

STUDY OF AYURVEDIC CONCEPT OF “AGNI” AND ITS ASSOCIATION WITH
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ABSTRACT

According to *Ayurveda*, “Agni” or “biological fire” has its own importance. *Agni* is responsible for metabolic anabolic changes at peripheral cell for determining the optimal health. Whole process of biological conversion is signified by the term *Agni*. The process of digestion is mainly carried out by *Agni*. The food provides nourishment to bodily tissue which is reached to all organ by the action of *Agni*. Proper maintenance of *Agni* is responsible for proper digestion and metabolism which helps to maintain health and to live along life. Impaired *Agni* i.e. irregular & poor capacity of digestion are responsible for many diseases. Due to the impaired *Agni*, the most common lifestyle disorder is metabolic syndrome which includes HTN, DM, Obesity, Dyslipidemia which is the major cause of mortality because its complication results into cardiovascular and other systemic diseases. So, taking into considering this aspect, present article is summerized with Metabolic syndrome and its clinical manifestation of *Agni-dushti*. It's essential to treat and maintain the '*Agni status*' for avoid the Metabolic syndrome by improving the diet style, life style with the help of *Ahara-Vidhi-Visheshayatan* with their specific line of treatment.

KEYWORDS: *Agni*, Metabolism, *Dhatavagni*, *Meda dhatu*, *Aam*.

INTRODUCTION

Metabolic syndrome is a clustering of at least three of these - Obesity, elevated blood pressure, elevated fasting plasma glucose, high serum triglycerides and low level of HDL.^[4]

In present scenario, there is an alarming increase in metabolic syndrome. It is a result of improper metabolism. Metabolism is nothing but the function of *Agni*. Entire range of digestion and metabolic activities in the body takes place with the help of biological fire of the body i.e. *Agni*. So, it is the sole cause for existence of life and its extinction leads to death. The presence and absence of existence of *Agni* indicates living things.

Various causes like sedentary lifestyle, oily heavy food, excessive calorie consumption, lack of exercise or physical exertion etc mainly vitiate *Agni* especially *dhatavgni (meda)*. Above Causative factors vitiates *Agni* and produces toxic substances like *Aam*, *kleda*, excess unwanted harmful *kapha*, *meda*. So metabolic syndrome can be said as *Santarpan-janya Vyadhi*. It is one of the most common consequences of *Agni-dushti*. The present study focuses on *Agni* and its correlation with Metabolic Syndrome.

REVIEW OF LITERATURE

Ayurveda describes various concepts related to physiological functioning, pathological response; *Agni* is one of such concepts which is responsible for healthy Will being. It is considered responsible for digestion and metabolic functioning of the body. The digestion and assimilation of ingested food performed by the *Agni* is very essential process for the growth and development of human body. It is also associated with activities of hormones, enzymes and co-enzymes which is involved in digestive process.

आयुर्वर्णाबलंस्वास्थ्यमुत्साहोपचयोप्रभा ।

ओजतेजो अग्नयः प्राणश्चोक्तदेहाग्निहेतुकाः ^[1] च.चि. १५/३

According to the fundamental principle of *Ayurvedic* science, *Agni* has an important role. Health, colour of skin, mind and body health, freshness, intelligence, lustre, *ojas*, *tejas* and *life* of human beings mainly depends on the normal status of *Agni*.

Agni considered the three major categories *Jatharagni*, *dhatavgni*, *Bhutagni*.

- **Jatharagni**

It has been considered prime among all *Agnis*. The functioning of other *agnis* i.e. potential capacity of *Dhatvagni* and *Bhutagni* depends upon the status of that *jatharagni*.

- **Bhutagni**

There are five *agnis* in each of the five basic elements such as *Parthiva*, *Apya*, *Tejas*, *Vayu* and *Nabhasa*. All the nutrients consist of the same five basic elements with respective *agni*. It digests their own parts of the elements present in the food materials and after the digestion *Bhutas* nourishes their specific *Bhautik* elements.

- **Dhatavgni**

Seven *Dhatus* contain their own *Agni* to metabolise the nutrient materials supplied to organ through systems. Each *Agni* has capacity to change further *dhatus* and transforms into two types of substance a) Useful substance in metabolic -anabolic changes b) Wasted substance which are not acceptable, nor assimilated, excreted from the body. But in excess that would be accumulated preferably at abdomen, shoulder, breast whenever possible.

Agni worked their metabolic function as predominance of *Doshas* accordingly. So, Its classified as *Samagni*, *vishamagni*, *mandagni*, *tikshagni*.

- **Sam-Agni (Normal or natural balanced Agni status)**

It ensures complete digestion of the food ingested at the proper time without any irregularity. There is *samagni* when all *doshas* *vata-pitta-kapha* are in a state of equilibrium.

- **Tikshn-agni (Enhanced capacity of digestion)**

It results because of the dominance of *pitta* which is intense and hence it easily digest even a very heavy meal in a very short span of time.

- **Vishama-Agni (Irregular capacity of digestion)**

It represents an unpredictable state of *Agni* which is due to the dominance of *vayu*. It's sometimes quickly digest the food and at other times it does so very slowly representing unpredictably.

- **Mandagni**

This is the state of *Agni* with low potency, poor appetite and decrease the metabolism. It is due to the dominance of *vata* which leads to the production of toxics substance i.e. *Ama*.

Metabolic Syndrome

The metabolic syndrome (Syndrome X, insulin resistance syndrome) consists of a constellation of metabolic abnormalities that confer increased risk of cardiovascular disease and Diabetes mellitus⁴. It is the major cause of mortality, Some causes of metabolic syndrome are stress,

overweight, sedentary lifestyle, ageing, dm, alcohol intake, high calories food intake, absence of exercise.^[5]

NCEP: ATP3 and IDF Diagnostic criteria for metabolic syndrome^[6]

1. Central obesity- Waist circumference >102cm (MALE)
2. Dyslipidemia- TG > 1.70 mg/dl
3. Dyslipidemia- HDL < 40 mg/dl
4. BP > 130/85 mmhg
5. Fasting plasma glucose > 110 mg/dl

Signs and symptoms^[7]

- It is typically unassociated.
- On physical examination, waist circumference may be expanded
- Blood pressure elevated
- The presence of one or either of these signs should alert the clinician to search for other biochemical abnormalities that may be associated with metabolic syndrome.

Other associated conditions^[7]-complications

In addition to the features specifically associated with Metabolic Syndrome, insulin resistance is accompanied by other metabolic alterations. Such as
Non alcoholic fatty liver disease
Hyperuricemia
Polycystic ovary syndrome
Obstructive sleep apnea

Discussion and observation

Metabolic syndrome is the result of poor or irregular metabolism. In *Ayurveda*, Metabolism is considered as the functioning of *Agni*. Improper functioning of *Agni* is the major causative factor for digestion and metabolic ailments.

Several factors which triggers *Agnidushti*

अभोजनादजीर्णातिभोजनाद विषमाशनात् ।

असात्म्य गुरुशीततिरुक्षसन्दुष्टभोजनात्^{[[2]} च.चि. १५/४२-४३



1. Disturb pattern of daily regimen
2. Consumption of unwholesome diet and viruddha ahara
3. Eating foods too fast or slow
4. Fasting, irregular dietary timing or consumption of too much refrigerated cold and stale food.
5. Lack of exercise
6. Psychological factors- anger, anxiety, depression.

The above Causative factors vitiates *Agni* and produces toxic substances (*aam*) which initiates the several pathogenesis. So, Metabolic Syndrome can be said *Santarpanjanya Vyadhi*.

It's essential to treat and maintain the *Agni* status for avoid the Metabolic syndrome by improving the diet style, life style with the help of *Ashta- Ahara- Vidhi- Visheshayatan*.

तत्र खलु इमानि अष्टौ आहार विधि विशेष आयतनानि भवन्ति ;

तद यथा प्रकृति करण संयोग राशि देश काल उपयोग संस्था उपयोक्ता अष्टमानि भवन्ति ^[3] च.वि. 1/२१

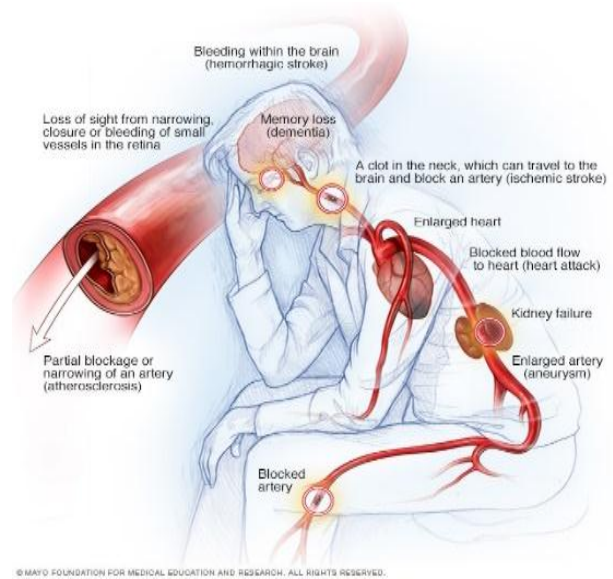
The main features of metabolic syndrome are obesity, dyslipidemia, HTN, DM.

Obesity

According to *Ayurveda*, obesity is regarded as *Medoroga*, which is caused due to disturbance in *meda dhatu*, which includes fat tissue and fat metabolism. The above Causative factors results into *tikshnagni* (excess intake of food) which causes poor capacity of digestion. Due to this, there is production of toxic fatty substance (*aam*) which causes poor capacity of *medo dhatwagni* and *srotodushti*. It results into accumulation of excess deposition of fatty substance at belly, breast, hip, shoulder etc. It causes various signs and symptoms.

Hypertension

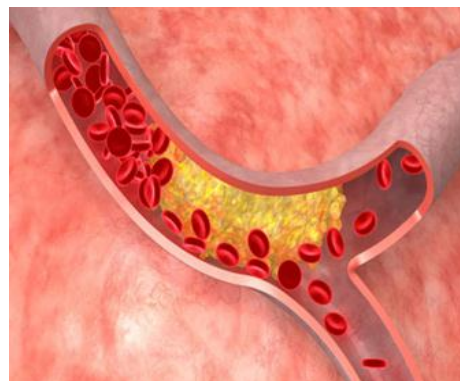
It is a chronic and often a symptomatic medical condition in which systemic arterial blood pressure is elevated beyond normal. It is called a silent killer because it rarely exhibits symptoms before it damages the heart, brain or kidney. According to *Ayurveda*, it is an *Anukta vyadhi*. Description of *hridaya* and process of *rasa rakta* circulation by *vyana vayu* is helpful to understand the disease.



The above etiological factors causes poor capacity of digestion which affects *dhatwagni* and *bhutagni*. It results into the formation of *samata* which leads to *Srotorodha*, *srotosang* i.e. obstruction of fatty tissue in circulatory system may cause of excess, unwanted toxic fatty tissue i.e. *samata*. It will ultimately increases the peripheral resistance and leads to HTN. Its nothing but the *Medo – Avritta vyana*”, it causes disturbed function of *vyana vayu*. Atherosclerotic changes can be outcome of chronic *agnimandya* and *samata*. So, *Agni* is the prime factor of HTN.

Dyslipidemia

It involves abnormally elevated levels of any or all lipids or lipoproteins in the blood. In our body, there are many tissues which are rich in lipids such as *Medo dhatu*, *vasa*, *majja dhatu*.



It is also caused by improper functioning of *Agni*. Causative factors as described above ultimately all of them leads to *jathragni dushti*. Once the *jathragni* is impaired, *Bhutagni* and *Dhatwagni* mainly *medo dhatwagni* also impaired. It results into formation of toxic substance i.e. *aam*. this causes impairment of conversion of one *dhatu* to the next. *Meda dhatwagni* in *meda dhatu* starts malfunctioning and conversion to the next *dhatu*. This causes accumulation of unhealthy and

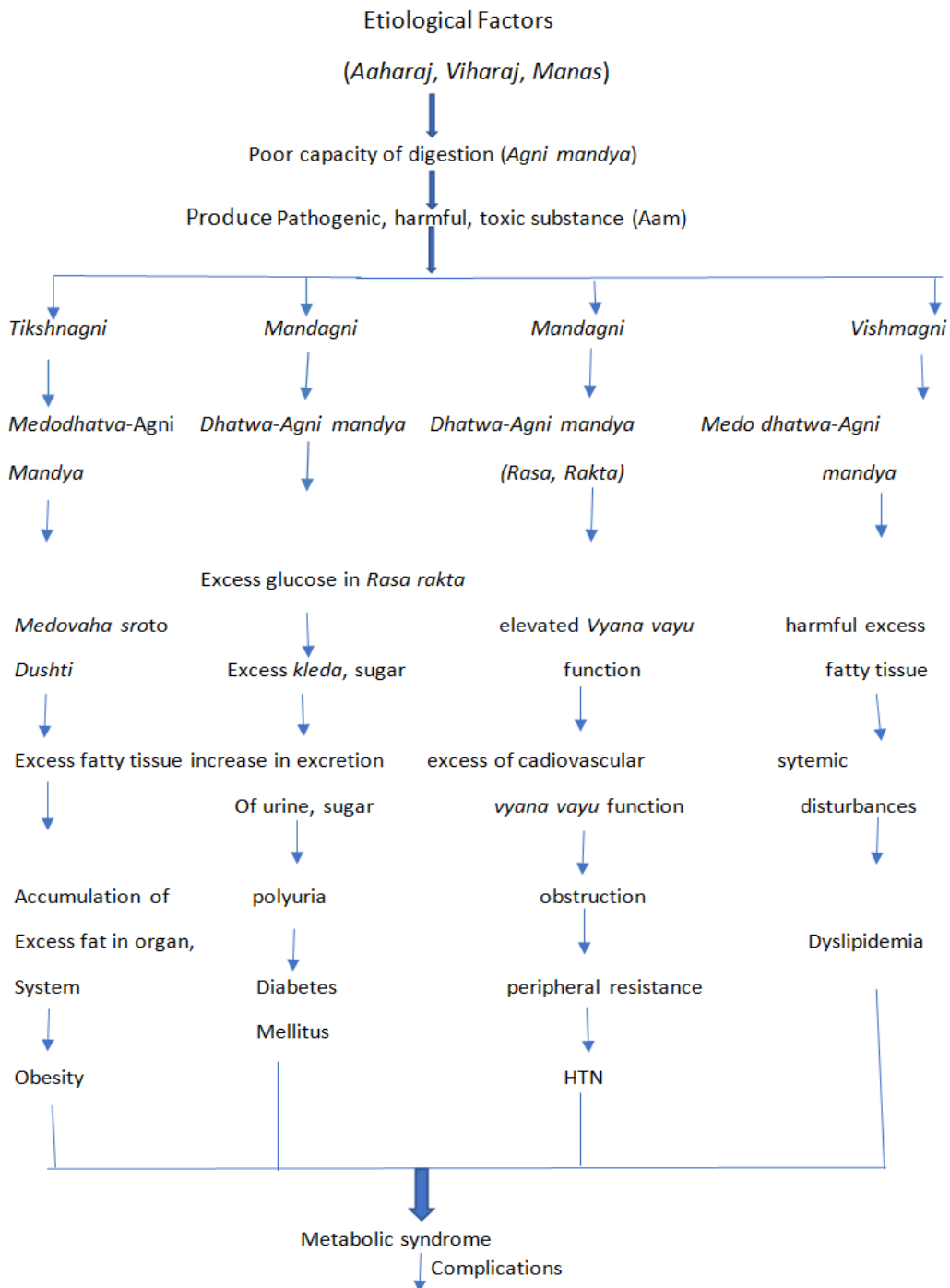
partly digested medas along the srotas which transports it. This pathogenesis results in to the diseased condition dyslipidemia. *Mandagni* is the prime causative factor for it. So it is necessary to treat *mandangi* preferably.

shaithilya in surrounding tissues and other cardinal signs such polyuria, polydipsia, It is due to the increased function of *vyana vayu* So, *Agni* is the main culprit in the pathogenesis of disease.

Diabetes Mellitus

In diabetes mellitus, process of pathophysiology revolves around the *Agni*. Various etiological factors dishonours *Agni* mainly causes *Mandangi* which aggravates *kapha dosh* and *kleda* formation. This excess *kleda* bring

From the above discussion, probable pathogenesis of Metabolic syndrome can be characterized by as follows.



Obstruction by saam fatty tissue in cardiac valves may develop cardiac disorders i.e. CVD.

From the above discussion, we observed that *Agni* plays a very important role since beginning to the end. In case of Metabolic Syndrome, poor capacity of digestion i.e. disturbed metabolism is especially at the level of *meda dhatu*.

CONCLUSION

1. It reveals that *Agni* as a vital entity of human body which not only help in digestion of ingested food but also responsible for various metabolic activities and metabolic disorders.
2. It's essential to treat and maintain the *Agni* status for avoid the Metabolic syndrome by improving the diet style, life style with the help of *Ashta-Ahara-Vidhi-Visheshayatan*.

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