

# Clinico-Pathological Review on *Pravahika* vis-a-vis Amoebiasis

Neha Dubey<sup>\*</sup>, P S Byadgi<sup>\*\*</sup>, A C Kar<sup>\*\*\*</sup>

## Abstract

The disease *Pravahika* (Amoebiasis) is described after the description of *Atisara* (Diarrhea). Critical study of the etiopathogenesis and clinical features of *Pravahika* in relation to the disease amoebic dysentery as described in modern medicine reveal that the disease *Pravahika* includes the varied clinical syndromes of amoebic dysentery. *Pravahika* is a disorder of variable clinical picture. Amoebic dysentery is also of wider range with gradual onset. *Pravahika* may include some other dysentery also. It may not be possible to identify *E. histolytica* in all cases of *pravahika*. Similarly all cases of amoebic dysentery may not have tenesmus or *Pravahana*. It can be said that *Pravahika* is the only condition described in *Ayurveda* which can include amoebiasis i.e. amoebic dysentery.

**Keywords:** *Pravahika*, Amoebiasis, *Atisara*.

## Introduction

*Pravahika* includes all dysenteries of any origin. Any diarrheal condition when presented with defecation of mucus comes under *Pravahika*. Some cases of amoebiasis and colitis may come under the *Grahani* (Coeliac sprue). Some cases may rarely present with watery stools resembling *Atisara*. In chronic and in colitis stages, it resembles *Grahani* in some aspects.

*Atisara* is considered as a precursor (*Nidanarthakara* disease) for *Pravahika*. Both *Atisara* and *Pravahika* are considered as precursors for *Grahani*. These two conditions can be considered as its stages i.e. *Atisara* as its precursor, and *Grahani* as its sequel. The reason of difference in *Ayurvedic* and modern diagnosis is the difference in the approach of diagnosis.

The clinical entities of *Pravahika* are varied comprising of a variety of clinical syndromes distinctive with each other in some respects according to their etiology, *samprapti* (pathogenesis) etc. It is better to classify them from various angles for proper diagnosis because it facilitates appropriate assessment as regards to the prognosis and to implement suitable methods of management.

## Classification of *Pravahika* according to Symptomatology

### Asymptomatic

According to *Ayurveda*, *Pravahika* occurs due to the *Dosha-Dushya Sammurchhana* occurring in *Purishashaya*. The *Doshas* undergo *Chaya*, *Prakopa* and *Prasara* stages before they settle in *Purishashaya*. While they undergo these stages as described in the context of stage wise *Samprapti*, they manifest some vague clinical features which are negligible and may be considered as asymptomatic stage of *Pravahika*.<sup>1</sup>

According to WHO (World Health Organization), the condition of harboring *E. histolytica* without clinical manifestation is termed as asymptomatic amoebiasis.<sup>2</sup> *E. histolytica* lives as a commensal organism in the bowel harmlessly feeding on bowel contents without invading tissues.

### *Purvarupavastha* (Prodromal Symptoms)

***Samanya* (General):** The *Purvarupa* or premonitory clinical features of *Atisara* which include *Pravahika* are as follows: *Toda* (pricking pain) in *Hridaya* (cardiac region), *Nabhi* (umbilicus), *Payu* (rectum),

<sup>\*</sup> Junior Resident, Department of Vikriti Vigyan, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221005.

<sup>\*\*</sup> Assistant Professor, Department of Vikriti Vigyan, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221005.

<sup>\*\*\*</sup> Professor, Department of Vikriti Vigyan, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221005.

**Correspondence to:** Dr P S Byadgi, Department of Vikriti Vigyan, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi -221005.

**E-mail Id:** psbyadgi@rediffmail.com

*Udara* (abdomen), *Gatra Avasada* (flaccidity or emaciation) of the body, *Vitsanga* (obstruction of flatus and feces), *Adhmana* (distension of abdomen) and *Avipaka* (indigestion).<sup>3</sup>

**Vishesha (Specific to Dosha):** No *Vishesha Purvarupas* have been described in the texts.

### **Rupavastha (Symptoms)**

*Pravahika* is characterized by defecation of *Mala* (stool) containing *Sleshma* (mucus) and *Rakta* (if associated with *pitta*) repeatedly accompanied by excessive tenesmus or *Pravahana*.<sup>4</sup>

When the *Purisha* contains *Krimis* i.e. trophozoites (or cysts), indicating the harboring of *E. histolytica* (amoeba or *Suchimuka Purisaja Krimi* according to *Rigveda* and *Harita*) in the bowel, it is termed as amoebiasis. The onset is usually insidious except in fulminating cases.

### **Classification of Pravahika According to Etiology**

**Svatantra-Paratantra (independent or dependent on other diseases)**

**Svatantra-Origin:** *Svatantra Pravahika* is that which manifests independently with its own causative factors. It should be managed with principles of *pravahika* treatment.

**Paratantra-Origin:** The disorder in which *Pravahika* develops secondary to *Atisara* and other diseases.

### **Classification of Pravahika according to Dosha Predominance**

**Vataja Pravahika:**<sup>5&9</sup> *Vata* gets provoked due to the intake of *Ruksha Ahara* and other *vata* provocative measures. The provoked *Vata* disturbs *Jatharagni* causing the disturbance of *Shoshana* (capacity to absorb) of *Dravadhatus*, *Kleda* and *Sleshma*, leading to accumulation of *Balasa (Kapha)* and related watery substances, and its elimination through *Purishashaya*, known as *vataja Pravahika*. In this state, it is possible that *Purishaja Krimi* including *E. histolytica* gains favorable atmosphere for their growth and invasion into the *Saishmika kala* (mucous membrane) and bowel wall of the *Purishasaya* (intestine).

**Pittaja Pravahika:**<sup>5&9</sup> Due to etiological factors, the liquid characteristic property of *Pitta* increases and diminishes the *Agni* and reaches the *Purishasaya*

(intestine) by *vata* and breaks the *Purisha* due to its *Ushna*, *Drava* and *Sara* properties and manifests *pittaja pravahika*. It facilitates the invasion of *E. histolytica* due to the above properties resulting into irritation, inflammation, abrasion, etc, and along with accumulated *Kapha* with *Vata*, causes *Pravahika*.

**Shleshmaja Pravahika:**<sup>5&9</sup> The vitiated *Sleshma* diminishes the *Agni* due to its nature of *Guru*, *Madhura* and *Snigdha* and reaches the *Purishasaya* (intestine) by the *vata* and manifests *kaphaja pravahika*. It favors the atmosphere conducive for *Purisaja Krimis*.

**Raktaja Pravahik:**<sup>5&9</sup> The vitiated *rakta* along with *kapha* and *vata* diminishes the *Agni* and reaches the *Purishasaya* (intestine) and blood comes out with *kapha* known as *raktaja pravahika*.

### **Upadravavastha (Stage of Complications)**

#### **Antrastha (Intestinal) Complications**

**Grahani:** The commonest complication of *Pravahika* is *Grahani*.<sup>6</sup> When *Agni* is diminished due to *Pravahika* or improper treatment, then the *Ahara* without proper digestion passes through *Grahani* resulting into defecation of feces containing undigested food and putrid material either solid or liquid accompanied with pain. The colitis due to varied causes and non-specific colitis appear to be similar to *Grahani*.

**Raktasrava:** Excessive *Raktasrava* may occur due to erosions of blood vessel by an amoebic ulcer which may be serious and lead to mortality if urgent measures are not adopted.

**Intussusception:** It may occur in cases of *Pravahika* usually known as Caecocolic intussusception. There will be severe pain with a sausage shaped mass in the course of the colon and an empty right iliac fossa. Immediate resection will be done to save the patient. Strictures of the colon and rectal strictures may occur.

**Other Conditions:** Amoebic appendicitis and peritonitis may occur. Peritonitis may occur in two modes in amoebiasis as complication.

- It may occur abruptly with severe abdominal pain and immobility of abdominal muscles.
- It may occur due to severe amoebic ulceration of the colon. Vomiting and hiccough are regarded as bad prognostic features.

## Antretara (Extra Intestinal) Complications

### Yakrit (Liver)

**Hepatitis:** Early stage of liver abscess, swinging temperature and pain are associated.

**Amoebic Liver Abscess:**<sup>7</sup> The involvement of liver by *Krimi* through intestines and causing its suppuration. Liver abscess may occur after a longer period of the infection of *E. histolytica*. It may take even years. The cause of such long latent period is not fully known. The occurrence after years appears to be the coincidence of contributory factors decreased *Vyadhikshamatva* (decreased immunity), preceding pre-existing liver damage. The amoeba reaches the liver by portal system. Necrosis occurs in liver cells at the centers of the lobules, tending to enlarge and coalesce. Liver enlarges as abscess develops. The necrotic area liquefies forming cavities full of chocolate brown thick pus. The abscess may be single or multiple, usually in the right lobe. The abscess pushes up the diaphragm and may burst in pleural cavity, lung may infect pericardium. The clinical features may be varied. Feeling of heaviness in the right hypochondrium during *Pravahika* or with or without history of *Pravahika* or amoebiasis is the first feature in some cases. Pain in liver region enhances during cough. Pain may occur suddenly or may gradually extend to chest increased by breathing. Liver is tender with more concentrated tenderness in a spot.

### Conclusion

It can be concluded that *Pravahika* or amoebiasis is characterized by defecation of *Mala* (feces) containing small quantity of *Sleshma* (mucus) or *Rakta* (if *pitta* is associated repeatedly) accompanied by tenesmus or *Pravahana*. The *Purisa* (stool) must contain *Krimis* i.e. active *E. histolytica* or trophozoites (or cysts) indicating the harboring of

*Krimi* in the bowels to apply the term amoebiasis. The understanding of all the aspects of the disease is necessary before proceeding to treatment. The treatment must aim at *Samprapti Vighatana* (dissociation of pathogenesis).

### References

1. Shastri Ambikadutta. Sushrut samhita of sushruta. Sutra sthana, chapter 21, Verse no. 36. 13<sup>th</sup> edition. *Chaukhambha Publications: Varanasi, 2002: 121.*
2. International Travel and Health. Amoebiasis. Available from: <http://www.who.int/ith/diseases/amoebiasis/en>.
3. Shastri Ambikadutta. Sushrut samhita of sushruta, Uttara tantra, chapter 40, Verse no. 9. 13<sup>th</sup> edition. *Chaukhambha Publications: Varanasi, 2002: 275.*
4. Shastri Ambikadutta. Sushrut samhita of sushruta, Uttara tantra, chapter 40, Verse no. 139. 13<sup>th</sup> edition. *Chaukhambha Publications: Varanasi, 2002: 215.*
5. Upadhyaya Yadunandana, Madhava Nidanam of Madhavakara. Chapter 3, Verse no. 22. Edition reprint 2006. *Chaukhambha Publications: Varanasi, 2006: 177.*
6. Shastri Ambikadutta. Sushrut samhita of sushruta, Uttara tantra, chapter 40, Verse no. 167. 13<sup>th</sup> edition. *Chaukhambha Publications: Varanasi, 2002: 305.*
7. Medscape. Available from: <http://www.emedicine.medscape.com/article/183920-overview>.
8. Purushothamacharyulu G. *Pravahika*, 2<sup>nd</sup> edition. *Arya Vaidya Sala Publications: Kottakala, 2011.*
9. Byadgi PS. *Pravahika*. Parameswarappa's Ayurvediya Vikriti Vigyan & Roga Vigyan. 1st edition. Volume II. *Varanasi, Chaukhambha Sanskrit Sansthan, 2009: 447.*