

A REVIEW ARTICLE ON LANGHANA IN JAWARA THROUGH UPAVASA

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ABSTRACT

Ayurveda helps in the maintenance and promotion of positive health of a healthy person and the other helps in the cure of diseases. Fever is referred to as *Jwara* by ancient *Ayurvedic Samhitas*, and it was thought to be the most serious of all diseases. Fever is described as a separate illness, a symptom, and a complication of many ailments in Ayurveda classics. The signs and symptoms invariably associated with *Jwara* are the increase in the temperature of the body and mental unhappiness. Fever is a generalized body reaction to a variety of infectious and non-infectious causes. In this article, we will attempt to compile and evaluate the importance of *Langhana* in *Jwara Chikitsa* with Modern texts as MMC (Migrating Motor Complex). *Langhana* indicates the whole procedure of producing lightness in the body. It eliminates undigested food materials in the *Aanavaha Srotas*. As the undigested food in *Aanavaha Srotas* acts as a source for the growth of microorganisms and causing *Jwara*. Hence, *Langhana* abolish the undigested food as a result of that *Jwara* subsides, the body becomes light and there is appetite. *Langhana* or fasting does reduce the strength of the patient. During fasting, migrating motor complex (MMC) starts in the lower esophagus. Sweeping through the stomach removes debris and residual material not emptied with the last meal. The debris and residual material left in GIT (intestine) start fermenting and act as a favorable condition for the growth of microorganisms, hence causing infection which leads to fever.

Keywords: *Jwara*, *Langhana*, Fever, MMC.

INTRODUCTION

Ayurveda helps in the maintenance and promotion of positive health of a healthy person and the other helps in the cure of diseases. Among all the diseases, *Jwara* is the most important one. Fever is referred to as *Jwara* by ancient Ayurvedic seers, and it was thought to be the most serious of all diseases. It afflicts the body, the senses and the mind.^[1] It is the first to be manifested among all the diseases. In Ayurvedic classical texts, the word *langhana* is used in a wide sense. In *Samhitas*, various meanings are denoted with the word *langhana* but mostly it is used in the sense of *upavasa* or *abhojana*. *Langhana* indicates the whole procedure of producing lightness in the body. *Anasana*, *apatarpaṇa*, *laghubhojana* and *upavasa* are the synonyms of *langhana*. *Langhana* as *upavasa* found in *Samhitas*.^[1] *Acarya caraka* has mentioned ten types of *langhana* while *Acarya Vagbhata* described the twelve types of *langhana*. He added two more types i.e., *Dipana*, *Raktmoksana*. Types of *Langhana* include *Pipasa*, *Maruta*, *Atapa*, *Pacana*, *Upavasa*, *Vyayama* and 4 types of *Sodhana*.^[2] The *upavasa* may be taken as a complete or partial restriction of food intake.^[3] By the complete or partial food restriction, *Agni* which is previously busy with digestion becomes free hence it digests the undigested food which is already present in the body. The basic cause of all the diseases in a human being is wrong feeding which leads to the formation of *ama* due to impaired *jatharagni*. The value of fasting as a curative aspect must surely be to be apparent. While describing the function of the *jatharagni* *Acarya vagbhata* indirectly indicated the mode of action of *upavasa* as *agni* always remains busy in the digestion of daily consuming food and if it is withdrawn as *upavasa* then *doṣas* which are present in the *amasaya* or the *ama* at the level of *jatharagni* will be digested. Later on, when *doṣas* have been digested then *jatharagni* consumes *dhatu*s and eventually life itself.^[4]

SAMYAK YOGA OF THE LANGHANA

The signs and symptoms of proper administration of *Langhana* are proper excretions of *vata*, *mutra* and *puriṣa*, lightness of the body, feeling of purity in heart, eructation, throat and mouth, the disappearance of

drowsiness and exertion, appearance of sweat, and desire for food, excessive hunger and thirst and contentment.^[5] Hence we understood here the concept of *Langhana* which causes *jwara*. This function of *Langhana* is similar to the function of MMC (Migrating motor complex).

Migrating motor complex, also known as migrating myoelectric complex, migratory motor complex, migratory myoelectric complex and MMC. It is a pattern of electrical activity observed in the gastrointestinal tract in a regular cycle during fasting. MMC was discovered and characterized in fasting dogs in 1969 by Dr Joseph H. Szurszewski at the Mayo Clinic. The main function of the small intestine is digestion and absorption of nutrients. The role of small bowel motility is to mix food products with digestive enzymes (chyme), to promote contact of chyme with the absorptive cells over a sufficient length of bowel and to on-like propel undigested material into the colon. Food in the stomach is churned into smaller and smaller particles. Once those particles are < 2 mm in size, they are pushed into the duodenum by co-ordination of contraction of the antrum and the recurring from the duodenum or from and the relaxation of the pylorus. The emptying of the stomach may be slowed by inhibition occurring from the ileum. Receptors in the mucosa sense calories, osmolality, acid, fatty acid concentrations and slow emptying when these are high. Fatty acid in the ileum release glucagon peptide (GLP-1 or -2), Peptide tyrosine-tyrosine (peptide YY); these peptides also slow gastric emptying by a process called the "ileal brake". Well-organized motility patterns occur in the small intestine to accomplish these goals in peptide in the fed as well the fasting. During fasting, there is a migrating motor complex (MMC) which starts the lower oesophagus, sweeping through the stomach, it removing debris and residual material not emptied with the last meal. This MMC is characterized by a front of intense spiking activity (phase III activity) that continues to migrate down the entire small intestine. As the activity front reaches the terminal ileum, another front develops in the gastroduodenal area and progresses down the intestine. The purpose of phase

III myoelectric and contractile activity is to sweep remnants of the previous meal into the colon and prevent stagnation and bacterial overgrowth.

During meals, this MMC cycle is interrupted, and the motility pattern in the small bowel becomes an irregular spiking activity called the "fed pattern." This fed pattern of motility mixes but does not seem to move intestinal contents forward to any great extent but does mix these contents with digestive juices, spreading them again and again over the absorptive surface of the brush border. Diarrhoea can occur when this normal fed pattern is replaced by aggressive propulsive rather than mixing contractions. The enteric nervous system (ENS) is comprised of efferent intrinsic and extrinsic motor neurons, interneurons, and afferent sensory neurons. The extrinsic afferent innervation of the intestine is supplied by the vagus nerve; over 80% of the vagal fibres are afferent, 20% are efferent (motor). The sensory aspect will be a discussion with consideration of the pain arising from IBS, the so-called irritable bowel (colon) syndrome.

GIT has its entero nervous system i.e., ENS. The ENS has two major plexuses, the myenteric and the submucosal plexus (Figure ENS receives input from the central nervous system (CNS) and the autonomic 4). The nervous system (ANS). Enteric nerve cell bodies receive input from the sympathetic and parasympathetic components of the ANS. The myenteric plexus (Auerbach's plexus) runs between the inner circular and outer longitudinal smooth muscle and most of the nerves of this plexus project to these muscle layers. The submucosal plexus (Meissner's plexus and Schabadasch's plexus) runs between the inner circular muscle and the mucosa, and its nerves project to the mucosal nerves, as well as to the myenteric plexus. The reflexes arising in the ENS begin from chemical or mechanical stimulation. Intrinsic primary afferent neurons (IPANs) are activated, and in turn, the IPANs activate the enteric primary afferent neurons ("sensory", although not normally consciously perceived) in the submucosal and myenteric plexuses, which are integrated through interneurons, and produce a motor or secretory reflex response. Serotonin-containing enterochromaffin cells may be involved in the mucosal

sensing of stimuli.^[6] Narcotics are also known to impair the MMC.^[7] Stress has been shown to reduce MMC activity as well.^[8] Patients with SIBO and IBS have on average a third as many MMC phase III events with those events being roughly 30% shorter on average.^[9]

IMPAIRMENT: -

Therapeutic Stimuli: - Drugs used to enhance gastrointestinal motility are generally referred to as prokinetics. Serotonin induces phase III of the MMC, and so serotonin receptor agonists are commonly administered as prokinetics.^[10] Motilin administration causes phase III contractions, and so motilin agonists are another common prokinetic. Eradication of bacterial overgrowth has been shown to partially restore MMC activity. An elemental diet has been hypothesized to partially restore MMC function.^[11]

DISCUSSION

Jwara is not just a *vyadhi*, according to Ayurveda. It is a *Lakshana* as well as a *upadrava* for a variety of ailments. The *jwara samprapti* is influenced by the development of *ama*. Except for *vathika* and *kshayaja* conditions, *ama soshana* and *ama nirharana* are the key aspects of *Jwara chikitsa* and is done by *Langhana* in Ayurvedic texts *Langhana* is the foremost treatment for *Jwara*. This article is an attempt to discuss *Langhana* with MMC i.e., motor migratory complex as described in modern texts. MMC acts similarly to *Langhana* by their mode of action. *Langhana* eliminates undigested food materials in the *Aanavaha Srotas*. As the undigested food in *Aanavaha Srotsa* acts as a source for the growth of microorganisms and causing *jawara*. Hence, *langhana* abolish the undigested food as a result of that *Jwara* subsides. Migrating Motor Complex (MMC) starts in the lower oesophagus. Sweeping through the stomach removes debris and residual material not emptied with the last meal. The debris and residual material left in GIT (intestine) start fermenting and become the reservoir for the microorganisms that causes an infection that leads to fever.

CONCLUSION

Ayurvedic texts were written thousands of years back, but the things in that are scientific today as well. This article is focused on *Langhana (upavasa)* described in *jawar chikitsa* is very scientific to MMC in modern texts which acts similar to *Langhana* to protect the human body from illness.

REFERENCES

1. Astanga Hrudayam with Sarvanga Sundara Commentary of Arunadatta and Ayurveda rasayana of Hemadri. Edited by Bhisagacharya Hari Shastri Paradakara Vaidya; 8th edition; Chaukhamba Orientalia; Varanasi, 2009.
2. Charaka Samhita with Ayurveda Deepika Commentary of Chakrapanidatta. Edited by Vaidya Jadavji Trikamji Acharya; 8th edition; Chaukhamba Sanskrit Sansthana; Varanasi, 2005.
3. Charaka Samhita with Ayurveda Deepika Commentary of Chakrapanidatta. Edited by Vaidya Jadavji Trikamji Acharya; 8th edition; Chaukhamba Sanskrit Sansthana; Varanasi, 2005.
4. Astanga Hrudayam with Sarvanga Sundara Commentary of Arunadatta and Ayurveda rasayana of Hemadri. Edited by Bhisagacharya Hari Shastri Paradakara Vaidya; 8th edition; Chaukhamba Orientalia; Varanasi, 2009.
5. Charaka Samhita with Ayurveda Deepika Commentary of Chakrapanidatta. Edited by Vaidya Jadavji Trikamji Acharya; 8th edition; Chaukhamba Sanskrit Sansthana; Varanasi, 2005.
6. A.B.R Thomson and E. A. Shaffer, Editors, First Principle of Gastroenterology and Hepatology: Edition-12; 171-172.
7. Kumar D, Wingate DL (November 1985). "The irritable bowel syndrome: a paroxysmal motor disorder". *Lancet*. 2 (8462): 973–7.
8. Pimentel M, Soffer EE, Chow EJ, Kong Y, Lin HC (December 2002). "Lower frequency of MMC is found in IBS subjects with an abnormal lactulose breath test, suggesting bacterial overgrowth". *Digestive Diseases and Sciences*. 47 (12): 2639–43.
9. Lördal M, Hellström PM (1998-04-15). "Serotonin induces phase III of the MMC, VIA 5-HT₃-receptors dependent on cholinergic mechanisms in the small intestine". *Gastroenterology*. 114:
10. Janssens J, Vantrappen G, Peeters TL (August 1983). "The activity front of the migrating motor complex of

the human stomach but not of the small intestine is motilin-dependent". *Regulatory Peptides*. 6 (4):

11. Pimentel M, Constantino T, Kong Y, Bajwa M, Rezaei A, Park S (January 2004). "A 14-day elemental diet is highly effective in normalizing the lactulose breath test". *Digestive Diseases and Sciences*. 49 (1):

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