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CONCEPT OF AAMVISHA THROUGH AGADTANTRA ASPECT: A REVIEW STUDY

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ABSTRACT

Now a day many of the disorders observed in human being are commonly liable as unknown aetiology such as development of hormonal disorders observed in early age, premature senility, and lifestyle disorders etc. To find exact and perfect answer for that situation the concept of "Aamvisha" from Ayurveda plays a key role in current era. Ayurveda, the Ancient Indian Medical Science, is rapidly gaining global acceptability as a highly effective Healthcare system. It is one of the most complex and intellectually challenging among Professional pursuits, demanding as effective integration of one of the World's oldest systems of Medicine with the advancements and needs of the current era. Agadatantra (Toxicology) was so highly developed during the early ages that it was given prime status, as one among the eight branches of Classical Ayurveda. It still continues to serve successfully Rural publications, especially in treating snake bites, in areas where Anti-venom is not readily available.

KEYWORDS: Aamvisha, Agadtantra, Toxins, Detox.

INTRODUCTION

Right from ancient times importance of digestive power was known and defects of digestion were considered as pathogenic, but it was Vaagbhat'a in Ashtangahr'daya, provided a new

dimension in its explanation. The product of defective digestion is called AAMA. Former authors have explained this factor as denatured or improper juice of ingested food. Vaagbhat'a amended this concept by providing two definitions for AAMA. As per the newdefinition AAMA refers to an endogenous toxin. This toxin is a harmful material formed in the body at the level of gut or even at the level of cellular metabolism. The severity of this toxin will differ and the symptoms will change depending upon the production and accumulation of the toxin. General signs and symptoms caused by this 'endotoxin' are blockage in the channels of the body, fatigue, heaviness of the body, neuroticchanges, lassitude, indigestion, constipation, lossof appetite, increased salivary secretion etc.

This toxin, AAMA is said to be heterogenous, sticky, and odorous and it tends to make fatigue. Almost all diseases are caused by impaired digestive capacis. Here, dhgestion refers to that in the gastrointestinar Tact and on the subtler levels. This AAMA as a toxin has many torms viz. the fermented and vitiated chyme, accumulated by-products formed during metabolism and the humours vitiated at the primary level.

CONCEPT OF UNWHOLESOME FOODS

The drugs and food materials incompatible [VIRUDDHA] with the normal tissue elements are unwholesome. Some act adversely due to their mutually contradictory properties, some by combinations, some by method of preparations, some by virtue of the place, time and dose and some by their nature.

The difference between unwholesome materials and eliminatory drugs (SHODHANA DRAVYA] is that the former only increases humors and loosens them but the latter, in addition eliminates them.

Further, 18 types of incompatibilities are mentioned in Charaka Samhitan, Charaka provides the list of diseases caused by themThey are impotency, blindness, erysipelas, ascites, bullae, insanity, fistula, unconsciousness, intoxication, tympanitis, spasmodic obstructionin throat, anaemia, toxins in gut, leukoderma, skin diseases, malabsorption syndrome, oedema, hyperacidity, fever, rhinitis and even hereditarydisorders (for coming generations) and death. The idea of incompatibility is so intimately connected with intrinsic toxin (AamaVisha) that Ashtangabrdaya states that this leadsto symptoms of poison.

The treatment of intrinsic toxin present in the gut produces diseases viz. intestinal obstruction, cholera. paralytic ileus. Botulism is very difficult. Here Aama present in profuse quantity in the body acts as an acute poison. Any cold treatment will tend to increase AAMA and any hot treatment will tend to augment theproperties of poison.

Modern science describes poison as a substance that on ingestion. Inhalation, absorption. Duplication, injection or development within the body in relatively small amounts may cause structural damage or functional disturbance.This development of toxin within the body mainly depends upon the digestive capacity, theproperties of the food, the frequency of ingestion and the mental conditions. Charaka also mention the same in the second chapter of Vimaana Sthaanathat psychological factors like fear, anxiety, anger andDepression lead to production of toxin in the body.

Once Aama Vishais formed, its quantity and location in the body decides the morbidity of the sufferer Susruta guides us by saying that if it is lodged in stomach, it will lead to Kapha Vaata diseases and in large intestine to diseases by Pitta Vaata. So also the accumulation of this toxin in specific tissues leads to specific diseases mentioned in the contexts. E.g. If it gets accumulated in plasma symptoms will be: loss of appetite, heaviness, skin diseases, eruptions, etc.If we examine the mode of development of diseases as mentioned by Susruta, regular production of endotoxins (AAMAVISHA) will continuously vitiate humors and tissues. Unless a particular symptom or disease is seen by these toxins tend to be passive in terms ofdevelopment of disease.

If the excellence of tissues (SAARA) is good enough not to let this toxin be accumulated in them, particular disease will not manifestfor many days or as long as this quality is maintained. The controller of excellence of all tissues is none other than OJAS. It is the strength (BALA) of the body as a whole. The properties of OJAS are opposite to that of poison. Nowadays, thisconcept of OJAS is correlated with immunity.

The acquired immunity against a particular disease is developed in a person with the dead or alive (attenuated) vaccine. We can correlatethis with the induced strength (YUKTIKR'TA BALA) mentioned in Ayurveda. The concept ofhabituation (SAATMYA) is in this purview. Charaka states that not only OJAS, but young age and good appetite, exercise, unctuous food etc. are factors positively influencing the detoxification of endotoxins.

Modern medicine tells that the toxin i.e. conjugated protein disturbs humans in three levels, viz. psychological, biochemical andphysiological After entering the body, toxins may be detoxified in four different manners viz. oxidation, reduction, hydrolysis and conjugation. These processes normally take place in the liver.The conjugated protein may remain inside the body for quite a long time, without causing any harm as such. Later, even a trivial precipitating factor leads to antigen - antibody reaction and symptoms manifest.

The bio-transformation of toxin is a complete or a partial process of detoxification. Connective tissue including blood may serve as the place for conjugated proteins to stay. This fact has been vividly explained by Shusruta in his definition of denatured toxins (DOOSHEE VISHA). According to him the denatured toxin is a product of frequent vitiation of the body constituents by unfavourable place, time, food and day sleep. This in turn further vitiates the tissues of the body. Here the pathogenic interaction between humors and tissues are also relevant.

Table No 1. Here is a compilation from various chapters of CharakaSamhitaa on the causes of diseases due to endotoxins.

Aetiological factors	**Diseases**
Heavy, cold, fatly, food	Piles, cough, cough, vomiting, diarrhoea, abdominal, diabetes mellitus, skin diseases, ascites.
Incompatible food	Piles, cough, frozen thigh, cough, vomiting, diarrhoea, abdominal, tumor (GULMA), diabetes mellitus, skin diseases, ascites.
Fermented, pungent andspicy food	Piles, malabsorption syndrome, cough, vomiting, gout, diarrhoea, skin diseases, Oedema.
Day sleep	malabsorption syndrome,frozen thigh (TOORUSTHAMBHA), gout, eruptions, insanity, epilepsy, abdominal tumour GULMA), skin disease, oedema, ascites, anaemia,
Lack of exercise	Piles, diabetes mellitus, hiccup, asthma, skin diseases, anaemia, diarrhoea
Excessive intercourse	Hiccup, asthma, skin diseases, anaemia, diarrhoea
Improper purificationtreatment	Piles, malabsorption syndrome, skin diseases
Supression of natural urges.	Frozen thigh (OORUSTHAMBHA], gout, malabsorption syndrome,

So we can conclude that unwholesome food is the main culprit in causing endotoxins (AAMA VISHA). Food with heavy and cold propertiescapable of producing excessive

mucous secretion (ABHISHYANDI) or causing burning sensation in stomach (VIDAAHI) is conducive to theproduction of endotoxins. One can easily note from the table that day sleep is also of aetiological importance. Total lack of exercise orexcessive physical strain and suppression of natural urges also prompt the body to produce endotoxins (AAMA VISHA) Taking modern part of physiology into consideration we may say that byproducts formed during daily physiological activities may act as toxins (AAMA VISHA)Here are some of the physiological reactions leading to the harmful byproducts retained in the body.

The concerned physiology and related symptoms are detailed below

1) Faces

- The chemical digestion.

The last stage of digestion occurs in the colon through the activity of bacteria that live in the human mucus, secreted by the glands of thelarge intestine. But no enzymes are secreted.

Contents of feces

1. Water
2. Inorganic salts
3. Sloughed off epithelial cells from mucosa of gut
4. Bacteria
5. Undigested food.

2) Flatus

Bacteria that ferment any remaining carbohydrates and release

1. Hydrogen
2. CO2
3. Methane gas

Bacteria that act on proteins produce

Amino acids those break down to

1. Indole
2. Skatole
3. Hydrogen sulfide and
4. Fatty acids

Some of indole and skatole is carried off in the feces and contributes to the odor. The rest of gases are absorbed and transported to liver and less toxic compounds are excreted through

urine Feces is brown. Due to stercobilin that is formed by bacterial action on bilirubin 8 - 11 lit. of gas is produced in the gut daily. Only amount 0.6 lit is excreted as flatus and remaining is absorbed from the gut and excreted through the lungs.

3) Urine

Contents of the urine

1. Water
2. Ammonia
3. Urea
4. Bilirubin
5. Uric acid
6. Some bacterial toxins
7. H+ ions
8. Heat
9. CO2

4) Sweat

Urea, lactic acid and potassium ions.

5) The following are some wantesformes during metabolic reactions, Wastes formed by

i) Cellular respiration → CO2

ii) Protein ---'zcatabolism------toxic nitrogen containing molecules -----'-ammonin and urea,

iii) Hemoglobin catabolism--------' bilirubin

iv) Nucleic acids----------catabolism-----'uric acid

V) Toxic substances changed by liver into less toxic materials E.g. ammonia into urea

VI) Ammonia is produced by de-amination of amino acids. Then ammonia with Co, produces uren.

vii) Creatinine breakdown of creatine phosphate into muscle tissue---'creatinine

viii) Uric acid catabolism → Nucleic acids (DNA &RNA) derived from food or cellular destruction,

ix) Uribilinogen: derived from breakdown of Hemoglobin.

Blood chemistry

Normal

Urea: 2.5 - mmol/lit.

Creatinine: 50 - 100 u mole/lit.

CO_2 normal 22 - 28 mmol/l.

Some hazardous effects of wastes in the body are discussed below.

1) Uremia - The presence in excess of the byproducts of proteins and amino acids in the blood. In uremia, fats and carbon whichare eventually metabolized to CO2 + H2O - are easily excreted through skin. Products of proteins and amino acids metabolism depend largely upon the kidneys for excretion. Symptoms of uremia: Anorexia, malaise, vomiting, headache, protein energy malnutrition (PEM), hypothermia, peptic ulcer, gut bleeding, pruritus etc.
2) Bilirubin - excess of bilirubin in blood (jaundice)
3) Lactic acidosis - rate of production of lactic acid from pyruvate in muscle, skin, brain and erythrocytes exceeds the rate of removalby liver and kidney. Hypotension and tissue hypoxia leads to impaired mitochondrial respiration and hence lactic acid accumulation.Severe Acidosis (<pH 7) causes depression of nervous system - so the individual becomes disoriented and comatose and may die.Severe alkalosis (>pH 7) causes over excitability in both CNS and peripheral nerves. Nerves conduct impulses repetitively, even in the absence of sufficient external stimuli - feeling of emptiness of head, numbness around mouth, nervousness, muscle spasm, convulsions and death.
4) Atherosclerosis - High blood plasma concentration of cholesterol causing hypertension. This may lead to fat embolism in coronary arteries and myocardial infarction (M.I.).
5) Ketosis - concentration. of acetoacetic acid, B- hydroxybutric acid and acetone occasionally rise very high in the blood and intestinal fluid.Ketosis occurs especially in starvation, in diabetes mellitus and sometimes if diet is composed almost entirely of fat.
6) Calcium pyrophosphate dihydrate - acute pseudo gout

Basic calcium phosphate calcium Periarthritis /tendonitis

Hydroxypatite, Destructive Arthropathy.

Tricalcium Phosphate soft tissue calcinosis.

Coming on to the treatment part, elimination (SHODHANA) of those toxins is of utmost importance. Caraka advises bloodletting RAKTHARAMOKAHANAT the same amesto treatment of prisons. The conjugated protein in various parts of the body causes hazardous effects.Its position in the body is particular tissue will give rise to different diseases as per the system. Free radicals in this context may play an important role. The rate of free or conjugated radicals although is not predictable by modern science, Ayurvedic concept of denature of channels explains the phenomenon.

Thus we know the importance of gold in the treatment of toxins, as it is the purest of all metals, it not only acts against toxins but alsoenhances immunity. The first line of treatment is to avoid etiological factors.

Scope of Study

In 21st century all the people are suffering from premature aging. Main cause is the unhealthy lifestyle. Ayurveda is science of life. Concept of Aamvisha in ayurveda is helpful for preventing and management of disorders which causes due to Aamvisha and helpful for healthy longer life.

DISCUSSION

Cellular reaction leads to the production of various free radicals which cause much degenerative diseases. To minimize the effect of these free radicals we have specific line of treatment which safely interact with free radicals and terminate chain of reaction before vital molecule damaged. Production of antioxidant decline with age, some factor is also increase free radicals. Antioxidants have been touted as key to health and longevity.

Hence the concept of Aamvisha helps to diagnosis and management of early stages of various unknown etiological disorders which may prevent further hazards to human being.

CONCLUSION

Concept of Aamvisha and its treatment of intrinsic toxin present in the gut produces diseases viz. intestinal obstruction, cholera. paralytic ileus. is very difficult. Here Aama present in profuse quantity in the body acts as an acute poison. Any cold treatment will tend to increase AAMA and any hot treatment will tend to augment theproperties of poison. Further clinical study can be conducted to prove efficacy.

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