



ROLE OF AGNI IN DIGESTION AND METABOLISM

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ABSTRACT

Agni play major physiological role in pak prakriya (digestion and metabolism) in our body. Unless the ingested ahar (diet) not properly digested and metabolized, it (ahar) is not actually part of our body. Different type of agni play their role at different level of digestion. After ingestion of food jatharagni first come in action and digest and make in the form to get absorbed then bhutagnipaka takes place. The

bhutagnis act on their respective bhautic portion of food and thereby nourishe the bhutas in body. At the end dhatwagni play its role. Seven dhatwagni acts on their respective dhatus to form, dhatu, upadhatu and their mala. Literature is available in our classics to indicate that pitta is same as agni but some doubts arises behind this concept, that pitta and agni are different or same.

KEYWORDS: Agni, Dhatvagni, Jatharagni, Metabolism, Pitta.

INTRODUCTION

Ayurveda has described digestion and metabolism on the basis of its basic principle, dosha and agni.in these agni is the most important factor for digestion and metabolism the Ahar(diet) which we ingest,is digested, absorbed and assimilated by agni for the maintenance of body and energy purpose, is performed by agni.

The concept of agni gives us basic knowledge for the understanding theories of ayurvedic physiology viz. Ahar pachan,dhatu and updhatu ,utpatti,vyadhi utpatiti,metabolic transformation etc.Many philosophical theories has been given to describe agni. According to sankhya darshana agni originated from rupa tanmantra , but vaisheshik describe agni as one of the karan dravya which is eternal and one of the material cause of entire world. Agni

convert food to energy, required to perform vital functions. Therefore ayurveda considers dehagni as cause of life complexion strength, health nourishment Luster of teja and prana (life). (Ch.chi 15/3).^[1]

Acharya charak has mentioned the importance of agni, that shantey agnau mriyate i.e when agni stop functioning person dies, rogi syat vaikrite, i.e vitiated agni causes illness, yuktam chiram jiwet anamayah, i.e when the agni is functioning properly, the person would be absolutely healthy and would lead a long happy life. Hence agni is base of life. Ch.chi (15/4).^[2]

Acharya charak has describe thirteen type of agni which can be grouped in three types viz. jathragni, bhutagni and dhatugani. According to modern system of medicine metabolic process cell division, and maturation are continuously taking place in our body. The cell is the structural and functional unit of the body. Charak mentioned that constituent part of the body if further divided into atoms are sure to become innumerable, as such cells or atoms are exceedingly numerous. (cha.sha 7/17).^[3] Shushrat has described the formation of avayavas from various dhatus (shu.sha 4/25-30).^[4] Thus from above discussion, the above cell should be considered as dhatu paramanu. For these a source of energy is provided by agni.

REVIEW AND DISCUSSION

The study of agni, can be summarized in two groups.

1. General description of agni in various ayurvedic texts.
2. Normal physiological function of different type of agni.

In Vedic literature, it has been said that agni is present in each particle of universe. It is hard to imagine the existence of any particle without agni. It has been said “agranee” (yask) as it comes first in each function.

Agni is a Sanskrit word, derived from ‘Ang’ dhatu means everywhere present or Aag’ dhatu means motion, thus its meaning become, it is present everywhere or it is in motion. In brahman sutra, it has been meant to be sign of life in the body. Acharya yask has given etymology of agni such as A+G+Ni.

The word A denote root, I means to go, G root means to glitter and Ni means to carry. In vedant shabdikalpdrum^[5], the etymology given by yask shankaracharya says that agni carry

everything in it. In shabdkalpdrum^[6], there are 61 synonyms compiled which help in explaining nature and function of agni e.g vaishyanara, tanoonpat, sarvapak etc.

Types of Agni

Agni is present in dhatu, updhatu, malas, sira, manspesi even in the paramanu in the body. If these agni's are counted it becomes innumerable (commentary of Arundatt on A.H.sha 3/60). But the number of agni varies in different ayurvedic texts as shown below.

1. Charak has mentioned 13 agni in three groups. jathragni-1, bhutagni-5, dhatwagni-7 (cha.chi 15/38).^[7]
2. In description of type of pitta acharaya shushruta names of pita as agni, thus shushrut mentioned five type of agni viz, pachakagni, ranjak agni, alochak agni, sadhak agni, and bhrajak agni. However indirect and brief reference of five types of bhutagni has been made in shusruta.^[8]
3. Acharya Vagbhat has described. bhutagni and malagi along with bhutagni and dhatvagni viz. bhutagni-5, dhatwagni-7, doshagni-3 and malagni-3.
4. Bhava parkash has followed charak and b.vagabhata.^[9]

Thus from the above mentioned references can be divided in thirteen type in three groups.

These are.

1. Jatharagni- one in number present in jathara
2. Bhutagni – five in number from five basic elements.
3. Dhatvagni- seven in number one each in seven dhatus.

Jatharagni : acharaya shushrat has used term pachak agni in the context of pachak pitta. The seat of pachak agni is Ampakyashya madhyasthamin between the amasay and pakvashaya. The organ which comes between amashaya and pakvashaya is grahani i.e-pittadhara kala.

According to astang hridaya, grahani the seat of jathragni so called, because it withhold food for a certain time, to facilitate the digestion, it is responsible to life span, health color ojas strength of all bhutagni and dhatvagni. The strength of grahani and agni is mutually interlinked with each other. If one get vitiated another also gets vitiat and produces diseases.

FUNCTION OF JATHARAGAGNI

The pran vayu take the ingested food from mouth to kosh. The kledaka kaph present in amashay then by virtue of dravasa and snigdhatva transform it into small

particle(sanghatbhed). This makes food particle soft and mucilaginous. Then the jatharagni activated by saman vayu comes in action and digest the undigested food material taken in proper matra and proper manner. As the ingested food material is subjected to digestion first by jatharagni and then to bhutagni and dhatvagni. Hence the jatharagni is most important among all agni. Jatharagni is responsible for separation of digested material into essence portion (Prasad) and waste product in our body^[11] and Beside the above mentioned function of dhatvagni, the strength of dhatvagni or bioenergy in the cell and metabolic process is directly related to the strength of jatharagni.

All the functioning of dhatvagni dhatu pak depends on normal healthy state of jatharagni. If jatharagni is hyper active(tikshna) or hypo active (manda). It will lead to excessive or retarded action of dhatvagni, which can lead to various disease. Thus jatharagni is main agni at which other agni. (bhutagni and dhatvagni) depends and jatharagni control the functioning of all other remaining agni.^[12]

The jatharagni can be grouped in four group according to its power of digestion namely, vishmagni, tikshanagni, mandagni and samagni.^[13]

According to hareet the samagni is due to balance state of vata, pitta and kapha and pitta in excess leads to tikshanagni and when vata and kapha are higher than the normal, the condition leads to mandagni.

- (a) Vishmagni: it is due to excess of vata at agni ahan. This type of agni some time digest some time fails to do.
- (b) Tikshna agni: it is due to excess of pitta dosh. Tirshna means sharp in this state of agni very sharp digestion of food takes place, whatever is the quality of food, that is why it is called srava apachar saha. Acharya sushrat states when the power of digestion increased from normal state food digest very quickly and produces hunger, the throat lip, mouth cavity become dry and feel burning sensation. If the food is not provided adequately. It may digest to dhatu, the condition is called bhasmak rog by yagaratnakar.
- (c) Mandagni : it is due to the excess kapha which cover the seat of agni, mand mean slow. Person have mandagni eat very little and takes more time to digest even the little amount at digested food mandagni leads to ama dosh production.
- (d) Samagni: it is the state of agni when all the dosh's are in balance state samagni digest and assimilate food properly in proper time. Thus this increase the quality of dhatu's.

BHUTAGNI

Every cell of our body is made up of five basic element known as five mahabhuta viz. prithvi, jala, agni, vayu, akash. All the nutrient that we ingest is also made of these five elements. Bhutagni is five in number and present in basic elements i.e. all the nutrient in the world that we eat has, their respective agni. These bhutagni comes in our body with all these food stuff. Bhutagni act after action of jatharagni present in stomach and duodenum. That is why bhutagni pak is also known as intermediate digestion. After jatharagni pak and before dhatwagni pak. It is principle of ayurveda that different organs of our body are nourished by different type of material having the same quality of that different organ that is to say bhutagani pak provide similar substance for nourishment to organs from dissimilar substances.^[14] Acharya chakrapani commented on 'Swan swam pushnanti' that yatha swam it yasya atmiyam for example parthiva part of body e.g bone and cartilage will nourish from similar part of aharaansh.

DHATWAGNI

According to ayurvedic view the element of nutrient substances as processed by bhutagnis are taken up for further metabolic reactions by dhatwagnis, ayurveda has envisaged seven specific types of agnis corresponding to seven species of dhatus viz. ras, rakta, mamsa, meda, asthi, mazza, and shukra. These primary tissue elements are also known as sthaya dhatus or poshya dhatus. The end product of bhutagani pak are known as poshak dravyas viz. ssparithwa poshak drava, appya.....etc. the specific agni corresponding to each dhatu metabolize end product of bhutagni paka and aid in structural synthesis of several constituents to that particular dhatu. Thus rasagni is started to aid in structural synthesis several constituent of the rasadhatu and so on..

Commenting on charak, charkrapani observe, rasadi dhatus, which continuously undergo, destruction are replaced. by dhatwahar derived from four fold kind of nutrition ingested.(chakrapani an ch.su. 28/15)^[15], also say sharirrasdhatus which are destroyed by their own agni are replenish by four kind of food ingested. Thus dhatwagni has a parallel in the intermediary metabolism described by modern physiology and biochemistry.

Vagabhatt has already suggested that the presence of pachakansha in the dhatus and the availability or otherwise(in the dhatus) of Indhan (fuel) corresponding to asthaya dhatus, determine their vriddhi or kashaya as the case may be.

It would be seen that dhatwagni paka takes place away from dhatus .each one of the seven dhatwagnis are apparently group specific in the sense that each variety has specific function to perform viz. parinamana or the transformation of appropriate kind of poshak dravya in to serval constituent element required for the synthesis of particular dhatu complex.

Agni and Pitta.

The discussion on agni cannot be completed without comparative discussion with pitta . As we see the properties and functions of agni and pitta , it seems similar to each other . Now the question arise, is the agni different from pitta ? Does any area exist of agni without pitta, because there is increased digestion and combustion in the body due to ushna guna of pitta , the treatment of agni is also opposite to pitta (su.su.21/9).^[16] Acharaya Maarich has also emphasized that agni present in the pitta give good or bad result when it is normal or vited (ch.su.12/11).^[17]

Acharya sushrut when describe five types of pitta, they named it as agni.

CONSLUSION

After a detailed discussion of agni and pitta. It has been observed that, all the theory regarding pitta and agni has its own important and it is very difficult to conclude on a single point. But what conclusion that can be drawn is agni and pitta are same as per the treatment is concern, but differ at other point. Agni is inside the pitta. That is agni reside in pitta, but agni is not exactly pitta. There are several places where pitta and agni entirely differs to eachother. Acharya charak has mentioned, various type of food which we ingest is digested by its own agni (bhutagni) which is activated and enhanced by jathragni, further it is metabolized by datawagni to provide body strength complexion and happy life & energy.

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