

### **DISCUSSION**

Nidan are important for Nidanparimarjan. As according to ayurveda It is first line of treatment of disease. Ayurveda explained Aharaj, Viharaj, Mansik, and angantuj nidan of Atisaar. Krimi is equivalent to pathogen(bacteria, parasite, virus). Samprapti (pathogenesis) described in detail in Ayurveda. As according to ayurveda samprapati bhang called as chikista(treatment) so Samprapati of each type given. which helpful for appropriate diagnosis and appropriate treatment.

Types of *Atisaar* correlated with modern types. As *Vataj Atisaar*, *Pittaj Atisaar* are closely related to Secretory Diarrhoea. Samprapti of *Vataj Atisaar*, *Pittaj atissar* closely related to Secretory diarrhoea. But ayurveda explain detailed nidan(causes) and *lakshanas*(symptoms) of *Vataj* and *Pittaj Atisaar*. Which is helpful for Appropriate clinical diagnosis. To confirm clinical Diagnosis Occult blood test, fecal osmotic gap test are important laboratory

investigations in above types of *Atisaar* (diarrhoea). Kaphaj Atisaar is closely related to Dysentery. Except bloody Diarrhoea. To confirm Clinical diagnosis stool microscopic examination is important. According to Ayurveda Jal nimmajan pariksha important. Sanipattaj Atisaar closely related Malabsorption Diarrhoea. *Lakshanas* of *Sanipattaj Atisaar* are closely related ton Malabsorption Diarrhoea. To confirm clinical diagnosis Test for malabsorption is important laboratory investigation. As fat is excreted through stool so to confirm type of *Atisaar* this test is important. *Amaj Atisaar* is closely related to Osmotic diarrhoea. *Lakshanas* of *Amaj Atisaar* are closely related to Osmotic diarrhoea. To confirm clinical diagnosis Fecal osmotic gap test is important laboratory investigation. According to ayurveda Jal *nimajaan pariksha* important. As *Agantuj atisaar* mentioned only in *ayurveda* which is caused by *Manas hetu* (psychological reason). *Shokaj Atisaar* and *Bhayaj Atissar* are the types of *Agantuj Atisaar*. *samprapti* also explained in detail where as in modern only anxiety induced diarrhoea is mentioned but detail information not given.

#### **CONCLUSION**

As *Ayurveda* is an ancient science, it gives detailed information about every basic to modern aspect of human life including diseases, causes, pathogenesis and treatment. As *vataj* and *pittaj Atisaar* closely related to Secretory diarrhoea. kaphaj atisaar closely related to dysentery. Amaj Atisaar closely related to osmotic diarrhoea. *Sanipattaj Atisaar* closely related to malabsorption diarrhoea. And *Agantuj Atisaar* is mentioned only in *ayurveda*. This study is useful in proper diagnosis of diarrhoea, Stage of diarrhoea. As well as differential diagnosis of diarrhoea.

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20. Maharshi susruta, susruta Samhita, commentary by Dalhana, translated English by Priya vat sharma, chaukhambha visavabharati, Varanasi vol 3, chapter no 40, verse no 18, page no 377.