



APPLIED ASPECT OF PACHAKA PITTA IN DIGESTION

Dr. Anshuman Pandey

B.A.M.S., MD (Kriya Sharir), Assistant Professor, Department of Kriya Sharir, SCPM Ayurvedic Medical College and Hospital, Gonda (U.P.)

ABSTRACT

Digestion and transformation are the main function of pitta dosha. Agni is the energy that is an important factor for this process. It works through the medium of pitta. This panchabhautic (physical) body is the outcome of the food. The health of a person depends upon proper digestion and assimilation of food. The digestion of food is the main function of the pachaka pitta. It digests the food and also separates sara bhaga from the kitta bhaga with help of samana vayu. All the digestive juices secreted by pancreas, small intestine, stomach and liver can be considered as pachaka pitta. In this article, the applied aspect of pachaka pitta and its effect on digestion is reviewed.

KEYWORDS: Pachaka Pitta, Digestive Juices, Sara, Kitta, Jatharagani

INTRODUCTION

The term “pitta” is derived from the root “Tapa Santape” which means “to heat” or “to burn” or “to warm”. Thus, pitta represents energy, heat or fire in the body. Pachaka pitta is one of the five types of pitta. Digestion occurs mainly in the part between amashaya (stomach) and pakwashaya (large intestine). This region is called as grahani (small intestine). This is the site of pachaka pitta.

Although pachaka pitta is composed of panchmahabhuta, It is predominant in teja mahabhuta (fire element). Pachaka pitta from grahani, gives stimulation, support and strength to other types of pitta. In short if digestion in abdomen is normal, all the other metabolic process in the body can remain normal.[1] Pachaka pitta, at some time is also called as pachaka agni, kosta agni or jatharagni. Pachaka pitta means the pitta which is responsible for the digestion process of the body. Pachaka pitta separates ahara rasa, mootra and pureesha. According to modern physiology, all the digestive juices secreted by pancreas, small intestine, stomach and liver can be considered as pachaka pitta.

REVIEW LITERATURE

According to Acharya Charaka:

Agni is in the form of energy and it works through the medium of pitta. When it is functioning properly it plays an important role in digestion. When it becomes abnormal than this same agni is the reason for indigestion.

According to Acharya Sushruta.[2]

Acharya Sushruta praised agni (jatharagni) as God. Because of its miraculous nature and action, one can never be understood this agni paramasukshma. (subtle form) and transforms the food substances just to suit the physiological and psychological requirements of the individuals.

According to Astanga Samgraha:

There are five types of pitta in the body. They are pachaka pitta, ranjaka pitta, sadhaka pitta, alochaka pitta and bhrajaka pitta.

Acharya Vagbbata explains that the pachaka pitta in amashaya has excess quality of tejas element and is devoid of liquid quality. It is then called by the term ‘Anala’ because of its function of paka or digestion. It cooks the food and separates it into essential and useful part and waste product.[3]

In Modern Science, the different digestive juices and enzymes corresponding to the gastro-intestinal tract, that are involving the splitting of complex food substances into their simpler component. Protein into amino acid carbohydrate into glucose and fats into fatty acid and glycerol. So that they may be rendered fit for absorption.[4]

APPLIED ASPECT

On the basis of influence of dosha this pachaka pitta will undergo four functional phases. They are mandagni, tikshnagni, vishamagni and samagni.

Mandagni:

In this stage the agni is unable to digest even a little amount of food. Because the function of pachaka pitta is inhibited by kapha. Hence this phase is considered as mandagni or agnimandya, leads to the condition of disease called ajirna.

Tikshnagni:

In this phase, his meals are digest too frequently, the function of pachaka agni are under the control of pitta. In this phase agni is excessively excited. Hence this phase is called as tikshnagni. This agni easily digest even a very heavy meal, within a very short period. It manifests excessive hunger.

Vishamagni:

This type of agni sometimes do the complete process of digestion and sometime indigestion. Due to indigestion, distension of the abdomen, colic pain, constipation, dyscentry, heaviness of the limbs and loose motion etc. are manifest. The function of agni in this phase are under the control of vata.[5]

Samagni:

In this phase, the complete digestion of the food takes place which is ingested at the proper time without any irregularity. Doshas are well equilibrium in this phase and functioning normally.

Excessive hunger (polyphagia). This occurs due to excess hot and sharp properties of pitta. Ayurveda has explained this symptom in Bhasmaka disease.

Anala means digestive fire. This fire becomes weak and low digestion occurs. This is due to lowering of hot and sharp properties. Garlic, Ginger and Black pepper can improve this condition.

Hyper or hypo state of pitta can occur in 3 types 1- by substance, 2- by properties and 3- by function. In hyper state of pitta, one should follow diet, behavior and medicines of the antagonistic properties of pitta. Cooling and soothing, measures are expected e.g. milk, ghee, sugar, mung dal, cold drinks, adequate sleep, mental rest and medicines like shatavari sugar granules-shatavari kalpa, coral and rose petal jam.[6]

Modern View

Digestion is defined as the process by which food is broken down into simple chemical substances that can be absorbed and used as nutrients by the body. Most of the substances in the diet cannot be utilized as such. These substances must be broken into smaller particles, so that they can be absorbed into blood and distributed to various parts of the body for utilization.7

Food contains: carbohydrates, proteins and fats.

Carbohydrates: Ptyalin (salivary amylase) present in saliva converts cooked starches in food into sugar called maltose. This conversion occurs in the mouth. All sugars are converted to simple monosaccharides like glucose by the action of enzymes (Sucrase, Maltase, Lactase) in the small intestine. Glucose is absorbed through the capillaries of villi in the small intestine. It is then carried to liver by portal vein where it is stored as glycogen.

Proteins: The digestive enzymes (Pepsin of Stomach, Trypsin and Erepsin of Small intestine) convert proteins into peptones, polypeptides and finally into amino acids. The amino acids are absorbed through villi of small intestine and carried to liver.

Fats: Lipase, an enzyme of pancreas which is poured into small intestine converts fats into fatty acids and glycerol. These two products are absorbed through lacteals of villi. They are carried to thoracic duct through cisterna chyli. From the thoracic duct they enter into blood through left brachiocephalic vein.[8]

The function of gastrointestinal tract are ingestion, digestion and absorption of food and excretion of waste products.

DISCUSSION

The 'pitta' present in between stomach and large intestine is called pachaka pitta. Though it is made up of five basic elements, it is dominant in fire principle. So it is devoid of liquidity and is called 'Anala' (Agni) also. This digests the food and splits it into essential nutrients part called 'Sara' and waste part called 'Kitta'.

This pachaka pitta is directly responsible for digestion and therefore, should include all amyolytic, proteolytic, lipolytic and nucleic acid splitting enzymes secreted from different parts of gut and pancreas. Bile salts too can be included in this.

Gastrointestinal hormones like gastrin, secretin, cholecystokinin etc. also must be regarded as the representative of pachaka pitta. 'Sara' (Nutrients) portion separated at this stage gets absorbed and there after it is called 'Rasa Dhatu'.[9]

Living body is a biproduct of nutrition. The doshas, dhatus and malas are the substances of living body which require food substances for their formation, maintenance or functioning of various physiological action in the body. The food substances which are the external ones do not exactly similar to the tissues of the living body. So the former must be converted in such a manner that they are absorbed into the system to reach every cell of the body and they become completely matched with the body tissues. This conversion of food substances (externally taken) at different levels in various ways till they ultimately become tissue of the body is brought about by the 'Agni'. It means without agni, there is no tissue building and hence no life.[10]

CONCLUSION

Pachaka pitta is equivalent to 'Jatharagni'. As its function suggest, all enzymes responsible for digestion like amyolytic, proteolytic, lipolytic enzymes. All gastrointestinal hormones like CCK, Gastrin, Secretin and all local hormones of GIT like Histamine, Somatostatin etc. are included in it. Agni itself is present in the body in form of pitta.

The food, which is the source of energy, is brought towards the gut through 'Prana Vayu'. There various fluids making its bonds loosen, act on it. Also, the food is softened here. 'Samana Vayu' then stimulates the 'Jatharagni' and this 'Agni' finally digest the food.[11]

REFERENCES

1. Dr. Subhash Ranade, Dr.R.R Despende, Dr.Swati Chobhe A Textbook Of Kriya Sharira, Chaukhambha Sanskrit Pratishthan, Delhi ,Reprint ed.2023, 5, pp 105
2. Dr. Srikant kumar panda, Basic Principles of Kriya Sharir, Chaukhambha Publishers, Varanasi, Reprint ed 2021, 6,pp 106-108
3. Dr. Subhash Ranade, Dr.R.R Despende, Dr.Swati Chobhe A Textbook Of Kriya Sharira, Chaukhambha Sanskrit Pratishthan, Delhi, Reprint ed. 2023,13, pp186-188
4. Dr. Srikant Kumar Panda, Basic Principles of Kriya Sharir,

- Chaukhambha Publishers, Varanasi, ed.2021,6, pp109
5. Prof. S.B Kotur, Dr. shashikala kotur, A Textbook of Ayurvedic Physiology. Chaukhambha Orientalia, Varansi, Reprint ed.2016,7,pp175
 6. Dr. Subhash Ranade, Dr.R.R Despende, Dr.Swati Chobhe A Textbook Of Kriya Sharira, Chaukhambha Sanskrit Pratishthan, Delhi Reprint ed. 2023,7, pp122-123
 7. K Sembulingum, Prema Sembulingum, Essentials of Medical Physiology, Jaypee Brothers Medical Publishers 7thed.2016, 4,pp219
 8. Dr. N. Muruges, Basic Anatomy and Physiology Sathya Pubulishers. 6thed.2018, 18,pp187
 9. Dr. Kishor Patwardhan, Human physiology In Ayurveda, Chaukhambha Orientalia, Varansi, Reprint ed 2016,4,pp29
 10. Dr. Srikant Kumar Panda, Basic Principles of Kriya Sharir, Chaukhambha Publishers, Varanasi, ed.2021,6, pp106
 11. Dr. Kishor Patwardhan, Human Physiology In Ayurveda, Chaukhambha Orientalia, Varansi, Reprint ed.2016,4,pp27