

Physiological Evaluation and Correlation of *Twacha* and *Agni W.S.R.* to *Bhrajak Pitta*

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Abstract- The primary agent in the *Paka* (digestion, transformation) process is *Agni*. Food that has been ingested needs to be digested, absorbed, and assimilated; this process is carried out by the *Agni*. Different examples are in our classics to indicate that *Pitta* is the same as *Agni*, but some doubt arises behind this concept, that *Pitta* is *Agni*¹. Since *Agni* is manifested in the body as *Pitta*, *Karmas* mentioned for *Pitta* is itself the *Karma* of *Agni*. Pathological increase in *Pitta* causes yellow-coloured skin and eyes and a decrease in *Pitta* causes loss of lustre and low glorification (*Prabhahani*). *Pitta* has five subtypes *Aalochak*, *Ranjak*, *Sadhak*, *Pachak* and *Bhrajak Pitta*. *Bhrajak Pitta* is located in the skin and its functions are regulation of body heat maintaining normal skin colour and absorption and digestion of medicine applied on the skin.

Keywords- *Agni*, *Pitta*, *Twacha*, *Bhrajak Pitta*

INTRODUCTION

The branch of life science that deals with the functional aspect of *Dravya* is termed physiology. It can be noticed that, in *Ayurvedasamhitas*, there is no exact description regarding the *Nirukti* and *Gunas* of *Agni*. However, the physiological and pathological phenomena of *Agni* have been described at every point of discussion in *Samhitas*. *Acharya Charak* has specified a few more *Saririka* and *Manasika* functions of *Agni*. *Saririka* functions are *Ayu*(lifespan), *Svasthya*(health), *Upachaya* (growth or metabolism) and *Prana* (life or energy).² *Manasika* functions are *Utsaha* (enthusiasm), *Bhaya*(fear), *Krodha*(anger), *Harsha*(pleasure), *Moha*(desire) and *Prasad* (happiness). *Pitta* is considered as *Agni*. *Sthana* of *Pitta* are *Nabhi*(umbilicus), *Aamashaya*(stomach), *Sweda*(sweat), *Lasika*(serum), *Rudhir*(blood), *Rasa*, *Drik*(eyes), *Sparshanedriya* (skin). *Pitta* has *Aalochak*, *Ranjak*, *Bhrajak*, *Sadhak*, and *Pachak* five subtypes. Out of five subtypes, *Bhrajak Pitta* is located

in the skin. The main function of *Bhrajak Pitta* is to maintain the colour and lustre of skin. It has also been stated that it governs the normal and abnormal temperature of the body.

Agni as per *Ayurveda*

Agni as a metabolic fire in human Body

Commonly used synonyms in *Ayurveda* classical text books are *Agni*, *Vahni*, *Pavak* and *Anala*. The entire human body is made up of *Dosha*, *Dhatu* and *Mala*.³ Even though *Agni* is given prime importance, it is not mentioned as a separate constituent of the human body. This is because the *Agni* in the human body is a *Virya* or force or power that exists in every part of the human body. Hence, a separate mention of it is not required to prove its importance in the body.

Agni is having 13 categories. one- *Kosthagni*, five- *Bhutagnis* and seven-*Dhatwagnis*. All the 13 categories of *agni* are key factors in transformation of consumed *ahara viharadi dravya* of *vijatiya* origin to *sajatiya* nature.

1) *Kosthagni* (1type)

Agni vs. *Pitta*

Whether *Agni* and *Pitta* are same or different is a controversy among *Ayurveda* Physicians. Some physicians support the view that both are same, while some oppose it. *Santap* or *Usma* is the common term for both *pitta* and *Agni*, it is the first reason. Second reason is usage of *Agni* and *Pitta* as same at various parts in the textbook. According to *Acharya Charak* *Agni* present in the Universe, is present inside the human body in the form of *Pitta*.⁴ *Usma* (heat) of *Agni* is present or manifested inside the body in the form of *Pitta*. *Usma* or Heat can perform its action only in the presence of carrier. For example, in human body heat can produce burns only when it is contact with the body in the form of oil and water etc. Here, heat is the

cause and performer of the burn. But it is transferred through oil or water which acts as the carrier to transfer heat to the body without which there will not be any burn. Similarly, *Pitta* in human body acts as the carrier of *Agni* which does its functions. This *Agni* in human body has got the nature of *Sukshmatva*, i.e., invisible to naked eye. But *Pitta* is in visible form. Hence, it can be interpreted that *Pitta* is the *Sthulabhaga*, which can be perceived through *Chaksurendriya*.

Physiology of *Bhrajak Pitta*

The *Agni* present in the skin is called as *Bhrajakagni*. It produces *Usma* (temperature on skin), *Paka* of the *Dravyas* used as *Abhyanga*, *Pariseka*, *Avagaha* or *Lepa* and determination of complexion.⁵

There are several *Dhamanis* that manifest themselves in the skin. Sweat is evacuated along this channel, and *Rasa-Rakta Dhatu* are constantly moving to sustain *Usnata* in the skin. The *Virya* of *Dravyas* used in the *Abhyanga*, *Pariseka*, *Avagaha*, and *Alepa* processes enter these *Dhamanis* through these holes. According to *Dalhan*, the term *Tvacivapakvani* signifies that there is *Pachan* in the *Tvak* via *Bhrajakagni*.⁶

Twacha and *Pitta Dosha* with correlation of *Agni*

Twacha is one of the sites of *Pitta Dosha*. *Sushruta* was the first *Acharya* to describe *Bhrajaka Pitta* as a variety of *Pitta*. He also used the term *Bhrajaka Agni* for *Bhrajaka Pitta*. *Acharya Vagbhata* also described the location and function of *Bhrajaka Pitta*. *Pachaka Pitta* and *Ranjaka Pitta* also indirectly play a role in the maintenance of Skin colour. According to *Charak*, the *Pitta Dosha* is responsible for *Prakrita & Vikrita Varna* in its normal & abnormal state respectively. *Avabhasini*, the first layer of *Twacha* exhibits all types of complexions & 5 types of *Cchaya* which due to the action of *Bhrajaka pitta*.⁷

यत्तु त्वचि पित्तं तस्मिन् भ्राजकोऽग्निरिति संज्ञा, सोऽभ्यङ्गपरिषेकावगाहावलेपनादीनां क्रियाद्रव्याणां पक्ता, छायानां च प्रकाशकः ॥(Su.su.21/10)

Different skin applications (like paste, and ointments) are digested and absorbed through skin due to *Bhrajak Pitta*. He describes *Bhrajak pitta* as *Agni*.

Bhela says that *Bhrajaka pitta* is responsible for manifestation of various *Prabha* of head, hand, feet, sides, back etc. & it brightens the *Prabha*.

“आयुर्वर्गो बलं स्वास्थ्यमुत्साहोपचयौ प्रभा|
ओजस्तेजोऽनयः प्राणाश्चोक्ता देहान्निहेतुकाः||
(cha.chi 15/3)

If *Agni* is functioning proper in a person, then his Skin is having good lustre and texture.

CONTEMPORARY VIEW

Melanin is a broad term for a group of natural pigments which is produced by a group of cells called as melanocytes. In humans, melanin is the primary determinant of skin colour. Melanin synthesis begins in liver where phenylalanine is converted to tyrosine by the action of phenylalanine hydroxylase. L-tyrosine is then converted into L-DOPA by the action of tyrosinase enzyme within the melanocyte's melanosome. L-DOPA is then oxidized to DOPA quinone. From DOPA quinone the dark pigments that are mixed melanin's are produced.⁸

Amino acid L-tyrosine can be compared to *Rasadhatu* and *Bhrajakagni* as the tyrosinase enzyme. The Proper functioning of this *Agni* will result in proper *Varna*.

CONCLUSION

Agni in its *Sukshmatva* form stays in *Pitta*. *Acharya Susruta* has described *Bhrajak Pitta* as one of the Five Agnis. As per above statements *Agni* is the key factor responsible in keeping individual healthy and in turn beautiful. If all the 13 types of Agnis of an individual are in healthy state then it will definitely bestow not only beautiful skin but also good health. If the *Agni* is not proper then it will lead to *Apakwa anna rasa* (undigested food particles) in the *Amashaya* (stomach). This is nothing but *Ama* (toxins) which gets accumulated all over body and leads to various types of skin diseases. Proper balance of all the type of *Agni* is responsible for formation of proper *Dhatu*s and subsequently proper *Dhatu* saras formed ultimate effect of which is seen on the skin.

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