

A CONCEPT OF AGNI IN AYURVEDIC SYSTEM OF MEDICINE: A CRITICAL REVIEW

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ABSTRACT:

In Ayurvedic system of medicine, *Agni* maximally represents digestive & metabolic fire in the body. It is the substance in the secretions of the body which are directly responsible for digestive and chemical changes in the body. Ingested food is to be digested, absorbed and assimilated, which is unavoidable for the maintenance of life, and is performed by the *Agni*. According to the functions and site of action, *Agni* has been divided into 13 types, i.e. one *Jatharagni*(digestive enzymes), five *bhutagni* and seven *dhatvagni* (metabolism at tissue level). *Jatharagni* is the chief among all types of *agni's* because function of *bhutagni* and *dhatvagni* depend on this. Aggravation or diminution of *jatharagni* results in aggravation or diminution of *bhutagni* and *dhatvagni*. *Agni* provides *Bala, Arogya, Ayu, Prana, Swasthyam, Varnam, Utsaha, Prabha, Ojha* and *Teja* to the body. For understanding of disease process and prescribe of treatment is one of the important concepts of *Agni*.

Key Words: *Jatharagni, Dhatvagni, Bhutagni, Bala.*

INTRODUCTION: *Agni* may be correlates with digestive (pak) and different kinds of hormones, enzyme and co-enzymes activities etc. which participate in these digestive & metabolic functions. Due to increased activity of *pitta* in *yuva vastava* (young stage) digestive & metabolic rate are higher. Vigor & vitality of human being is also maintained by balanced activity of *Agni*. It is necessary for proper growth & development of the body & their parts^[1]. Due to advancement in age, depletion of *Agni* is taking place (in old age) which cause instability in *Agni*, ultimately leads to decrease decay, atrophy, decay due to defective digestion in metabolism.^[2]

AIM AND OBJECTIVES:

➤ To emphasize and discuss the Concept of *Agni* in *Ayurvedic* classical literature.

➤ To evaluate the process of digestion and metabolism in *Ayurvedic* classical texts and in modern texts

MATERIAL AND METHODS: Basically this article is review of various *Ayurvedic* classical texts. Materials related to *agni*, in *Ayurveda* and other related topics have been collected from various *Ayurvedic* classical texts. The references were compiled, analyzed and discussed for a thorough and in-depth understanding of the concept of *Agni and ahara paka* (Metabolic transformations) in *Ayurveda*. Explain the correlation between *Pacaka pitta, Saman vayu* and *Agni*. The modern medical

literatures as well as other various related information were collected from related

Concept of Agni: Human body is derived from food. In healthy state the food consumed is properly digested and assimilated by the body with the help of Agni. Agni provides *Bala, Arogya, Ayu, Prana, Swasthyam, Varnam, Utsaha, Prabha, Ojha* and *Teja* to the body^[3]. All the transformations in the body is catalyzed by Agni, if Agni is impaired, the proper transformation of food, *Dhatu* and *Malas* are impaired and this will lead to accumulation of waste products in the body. *Agni Dusthi* is the causative factor for most of the diseases^[4]. The normal activity of the Agni helps the maintenance of physiological activities while its abnormal state produces pathology and its absence causes of death of the human being that is why Agni is known as *Mula* or Vital force^[5]. Agni is closely related to *Pitta*. The main function of *Pitta* is described as *pachana*, separation of *sara* and *kitta*, *Dahana*, *Bhinnasanghata*, *Prinama*, *Ranjana*, *Varnakarana* and *Prabhakarana*. The term Agni not only includes *Jatharagni* but also *Bhutagnis* and

Dhatwagnis. These are responsible for digestion and metabolism at different levels. These are as follows:

[A] *Jatharagni* - 1 [B] *Dhatwagni* - 5
[C] *Bhutagni* - 7

Jatharagni / Pachakagni: It is the main Agni (digestive juice) present in the body which is situated in *Kostha* and does *Pakadi Karmas* (digestion). Existence of all the different kind of Agni in their required *pramana, Guna* and *Karma* is known as *Agnivaishmya* (abnormal function of metabolism and digestion). In all the classical texts four states of *Jatharagni* are described.

[A] *Samagni* [B] *Vishamagni*
[C] *Tikshnagni* [D] *Mandagni*

Classification of Agni seem to have two aspects-

1. An aspect which may be described as natural and which forms as part of *Prakriti* of the individuals as described by *Acharya Charaka*^[6].

The *prakriti* in every individual a specific state of Agni also gets fixed at the time of birth itself. It is illustrated below:

Table no.1: relationship between Prakriti and Agni

S.No.	Prakriti	Agni	Predisposition to
1.	Vata	Vishama	Vata Rogas such as pain, paralysis.
2.	Pitta	Tikshna	Pitta rogas such as acidity, Daha.
3.	Kapha	Manda	Kapha Rogas such as anorexia, Aam.
4.	Sama	Sama	Resistance to diseases. Improve immunity.

[The classification is important in preventive medicine]

2. An aspect where *Trisdoshas* get involved due to the operation of different etiologic factors on the body leading to reciprocal influence between them and Agni.

The classification of different states of Agni due to pathology has been explained well by

Vagbatta. Acc. to him the function of Agni is normal when *Samana Vayu* is functioning normally in its own place. On the other hand, if this *Vayu* moves to the places other than its own (*Prakopa*). Agni too will be disturbed. Such *Prakupita Vayu* if gets

combine with *Pitta*, then the *Jatharagni* becomes *Tikshna* (increase of appetite) and if it is affected by *Kapha* then the *Agni* become *Manda* (loss of appetite)^[7].

Samagni: In the well equilibrated state of functioning of *Tridoshas* the *jatharagni* functions normally. In this state *Jatharagni* ensures complete digestion of food in scheduled time, without giving any adverse effect to the body^[8]. The *Samagni* digests and assimilates food properly at the proper time. This thus increases the quality of the *Dhatus* (supportive tissues of the body). Persons having *Samagni* are always hale and healthy.

Vishamagni: In *Vishamagni*, *Agni* varies with periods of strong appetite alternating with loss of appetite^[9]. This type of *Agni* changes between digesting food quickly and slowly. When this *Agni* is affected by the *Vata Dosh*, it creates different types of *udargata roga*.

Tiksnagni: The *Agni* in this state is excited by *pitta*, hence is known as *Tiksnagni*. It digests even large quantity of food in scheduled time^[10]. It is means very quick/very sharp/very fast. *Tikshnagni* is a state of very quick digestion of food, regardless of the type of food. *Acharya Shushrut* states that when the power of digestion is increased from normal to above normal, food digests very quickly and produces hunger or the desire for food. When food is digested, the throat, the mouth cavity and the lips become dry with a burning sensation. This condition is known as “*Bhasmak Roga*” according to Ayurveda.

Mandagni: *Agni* is low in this type with poor appetite, low metabolism and it can't digest even little quantity of food in

scheduled time. With three kinds of abnormal *Agnis* the digestion of food will not be proper. In *Mandagni* the food will be *Apakwa* (inadequately digested). Word “*Mand*” means slow. The meaning of the *Mandagni* is slow digestive power or digestive capacity. Those who are having *Mandagni* eat very little and are unable to digest the smallest amount of food. *Dhanvantri* says that *Agni* digests the least amount of food in the greatest amount of time.

In *Mandagni* and *Vishamagni* there will accumulation of *Ama* (undigested material) in *rasa Dhatu*. *Samarasa Dhatu* travels all over the body and produces symptoms like *Srotorodha*, *Balabhramsa*, *Gaurava*, *Anilmudhata*, *Alasya*, *Apakti*, *Nisthiva*, *Malasanga*, *Aruchi* and *klama*. The *Doshas* which are mixed with *Ama* produce some of their own symptoms. Since the *Tridoshas* are also present in the *rasa* they also get mixed with the *Ama* and called as *Samadoshas*. *Samadoshas* get enter into the *Dhatus* and *Malas*, get lodged in them and make them *Samadushyas*. All these together give rise to many diseases^[11].

Bhutagni: The human body is composed of *Panchamahabhutas* (five elements of nature) and the food on which the body survives is also made up of the same elements. They are five in number and present in *Kosthagni* itself. *Acharya Charaka* has referred *Bhutagni* in the context of his description of the process of normal digestive events. In this view the digestion of food, by *Jatharagni* leads to the breakdown or *sanghata Bheda* of the food into five distinct physiochemical groups (viz *Parthiva*, *Apya*, *Agneya*, *Vayavya* and

Nabhasa) and the activation of the *Agni Bhuta* present in each one of them.^[12]

The *Bhutagni* thus activated digests the substances of that group. *Acharya vagbhata* also stated that each one of the five kinds of *dravyas* after *Bhutagni Paka* precedes to argument the corresponding *Bhuta* element that composes the human body^[13]. There are five *Agnis* in each of the five basic elements, namely – *Parthiva* (earth), *Apya* (water), *Tejas* (*Agni*), *Vayavya* (*vayu*) and *Nabhasa* (*akash*).

Each and every cell in our body is composed of the five *mahabhutas* or five basic elements. Naturally, each cell (*dhatu paramanu*) consists of these five *Bhutagni* also. All the nutrients in this world that we eat also consist of the same five basic elements with their respective *Agni* or bioenergies. Thus, they are completely similar with respect to the five basic elements with their *Bhutagni* in our body cells as well in the entire outside nutrient that we ingest for the nutrition of our body. *Acharya Charaka* has mentioned that the five *Bhutagni* digest their own part of the element present in the food materials. After

the digestion of food by the *Bhutagni*, digested materials containing the elements and qualities similar to each *bhutas* nourish their own specific *bhautika* elements of the body.^[14] These *Bhutagnis* act after the *Jatharagni* present in the stomach and duodenum, acting on the food and causing their disintegration. In the modern physiological perspective, the action of *Jatharagni* can be equated with the digestion in the stomach and duodenum, and the action of the *Bhutagni* can be equated with the conversion of digested materials in the liver. The Vitamins, Essential amino acids, Essential fatty acids are to be supplemented essentially through the food for the conversion of concerned molecules in to the body tissues on to yield energy^[15]. Thus the essential factors supplemented through food for the synthesis of this *panchabhoutika sharira* can be considered as *Bhutagni amshitas*, i.e. Vitamins, Essential amino acids, Essential fatty acids^[16].

The *Panchamahabhuta* composition of the body constituents are described by *Acharya Chakrapani dutta* as follows –

Table.No.2 Relation between Tridoshas and PanchaMahabhutas

TRIDOSHA	MAHABHUTA PREDOMINANT
<i>Vata</i>	<i>Vayu</i> Predominant
<i>Pitta</i>	<i>Agni</i> predominant
<i>Kapha</i>	<i>Apya</i> predominant

Table.No.3 Relation of Sapta Dhatu and Panchamahabhuta

SAPTA DHATU	PANCHAMAHABHUTA
<i>Rasa</i>	<i>Apya</i> predominant
<i>Rakta</i>	<i>Agni + Apya</i> predominant
<i>Mamsha</i>	<i>Parthiva</i> predominant
<i>Meda</i>	<i>Apya + Parthiva</i> predominant
<i>Asthi</i>	<i>Parthiva + Vayu + Aakash</i> predominant
<i>Majja</i>	<i>Apya</i> predominant

Shukra	Apya predominant
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Table.No.4 Relation of Trimala and Panchamahabhuta

TRIMALA	PANCHAMAHABHUTA
1.Mutra	Apya predominant
2. Purisha	Parthiva predominant
3.Sweda	Apya predominant

So everything in the body is the combination of *Panchamahabhutas*. The *Bhutagni Pakas* is also important among the *pakas*. Any disturbances of any *Bhutagni* cause disturbances to those structures and hence it fails to get nourished. The body develops through the nourishment of the *seven Dhatus* which are also combination of *Panchamahabhutas*. Each *dhatu* gets their nourishment through the nourishment of *Bhutas* by which they are formed. So *Bhutagni* is present in *Dhatus* also.

Dhatwagnis: The use of term *Dhatwagni*, made more frequently in the classical world of *Ayurveda*, stands for *Pittas* concerned with the formation of *Dhatus*. The seven kinds of *Dhatwagnis*.^[17]

[1] *Rasagni* [2] *Raktagni* [3] *Mamsagni* [4] *Medagni* [5] *Majjagni* [6] *Asthyagni* [7] *Shukragni*.

Each *Dhatwagni* attends the digestion supplied to that *Dhatu* from circulating *Poshakamsha*. For example the *Dhatwagni* present in *mamsa Dhatu* digest the nutrient material required for *Mamsa Dhatu* only, but cannot digest those of other *Dhatus*. *Dhatwagni* is essential for the maintenance and growth of the *Dhatus*. Functions of *Dhatwagnis* are mainly two. One is synthesis of new tissue. Second is to yield energy for the function of tissue. If *Dhatwagni* is impaired both of these will impair.^[18]

As the weakness of *kosthagni* leads to formation of *Ama*, the weakness of

Dhatwagni also leads to production and accumulation of *Ama* in *Dhatu* (tissue level) concerned, giving rise to improper *Dhatu Vridhhi*. If *Kosthagni* is strong *Dhatwagni* also become strong. If *Dhatwagni* is stronger, they utilize quickly the quantity of nutrients supplied and still not getting satisfied and begins to destroy the *Dhatu* itself. This leads to *Dhatukshaya*. Hence both *vridhhi* and *Kshaya* of the *Dhatus* are *Vikrita* and are mainly due to weak and powerful *Dhatwagnis* respectively.^[19]

CONCLUSION: Explaining briefly the digestive and metabolic functions of *Agni*, *Acharya Charaka* has mentioned that various types of dietetic materials are digested by their own *Agni (Bhutagni)*, encouraged and enhanced by *Antaragni (Jatharagni)*, which is further digested and metabolized by *Dhatvagni* to associate the body with the nutritional strength, complexion and happy life along with providing energy to the seven *dhatu*s. It consist digestive (*pak*) enzymes and different kinds of hormones, and co-enzymes activities etc. which participate in these digestive & metabolic functions. It is a logical conclusion that *Ama* is produced due to hypo-functioning of *Agni*. At any level of the three *Pakas* (digestion and metabolism i.e. *Madhur, Amla & Katu avastha paka & vipaka*) due to hypo-functioning of the *agni* concerned unwanted chemical substances are produced known as *Ama*. Hypo-functioning of any *Agni* especially of

Jatharagni is likely to affect the function of other too, leading to formation of *Ama* in the different stage of *Paka-karma*. Lastly we can say that *Agni* plays very important role in growth, development & maintenance of the body. In healthy individual during awakening and sleep the *Agni* excited by *Samanavata* due to association of respiration and being blown by *Udanavata*. After digestion by *paccakapitta*, the metabolic products circulate in micro channel under the control of *Vyanavata*.^[20]

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Source of support: Nil

Conflict of interest: None
Declared