

**Original Article****Importance of Agni and its Impact on Human Body**Pushpa Gond¹, Jitendra Kumar², P.S. Byadgi^{3*}, Lakshman Singh⁴¹Ph.D. Scholar, Department of Shalya Tantra, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi²Junior Resident, Department of Vikriti Vigyan, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi³Assistant Professor, Department of Vikriti Vigyan, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi⁴Professor and Head, Department of Shalya Tantra, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi**ARTICLE INFO:****Article history:**

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ABSTRACT

Ayurveda is the ancient Indian system of life sciences and Medicine, its historicity going back to the Vedas. Its classical knowledge and practice is based on its own physics and biology, its unique pronature holistic health and disease concepts and diagnostics as well as its own material medica. Ayurveda has described an important factor of digestion and metabolism in our body as Agni. Ingested food is to be digested, absorbed and assimilated, which is unavoidable for the maintenance of life, and is performed by Agni in Ayurveda, the term "Agni" is used in the sense of digestion of food and metabolic products. Agni converts food in the form of energy, which is responsible for all the vital functions of our body. About the importance of Agni, Acharya Charak has mentioned that after stoppage of the function of Agni, the individual dies, and when the Agni of an individual is sama, then that person would be absolutely healthy and would lead a long, happy, healthy life. But, if the Agni of a person is vitiated, the whole metabolism in his body would be disturbed, resulting in ill health and disease. Hence, Agni is said to be the base (mool) of life.

1. Introduction

The ancient classical knowledge-base of Ayurveda is available today in the form of a robust ancient classical literature, the main books are the Brihatrayi (Caraka Samhita, Susruta Samhita and Astanga Sangraha) and Laghutrayi (Madhav Nidana, Sharangdhara Samhita and Bhavaprakash Samhita) texts which are considered the most respected and authentic source books. Ayurveda is the ancient Indian system of life sciences and Medicine, its historicity going back to the Vedas. Its classical knowledge and practice is based on its own physics and biology, its unique pronature holistic health and disease concepts and diagnostics as well as its own material medica. The entire basic physics and biology of Ayurveda are greatly different from the modern basic sciences and the understanding of the structure and function of human body, the pathology and diagnostics are based on its own theories of Triguna (Sattva-Raja-Tama), Tanmatra, Panchamahabhuta, Tridosha (Vata-Pitta-Kapha) and Agni.

Consumption of food may be various forms i.e. eatables, beverages, linctus (licked) and masticable foods, which is wholesome if consumed in suitable quantity and free from contamination. These substances undergo metabolic transformation by the effect of Jatharagni, Bhutagni and Dhatvagni. Initially Jatharagni gives stimulation to Bhutagni

because consumed food is Panchabhautika, it has to undergo transformation by the respective Bhutagni's then only it becomes easy for tissue metabolism by Dhatvagnis. Then processed metabolic products circulate inside the srotas continuously by the help of Vata dosha. This favours the development, strength, complexion and happiness as well as growth of tissues. Dhatus remain in their normalcy after receiving respective nutrients from metabolized food substances. Jatharagni is the main principal substance responsible for disease and health. During its normalcy it is responsible for longevity, complexion, strength, health, enthusiasm, well built, luster, immunity (ojas), temperature, other Agni's (bhutagni and dhatvagni) and other vital functions all are dependent on jatharagni. Therefore healthy state of body and diseased condition is entirely dependent on status of agni[1].

2. Material and Methods

This concept is based on a review of Ayurvedic texts. Materials related to kala, agni and other relevant topics have been collected and compiled. The main Ayurvedic texts used in this study are Charak Samhita, Susruta Samhita, Astang

Sangraha, Astang Hridaya, Bhavprakash, Yogaratnakar, Parameswarappa's Ayurvediya Vikriti Vigyan and Roga Vigyan, commentaries of Samhita's and current articles.

2.1 Concept of Agni

Ayurveda has described an important factor of digestion and metabolism in our body as Agni. Ingested food is to be digested, absorbed and assimilated, which is unavoidable for the maintenance of life, and is performed by Agni in Ayurveda, the term "Agni" is used in the sense of digestion of food and metabolic products. Agni converts food in the form of energy, which is responsible for all the vital functions of our body.

About the importance of Agni, Acharya Charak has mentioned that after stoppage of the function of Agni, the individual dies, and when the Agni of an individual is sama (normal), then that person would be absolutely healthy and would lead a long, happy and healthy life. But, if the Agni of a person is vitiated, the whole metabolism in his body would be disturbed, resulting in ill health and disease. Hence, Agni is said to be the pedestal (mool) of life[1].

In Brahmasutra, Agni has been meant to be a sign of life in the body. Agni moves everywhere and metamorphoses substances, burns, assimilates, glitters and grows. Agni is a pivot around which the remaining factors responsible for the maintenance of health and causation of disease as well as decay revolve.

In Shabdakalpa druma, 61 synonyms of Agni have been compiled. These synonyms help in explaining the nature and functions of the Agni e.g. Vaishvanara, Sarva Paka, Tanoonpata, Amivachatana, Vishwambhar, Rudra[2] etc.

2.2 Pitta-Vis-a-vis-Agni

The term pitta is derived from the root 'tap' which means[1] combustion/digestion-to give nourishment to the body by digestion of ingested food[1], to maintain heat- by means of heat; it maintains the colour, lustre etc. of the body[3].

There is an ambiguity exist that regarding pitta and agni. Is there a separate agni (fire) apart from pitta or is pitta itself the agni? Different views have been suggested regarding Pitta and Agni by different Acharyas. Some Acharyas consider Pitta to be Agni while other speaks differently. According to Acharya Sushruta, there is no existence of any other Agni in the body without Pitta because when the qualities/ properties of fire are diminished, the use of substances of similar qualities/properties have been prescribed and when the properties are greatly increased, resorting to cold treatments have been advocated[3]. Acharya Marichi has also emphasized that the Agni present in the Pitta gives good or bad results when it is normal or vitiated[4]. Chakrapani has commented on "pittantargata" that the function of Pitta inside the body is not combustion but its work is to provide heat of Agni. According to Hemadri, Pitta is of five divisions, which are located between the pakvashaya and amashaya, although it is composed of panchabhutas.

Because of an increase of (predominance qualities of) tejas bhuta, it is devoid of liquidity (although it is a liquid). Also, because it does not possess snigdha (viscosity), sita (coldness) and such other properties of apa bhuta, it is called by the term "Anal" because of its function of paka. It cooks the food, dividing it into essence and waste separately. Being localized there, it bestows grace (help) to the other pitta present there and also the other dhatvagni present in the dhatus by giving them strength (power of functioning), which is known as "Pachaka Pitta"[5].

Different examples are available in our classics to indicate the Pitta is the same as Agni. But, some doubts arise behind the concept of whether Pitta is Agni e.g.

- Why indulgence of aggravating factors like katu, vidahi, etc. reduces the strength of Agni instead of enhancing it.
- Appropriate example to highlight the above concept that ghee alleviates Pitta but enhances Agni.
- The quotation of Acharya Sushruta, Samadoshah samagnishcha has clearly indicated that Pitta and Agni are not the same.

2.3 Types of Agnis

Agni is innumerable because of its presence in each and every *dhatu paramanu* (cell) of the body. But, enumeration of the number of *Agnis* varies in various classical Ayurvedic texts, as shown below

- Charaka has mentioned about 13 *Agnis*. *Jatharagni* –1, *Bhutagni* –5, *Dhatvagni*[6] –7.
- According to Sushruta, five types of *Agnis* are illustrated, viz. *Pachakagni*, *Ranjakagni*, *Alochakagni*, *Sadhakagni* and *Bhrajakagni*[7]. However, there is an indirect reference of five *Bhutagnis* underlying in the brief description made to the transformation of food stuff[8].
- Vagbhata has described different types of *Agni*, viz. – *Audaryagni*-1, *Bhutagnis*[9]–5, *Dhatvagnis* –7, *Dhoshagni* –3 and *Malagni*[10]–3, Pitta -5 .
- Sharangadhara has recognized five *pittas* only (*Pachak*, *Bhrajak*, *Ranjak*, *Alochaka* and *Sadhak*)[11].
- Bhavamishra has followed Acharya Charaka and Vagbhata[12].

Agni has been divided into 13 types according to the function and site of action. These are:

- (a). *Jatharagni* – One *Agni* present in the stomach and duodenum.
- (b). *Bhutagni* – Five *Agni* from five basic elements.
- (c). *Dhatvagni* – Seven *Agni* present, one in each of the seven *dhatus*.

Accordingly, they are classified into three groups, namely Jatharagni, Bhutagni and Dhatvagni.

(a). Jatharagni

Jatharagni is the *Agni* or bioenergy present in the *Jathara* (stomach and duodenum). According to *Ashtanga Hridaya*, *Jatharagni*, the seat is *grahani* (duodenum), so called because it withholds the food for a certain time inside the *Amasaya* (stomach) to facilitate digestion. In the opinion of *Dhanvantari*, it is the *Kala* known as “*Pittadhara*,” situated at the entrance of the *Pakvashaya* (intestine) and acting as a bolt to the door of the pathway/channel of food. It is responsible for the duration of life, health, valour, ojas (essence of the *dhatu*s), strength of all the *bhutagni* and *dhatvagni*. The strength of the *grahani* is from *Agni* itself, and the strength of *Agni* is from *grahani*. When the *Agni* undergoes vitiation, *grahani* also gets vitiated and produces diseases[13].

Jatharagni is considered to be the most important because each and every nutrient that one ingests first comes to the *Jathara* and is subjected to the action of *Jatharagni*. *Jatharagni* digests the food materials that consist of the five basic elements and transforms it for utilization by the respective *Dhatu paramanus* (tissues). It is also responsible for separation of the food material into the essence portion (*Prasad*) and the waste products (*kitta*) in our body[14].

Jatharagni is directly related to *Dhatvagni* or bio-energy in the cells and their metabolic processes, with ultimate tissue metabolism or *Dhatu-Paka* process. All the *Dhatvagni* depend on the normal, healthy state of *Jatharagni*. If the *Jatharagni* is hyperactive (*Tikshna*) or hypoactive (*Manda*), it will cause an excessive or retarded action of the *Dhatvagni*. This disturbed action ultimately leads to various disorders. *Jatharagni* is the main important *Agni* that controls the function of all other 12 *Agnis*. All the *Agnis* are totally dependent on the status of *Jatharagni*[15].

Jatharagni is also classified into four categories according to its performance of digestion in the human being namely *Vishmaggni*, *Tikshanagni*, *Mandagni* and *Samagni*[16].

According to *Hareet Samhita*, *Samagni* depends on whether the *Doshas* (*Vata*, *Pitta*, *Kapha*) are in normal stage. When the *Pitta* is higher than normal, the condition is known as *Tikshnagni*. When *Vata* and *Kapha* are higher than normal, the condition is known as *Mandgni*.

(b). Bhutagni

Bhutagni is the one that is present in a basic element (*Bhutas*). 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 bioenergy. 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 Charak 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[17]. 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.

(c). Dhatvagni

All the seven *Dhatu*s (seven element tissues of the body) contain their own *Agni* to metabolize the nutrient materials supplied to them through their own *Srotas*.

- (a). *Rasagni* present in the *Rasa Dhatu*.
- (b). *Raktagni* present in the *Rakta Dhatu*.
- (c). *Mamsagni* present in the *Mamsa Dhatu*.
- (d). *Medagni* present in the *Meda Dhatu*.
- (e). *Asthyagni* present in the *Asthi Dhatu*.
- (f). *Majjagni* present in the *Majja Dhatu*.
- (g). *Shukragni* present in the *Shukra Dhatu*.

Each *Dhatvagni* or the bioenergy present in each *Dhatu* synthesizes and transforms the essential *Rasa Dhatu* required for that particular *Dhatu* or cell from the basic nutrients present in the *Anna Rasa* or essence of the diet that we consume. Each *Dhatvagni* has got a speciality to synthesize and transform the constituents suitable to its particular *Dhatu*. This action is a sort of selective action. Acharya Charaka has mentioned the fact that the seven *dhatu*s that are a support of the body contain their own *Agni*, and by their own *Agni* they digest and transform the materials supplied to them to make the substances alike to them for assimilation and nourishment[18].

2.4. Importance of Jatharagni

Functions of various agni elaborately discussed above in which jatharagni is the chief among all types of agnis because function of bhutagni and dhatvagni depends on this. Aggravation or diminution of jatharagni results in aggravation or diminution of bhutagni and dhatvagni. Therefore by all means one has to protect jatharagni by consuming suitable wholesome dietetics and behaviour because longevity and strength depends on normal state of agni. On the contrary one, who consumes unwholesome diet due to greed, succumbs to disease caused by the vitiation of grahani[19].

2.5 Physiological and Pathological State of Agni[20-23]

(a). *Samagni*

First variety is not associated with dosa and it is called samagni state and it is the physiological state of agni. The *Samagni* digests and assimilates food properly at the proper time. This thus increases the quality of the *Dhatu*s (supportive tissues of the body). Persons having *Samagni* are always hale and healthy.

(b). *Vishamagni*

Visamagni is the state in which improper digestion and metabolism takes place i.e. sometimes performs normal functions followed by abnormal one and manifest flatulence, abdominal pain, upward movement of vata inside the kosta, diarrhea, and heaviness in abdomen, intestinal gurgling and straining exercise for evacuation of stools. When this *Agni* is affected by the *Vata Dosha*, it creates different types of *vatavyadhi*.

(c). *Tikshnagni*

Tikshnagni 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. *Tikshnagni* state gives rise to manifestation of *vatavyadhi*.

(d). *Mandagni*

"*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 and manifest heaviness in abdomen and head, cough, dyspnea, excessive salivation, vomiting and weakness of the body. *Mandagni* state gives rise to manifestation of *kaphaja vikara*.

3. Conclusion

After a detailed discussion on *Pitta* and *Agni*, it is concluded that all theories in their regard have their own importance, and it is very difficult to conclude which theory is more appropriate. But, one conclusion that can be drawn after going through the details is that in regard of treatment, *Pitta* and *Agni* are the same, whereas in accordance to their, build they differ from each other. 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.

References

- [1]. Sharma RK, Das VB: Editor Caraka Samhita of Agnivesa, Chikitsa Sthan; Grahani Dosa Adhyaya: Chapter 15, Verse 3, Varanasi: Chaukhamba Krishnadas Academy, Edition 1, Vol. IV, 2009: 1-2.
- [2]. Deva RR: Editor, Shabdakalpa druma, Delhi: Nag Publishers Jawahar Nagar, Edition 1, Vol I, 1988: 8.
- [3]. Sharma PV: Editor, Sushruta Samhita of Dalhana, Sutrasthana; Vranaprashna Adhyaya: Chapter 21, Verse 5. Varanasi: Chaukhamba Vishvabharati, Oriental Publishers and Distributors, Ed. 1, Vol. 1, 2010: 225.
- [4]. Sharma RK, Das VB: Editor, Caraka Samhita of Agnivesa, Sutra Sthan; VatakalakaliyAdhyaya: Chapter 12, Verse 11. Varanasi:Chaukhamba Krishnadas Academy, Ed.1, Vol. 1, 2009:240-241.
- [5]. Upadhyaya Y: Editor, Astangahrdaya of Vagbhata, Sutra Sthan; Dosabhe deeya Adhyaya: Chapter 12, Verse 10-12, Varanasi: Chaukhambha Prakashan, Ed.1, 2007: 90-91.
- [6]. Sharma RK, Das VB: Editor, Caraka Samhita of Agnivesa, Chikitsa Sthan; Grahani Dosa Adhyaya:Chapter 15, Verse 5,13,15. Varanasi:Chaukhamba Krishnadas Academy Ed. 1, Vol. IV, 2009: 3-10.
- [7]. Sharma PV: Editor, Sushruta Samhita of Dalhana, Sutrasthana; Vranaprashna Adhyaya: Chapter 21, Verse 10, Varanasi: Chaukhamba Vishvabharati, Oriental Publishers and Distributors, Ed. 1, Vol. I, 2010: 227.
- [8]. Sharma PV: Editor, Sushruta Samhita of Dalhana, Sutrasthana; Anapanvidhi Adhyaya: Chapter 46, Verse 526, Varanasi: Chaukhamba Vishvabharati, Oriental Publishers and Distributors, Vol. I, 2010: 561.
- [9]. Upadhyaya Y: Editor, Astangahrdaya of Vagbhata, Sutra Sthan; Dosabhedeeeya Adhyaya: chapter 12, Verse 12-13, Varanasi: Chaukhambha Prakashan, Ed. 1, 2007: 90-91.
- [10]. Upadhyaya Y: Editor, Astangahrdaya of Vagbhata, Sharir Sthan; Angvibhagsharir Adhyaya: chapter 3, Verse 49, 56, 59, Varanasi: Chaukhambha Prakashan, Ed. 1, 2007: 188,189.
- [11]. Srivastava S: Editor, Sharngadhar Samhita of Acharya Sharngadhar, Purva Khand; Kaladikakhyanam: Chaptor 5, Verse 30-32,Varanasi:Chaukhambha Orientalia, Ed. 1, 2005: 41-42.

- [12]. Misra B, Vaisya R: Editor, Bhavaprakasa of bhava Misra, Garbhprakarnam: Chapter 3, Verse 121-123, Varanasi : chouxhambha Sanskrit Bhawan, Ed. 11, Vol. I, 2010: 37-39.
- [13]. Upadhyaya Y: Editor, Astangahrdaya of Vagbhata, Sharir Sthan; Angvibhagsharir Adhyaya: Chapter 3, Verse 50-54, Varanasi: Chaukhambha Prakashan, Ed. 1, 2007:188-189.
- [14]. Upadhyaya Y: Editor, Astangahrdaya of Vagbhata, Sharir Sthan; Angvibhagsharir Adhyaya: chapter 3, Verse 61, Varanasi: Chaukhambha Prakashan, Ed. 1, 2007: 189.
- [15]. Sharma RK, Das VB: Editor, Caraka Samhita of Agnivesa, Vol. IV Chikitisa Sthan; Grahani Dosa Adhyaya: Chapter 15, Verse 39-40, Varanasi:Chaukhamba Krishnadas Academy, Ed. 1, 2009: 22-23.
- [16]. Sharma RK, Das VB: Editor, Caraka Samhita of Agnivesa, Vol. IV Chikitisa Sthan; Grahani Dosa Adhyaya: Chapter 15, Verse 50-51. Varanasi:Chaukhamba Krishnadas Academy, Ed. 1, 2009: 27.
- [17]. Sharma RK, Das VB: Editor, Caraka Samhita of Agnivesa, Chikitisa Sthan; Grahani Dosa Adhyaya: Chapter 15, Verse 13, 14, Varanasi:Chaukhamba Krishnadas Academy, Vol. IV, 2009: 9-10.
- [18]. Sharma RK, Das VB: Editor, Caraka Samhita Of Agnivesa, Chikitisa Sthan; Grahani Dosa Adhyaya: Chapter 15, Verse 15-16, Varanasi:Chaukhamba Krishnadas Academy, Ed. 1, Vol. IV, 2009: 10-11.
- [19]. Byadgi PS: Ayurvediya Vikrti Vigyan & Roga Vigyan, Chaukhambha Publications, New Delhi, Edition 1, Vol. I, 2009: 74.
- [20]. Sharma RK, Das VB: Editor, Caraka Samhita of Agnivesa, Chikitisa Sthan; Grahani Dosa Adhyaya: Chapter 15, Verse 50-51, Varanasi:Chaukhamba Krishnadas Academy, Vol. IV, 2009: 27.
- [21]. Byadgi PS: Ayurvediya Vikrti Vigyan & Roga Vigyan, Chaukhambha Publications, New Delhi, Edition 1, Vol. I, 2009: 76-77.
- [22]. Sharma PV: Editor, Sushruta Samhita of Dalhana, Sutrasthana; Aturupkramneeya Adhyaya: Chapter 35, Verse 24-25, Varanasi: Chaukhamba Vishvabharati, Oriental Publishers and Distributors, Ed. 1, Vol. I, 2010: 334-335.
- [23]. Upadhyaya Y: Editor, Astangahrdaya of Vagbhata, Sharir Sthan; Angvibhagsharir Adhyaya: Chapter 3, Verse 76, Varanasi: Chaukhambha Prakashan, Ed. 1, 2007: 191-192.

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