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# A REVIEW ARTICLE ON THE PHYSIOLOGICAL STUDY OF DHATVAGNI

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## **ABSTRACT: -**

Agni is a dependable element for processing, change, and digestion in the body. The term 'dhatvagni' signifies the small part of agni that capabilities at different body parts (dhatu) for sustenance and digestion. It is answerable for the metabolic change of food devoured and its osmosis. Agni is the preeminent physiological expert in the human body and is of 13 sorts. Jatharagni is for absorption, five bhootagni for digestion of panchamahabhuta parts, and seven dhatvagni for digestion of dhatu or tissues. The dhatvagni absorbs and combines the dhatu or tissues of the human body. It is situated in the separate srotas of the specific dhatu. Dhatvagni is answerable for the change of one dhatu into another. This article depicts the idea and utilizations of dhatvagni in clinical sciences.

**KEYWORDS:** - Agni, bhootagni, panchamahabhuta, Jatharagni, srotas.

#### **INTRODUCTION: -**

The idea of Agni in Ayurveda which alludes to the complex capabilities credited to Pitta is on the double thorough. It not just incorporates substance organizations liable for Aaharapacana in the Kostha (gastrointestinal) which prompts detachment of Sarabhaga of Aahar (food) from the Kittabhaga (the toxic buildup of the food) yet in addition metabolic occasions energy, union and upkeep of digestion.

Dehagni is reason for Aayu, Varna, Bala, Swasthya, Utsah, Upchaya, Prabha, Oaj, Tej, Agni, and Pran. Assuming Agni of individual get vitiated, digestion in his body would be upset bringing about illnesses. Agni in residing body possesses whole body as different bio-changes are perpetually done in residing body at all spots. Portions of Agni completing various capabilities are named according to their capabilities. 'dhatvagni' is name to that piece of Agni, which assimiates or integrates Dhatus of living body. This need specific climate thus these Dhatwagni are situated in strotas connected with that specific Dhatu.

Because of the activity of Dhatavagni on their individual Dhatus for example Rasa, Rakta, Mamsa, Meda, Asthi, Majja and Shukra, dhatus get changed over into Prasad - Bhag and Kitta - Bhag. Acharya Sushruta and Vaghbhata have demonstrated that the organ known as Grahani is situated among Pakvasaya and Amasaya and that the connection that exists among Agni and Grahani is proportional for example Agni upholds the capability of Grahani and Grahani upholds the capability of Agni.

**SYNONYMS:** - Dhatu-ushma, dhatupaktru, dhatupakta, dhatupachaka agni.

#### TYPES: -

The administration of infections relies upon adjustment of agni and reclamation of very much shaped dhatu. The dhatvagni is ordered into seven kinds as underneath: -

- i. Rasa dhatvagni
- Rakta dhatvagni ii.
- Mamsa dhatvagni iii.
- Meda dhatvagni iv.
- Asthi dhatvagni v.
- Majja dhatvagni vi.
- Shukra dhatvagni vii.

# **DHATVAGNI IN PHYSIOLOGY: -**

Dhatus are the underlying and practical units that go about as dosha and mala seats. The working of dhatvagni (dhatvagnipaaka) incorporates by and large sustenance and advancement of the body structures. Dhatvagnipaaka alludes to the successive changes gone through by the pith of food thanks to seven dhatvagni elements. The seven dhatvagni follow up on the individual dhatu by which each dhatu is utilized into two sections i.e., quintessence (prasada bhaga) and results (mala bhaga). Dhatu is processed by their innate intensity (ushma) or dhatvagni (changing compounds in the tissue components). The supporting part of dhatu (supplement tissue components) further sustains the resulting dhatu through their separate srotas (channels of dissemination). For instance, a poshaka rasa dhatu supports the rakta dhatu. In this cycle, the arrangement of substance (prasad bhaga) can be corresponded with anabolic pathways. The arrangement of metabolic squanders or results (kitta-paka) can be related with catabolic pathways. The cell can carry on the metabolic cycle with the guide of chemicals (agnipitta), which are natural impetuses. An impetus controls the pace of a compound response's speed increase without change in itself. Barely any catalysts, like the stomach related compounds (similar with jatharaagni), capability outside the cell. Most chemicals are intracellular (practically identical to dhatvagni and bhutagni). Chemical oxidation that catalyzes an oxidation-decrease process is named as 'oxidase'. A catalyst worried about the processing of protein is a protease. This intracellular and extracellular digestion can be seen as the dhatvagnipaka.

Dhatvagni, as a general rule, addresses the course of tissue digestion and osmosis. Various kinds of healthy food sources ingested as eatables, drinkables, lickables and masticables animate processing (antaragni). They are additionally processed by individual bhutagni (explicit assimilation per essential constituent or component). At the appropriate time of time, food gets changed into various dhatu within the sight of dhatvagni (tissue-explicit assimilation and digestion) and vata (vyanavayu) by the course of dhatvagnipaka. It feeds the tissues through channels of dissemination without interference and produces stoutness, strength, appearance, wellbeing, and life span. The tissues are supported by getting taken care of by different feeding factors (poshaka dhatu). Consequently, it assumes a fundamental part in keeping up with the stomach related physiology and digestion in the body. Thusly, the entire beginning, digestion, working and end of dhatu are reliant upon this course of dhatvagnipaaka. Thus, it is the premise of the ksheeradadhinyaya (law of complete change of one substance to other like milk into curd) and kedarikulyanyaya (successive change of tissues very much like trenches in a ranch). This portrays the dhatu digestion. Hence, the orderly sustenance of dhatu (dhatusnehaparampara) is kept up with through dhatvagni.

### **DHATVAGNI IN PATHOGENESIS: -**

The jatharagni basically feeds the separate dhatu as dhatvagni dwelling in each of the dhatu. The dhatvagni is liable for the increment (vriddhi)/decline (kshaya) of the agent dhatu. The hypo working (saada) of the dhatvagni prompts the expansion in the particular dhatu. While hyper working (atideepti) prompts decreased creation (kshaya) of the dhatu. Consequently, every dhatu's digestion relies upon the elements of the dhatvagni, going before and ensuing dhatu. Cooperation of dosha-dhatu (samurchhana) is the premise of pathogenesis. The condition of agni ought to be viewed as in the pathogenesis. Any insanity of dosha, in the event that not rectified as expected, advances further into the dhatus and turns out to be more difficult to address. Moderate pathogenesis in any dhatu ought to be constrained by unambiguous measures, in any case it influences other consecutive dhatus. Thus, the job of dhatvagni is vital for metabolic problems like dyslilipdemia (medoroga), tenacious urinary infection including diabetes (prameha), weight (sthaulya). Agni and at last the dhatvagni are the fundamental ideas that are mean quite a bit to preclude the reason and treatment of any infection.

Agni is the physiological substance answerable for the situation with dosha. The dhatvagni being a piece of this agni part, is subsequently similarly dependable in the support of wellbeing and, surprisingly, in the burden of sicknesses. The dhatvagni is a determinant of the creation and elements of dhatu. Thus, its legitimate working is of most extreme significance in wellbeing. Unevenness can prompt illness sign. For example, in condition like raktapitta, the exorbitant pitta is answerable for the overstimulation of agni and dhatvagni, prompting the consumption of nature of rakta dhatu and liquidity (dravana). Here the dhatvagni is overwhelmed, prompting a lopsidedness in the tissue digestion. Additionally, in conditions like heftiness (sthoulya), the meda dhatu digestion debilitates, prompting unreasonable meda (fat testimony). Undernourishment of the excess dhatu portrays the sub-optimal ability to burn calories of meda (meda dhatvagnimandya) in the body. In the sickness rajayakshma, consumption of dhatu is noticed. Dhatvagni assumes a urgent part in the neurotic cycle. The text specifies the term 'ushma' in different cases while making sense of the digestion and arrangement of various dhatu (rakta dhatu, mamsa dhatu, asthi dhatu). This idea is additionally relevant in the pathogenesis of pandu roga, where the sustenance of dhatu is hampered prompting laxity and greatness of dhatu (dhatushaithilya and dhatugaurava). The nature of the rasa-raktadi dhatu is hampered generally in this condition. The dhatugata messes are consequence of dysfunctions of dhatvagni. Dhatvagni is liable for breakdown (bhinnasanghata), oxidation (dahana) prompting intensity or energy age (tapana).

# **DISCUSSION: -**

Dhatvagni can be considered as a transitional digestion in contemporary light. It is the mixture of amount of all intracellular compound cycles by which the nutritive material is changed over into cell matter. Cell energy is created from vigorous oxidation of metabolic fills (carbs, fats, proteins) got from the processing of a feast or the breakdown of inner stores. These can likewise measure up to proteins, the biocatalysts that accelerate the biochemical responses in living life forms. The compounds have changed activities relying on the site of activity and anticipated capability, additionally named as the particularity of the chemical. Consequently, the various sorts of proteins have explicit kinds of move in light of the substrate diet made. For example, there are different chemicals like dividing proteins (hydrolases), moving catalysts (oxidases, reductases), and isomerases engaged with the course of absorption. These can measure up to the elements of pitta dosha like separating particles (sanghatabheda), change (parinama), impetus (pravritti) and so forth. Dhatvagnipaaka can likewise measure up to the ideas of pilupaakavaada and pitharapaakavadaas set forth by the Nyaya-Vaisheshika reasoning. The pilupaka gives to the substance change, while pitharapaka to the actual change. The cycles of digestion, catabolism and anabolism are additionally firmly connected with the dhatvagnipaaka. The digestion is a progression of the multitude of responses that occur at the cell level. Catabolism is the breakdown or the corruption of mind-boggling macromolecules, while anabolism integrates the macromolecules and tissues. More examination on the connection among dhatvagni and explicit stomach related cycles can give new experiences into grasping the physiology and the board of illnesses.

# **CONCLUSION: -**

In this way, it is presumed that Aahara Dravya, Pachaka-pitta and Agni are corelated to one another and are answerable for doing the ordinary exercises of the body. The sama and Prakopa avastha of the Doshas are absolutely subject to the state of Agni of body. Thus, Anurakshan of Agni is of prime significance for the doctor and for the upkeep of soundness of an individual.

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