



A CRITICAL APPRAISAL ON RASA DHATU IN AYURVEDA & MODERN CONCEPT

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ABSTRACT

Ayurveda is the prehistoric holistic medical methodology which aims towards maintaining the health in its utmost normalcy by various preventive regimes to be adopted rather than treating and curing the diseases. The main objective of Ayurveda is to preclusion instead of the cure and treatment. Various primeval authors of Ayurveda have written Samhitas regarding the preventive and curing the ailments if occurred. Body is made up of tissues i.e. termed as Dhatu in Ayurveda. Rasadhātu is the main formed Dhatu from essence of food at the level of its metabolic transformation. As it is the Dhatu that can deliver predecessor material for the establishment of all other Dhatu, it is of principal significance in nourishment, improvement and preservation of the body. Rasa delivers fluidity to circulating rakta; it is the fluid that transmits dissolved nutrients. Salts and sugar are the supreme significant among nutrients. As a result, taking nutritional fluid is the best way to replenish rasa. The rasadhātu, being made up of the element water, has similar qualities with kapha. Rasa dhatu has potentials very similar to kapha dosha, which is made up of jala and prithvi. In the formation of the dhatus, kapha is the mala (waste product) produced during formation of rasadhātu. Some of the utmost mutual and important problems arise when a person becomes sthool or krish, it is due to the rasa dhatu as well. Sthaulya and karshya in themselves is due to many other diseases or we can say these diseases are the arrangement of many other diseases. The quality of the rasa dhatu is reliant upon the health of agni, or digestive fire. Food and liquid are initially digested in the gastro intestinal tract and, turned into ahara rasa. This fluid then further undergo metabolism by the rasagni to form rasa dhatu.

KEYWORDS: Rasa Dhatu, Aahar Rasa, Rasagni.

INTRODUCTION

Tridosha, Saptadhatu and Trimala are the elementary perceptions of Ayurveda. Vata, Pitta and Kapha are the Tridosha. Rasa, Rakta, Mamsa, Medas, Asthi, Majja and Shukra are the Saptadhatu, Mutra, Pureesha and Sweda are the Trimala. The word 'Dhatu' comes from a verb 'Dha' which is having the meaning 'to support (Dharana) and to nurture (Poshana)^[1] It is the one which provisions body, mind and life. The Dhatus as per Samhita are defined as the tissue origins which are having Dharana capacity (to retain as it is) are to be labelled as Dhatu. They are really continuously nourished by the Ahara Rasa and in continuous qualitative and quantitative transformation. The first Dhatu nurtured from Ahara Rasa is Rasa Dhatu. The Dhatus has been defined distinctly with respect to their Pramana, Parinama (transformation), Paryaya (Synonyms), their consistent Upadhatu, Karya of the Dhatu (functions) at their regularity, roles of the Upadhatus in their normalcy, their Kshaya and Vriddhi Lakshanas and their individual Chikitsa. The multitude or superiority of any Dhatu in

the human body is termed as Sara. The body may have one Dhatu Sarata or any being may have all Dhatu Uttama Sara. Rasa Dhatu is the first Dhatu of the body and is chief Dhatu with respect to its functions. The article primarily deals with the overall material about Rasa Dhatu by perceiving its all obtainable works. At the time of fusion of wholesome Purush Beeja (spermatozoa) and Stree Beeja (ovum) in the presence of Jeeva (soul - a life factor) fertilization takes place,^[2] and a new life comes in the shape. Ayurveda believes Garbha (fetus) attains its maturity in mother's womb through numerous inter-changes by the influence of Pancha Mahabhuta (five basic elements)^[3] and then it differentiates into all types of specific cell lineages. Thus, a single fertilized human egg (ovum) differentiates and develops into an embryo, and then into a fetus, after birth in an infant, a child, and finally an adult.^[4] This business of cell differentiation and development persists during prenatal and postnatal life of an individual to maintain health. The cell attains differentiation and specification cell type by the response of some

unspecific and undifferentiated mother cell known as stem cell. There are two types of sources of stem cells; embryonic stem (ES) cells and adult stem cells. Stem cells have attracted the attention of biologists and medical scientists for a long time. These provide materials for regenerative medicine.^[5]

Vyutpatti (etymology and origin)

The Dhatu constantly in motion and getting circulated is called Rasa Dhatu⁶. The Dhatu in its Srotasa and Sthanas retain constantly going is named Rasa Dhatu. It means that the bodily tissue element which is continuously kept in gesture by circulating it from one place to another is Rasa Dhatu.

Nirukti (delineation) of rasadhatu

Dhatu which is constantly in gesture and circulated in the body of human is called Rasa Dhatu.^[7] Acharya Charaka described the Rasa Dhatu as the first moulded product from the Ahara rasa,^[8] (digested food).

Paryaya (substitutes) of rasadhatu

Saumya Dhatu: for having Saumya/Sheeta Guna Ahara-prasada: as it is moulded from Ahara-rasa Certain other Paryaya are also used by authors of Ayurveda like Dhatusara, Aharateja, Agnisambhava, Asrik-kara etc.

Table 1: Panchabhautic Content of Rasadhatu with contemporary Science correlation.

Panchmahabhuta	Related Panchbhoutic Component In the Blood
Prithvi element	Proteins- Sr. albumin, Globulin, fibrinogen, prothrombin, etc.
	Nitrogenous- glutamine, creatine, urea, uric acid etc.
	Sugars- glucose, glycogen etc.
Apya element	Sneha- lipids, phospholipids, cholesterol etc.
	Body fluid- 60 %, All the Anions and Cations present in the body such as Sodium ion, Chloride ion, Potassium ion, Hydrogen ion etc.
Agneya elemen	Vitamin- A, D, E, K, C, B-complex, Niacin etc.
	Enzymes- Amylolytic, Lipolytic, Proteolytic etc
	Element- Sodium Potassium, Magnesium, Calcium, Iron etc
	Mineral drugs- Sulphur, Phosphorus
Vayavya element	All Endocrine secretions
	Gases- oxygen, carbon dioxide etc.

Gunas of rasadhatu

Acharya Vagbhata states, Gunas of Rasa Dhatu are alike to Kapha Dosha. Chief Gunas defined by all Acharyas are: Drava (liquid), Snigdha (unctuous), Manda (dull), Sheeta (cold). The taste of Rasa is described as Madhura.

Karyas (functions) of rasadhatu

As per Acharya Vagbhata,^[9] Preenana (satisfaction and freshness) is the primary function of the Rasa Dhatu. As per Acharya Susruta,^[10] Preenana as well as Rakta Pushti (nourishment of Rakta Dhatu) are the Karyas of Rasa Dhatu.

Pramana of rasadhatu

As per Acharya Charaka, 9 Anjali is the Pramana of Rasa Dhatu.^[11]

Sarata of rasadhatu

The word "Sara" denotes the potentials accompanying with full development of the exacting Dhatu in human being Sara is the term used by ancient ayurvedic Acharyas to depict the Lakshanas of Rasa sara as there are further Twak (skin) correlated excellences originate in Rasa sara publics. Samhitas described it thoroughly. A wholesome account of Rasa sara of all ayurvedic Samhitas is presented here: As per Charaka, persons having excellency of Twak or skin have unctuous, smooth, soft, clear, fine, fewer numerous, deep rooted and tender hair and lustrous skin.^[12] These persons have fineness of skin and are gifted with health and longevity.

They are gifted with happiness, fortune, power, intellectual capacity, knowledge and excitement. As per Acharya Susruta, these persons have clean and soft hairs.^[13] They are knowledgeable. According to Kashyapa Samhita, Rasa sara persons have clean and well marked complexion and rapid wound healing.^[14] As per Briht Samhita these persons have unctuous soft, thin skin by virtue of which they become wealthy, fortunuous and erudite.^[15]

Upadhatu and mala of rasadhatu

Stanya and Raja (Artava) are the Upadhatu of Rasa Dhatu.^[16]

Kshaya and vridhhi of rasadhatu

Kshaya: the quantitative and qualitative reduction in Rasa Dhatu pronounces the Kshaya of Rasa Dhatu. The Lakshanas designated by Vagbhata include Raukshya (dryness of skin, hairs, nails), Shrama (fatigue due to exertion) Shosha (dryness of mouth), Shabda-asahishnuta (intolerance of speech), Glani (weakness/giddiness)^[17] More Lakshanas designated by Acharya Susruta are Hritpida (pain in cardiac region/ cardiac abnormalities), Kampa (cramps), Shunyataa (feeling of lightness), Trishna (excessive thirst)^[18] Vridhhi: the quantitative and qualitative surge in Rasa Dhatu designates the Vridhhi of Rasa Dhatu. The Lakshanas described by Vagbhata embrace Agnisadana (indigestion), Praseka (nausea), Alasya (laziness), Gaurav (heaviness), Shwaitya (whitish coloration to

body parts), Shaitya (coldness to body parts), Shlathangataa (laxed body parts)^[19] More Lakshanas described by Acharya Susruta are Utkleda (nausea), Praseka (excess salivation).^[20]

Evaluation of Rasa functions with Contemporary Eventual

Hridya (heart) is its seat i.e., main place to stay, from the heart it voyages through the twenty-four dhamnis, ten of them profitable upwards, ten going downwards and four going side wards obliquely. By drifting all along the body it affords the proper nourishment to the body and gives proper provision to the body. It does the following functions i.e., it nourishes the intact body constantly (tarpayati), make it produce (vardhyati), ropes (dharyati), and maintains the living (yapyati). The cause of these functions is inscrutable. This process continues for all day, day and night. It delivers proper nourishment and support to the body. Charaka and Sushruta have stated hridya as the root organ of rasavaha srotas. Sushruta has mentioned that there are total twenty-four dhamnis present in the body which are body channels that transmits rasa to the whole body. Therefore, rasa travels throughout the body and delivers proper nourishment to the whole body. Due to the supremacy of jal mahabhutarasa improvements fluidity. Ahara undertake changes as soon as it arrives the alimentary tract. By the act of kledak kapha, saman vayu and pachak pitta, Pachak pitta benefits in digestion, Saman vayu resides near pachakagni and swing around the koshta, it benefits in overwhelming of food and delivers bala to jathragani which helps in proper digestion of food and helps in detachment of its sara (essence) and kitta (waste) bhaga. Kledak kapha assistances in moistening of the food that arrives in the alimentary canal. It helps to mark bolus soft. It services to make anna into adra form. Ahara rasa is fashioned from ahara after action of jatharagni. Saman Vayu brings the absorbed ahara rasa to hridya thus regulator the venous return. Vyaan vayu emits the rasa from the ventricle of the heart with proper pressure. The rasadhatu then mingles in the whole body always, endlessly and instantaneously. From hridya with the benefit of vyan vayu through all dhamnisrasa is reached to small arteries, arterioles, and capillaries and make it available to the level of all dhatus and deliver nourishment. Thus, Vyana vayu governs the process of cardiac output. Samana vayu carries the absorbed rasa back to the heart through sira. Thus, Samana Vayu governs the progression of venous return. All tissues in the body are nurtured in a circular way this is called chakravat, which arises with the help of Saman vayu and Vyana vayu. Jala mahabuta delivers fluidity to rasa and vyana vayu ejects the rasa from heart to move rasa all over the body. And hence in this way rasa delivers nutrition to each part of the body. Extracellular fluid is in constant signal throughout the body. It is elated rapidly in the circulating blood and then mixed between the blood and the tissue fluids by dispersion through the capillary walls. In the extracellular fluid are the ions and nutrients desired by the cells to maintain cell life. Thus,

all cells live in basically the same environment—the extracellular fluid (ECF). Because of this, the extracellular fluid is also called the internal environment of the body. Cells are capable of living (Yapyati), growing (vardhyati) and performing their special functions for providing nourishment (tarpyati) as long as the proper attentions of oxygen, glucose, dissimilar ions and other constituents are present in this internal environment. As ECF is the interior environment of the body and it doses all the utilities of rasa. Therefore, rasa can also be believed as interior environment of the body.

CONCLUSION

Rasadhatu is the first Dhatu among Saptadhatu. It is having prime importance as it is the precursor material for all the other Dhatu formation. Its Vriddhi and Kshaya will reflect its effect on all the Dhatu. Rasadhatu which is called the fluid of life is made up of Ahara rasa. Fluidity is current in it because of high proportion of jala mahabhuta and it can travel in param sukshma srotas of the body. It is essentially of two types' sthaya rasa and poshak rasa. Poshak rasa is the circulating one and carry the nutrients for the nourishment of sthaya or static dhatu. Sthaya dhatu is rasadhatu only or we can approximately sthaya dhatu, rasa dhatu and poshya dhatu all are synonyms. Configuration of rasa dhatu is the deciding factor for sthauya and karshya in the body. The socialising motion of the Rasa Dhatu and its enrichment at the skin level makes the skin fresh and lustrous. The Sheeta, Snigha Guna of the Rasa Dhatu makes it look like the Kapha Dosha. The Lakshanas of Kshaya and Vriddhi ranges from fewer to more severe. Some of them really necessity to be treated immediately.

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