A CRITICAL REVIEW ON AHARAJA NIDANA OF AMAVATA

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ABSTRACT

Amavata is a pain predominating and movement restricting disease, it hampers the normal activities of the patient. Amavata pose a challenge to the physician owing to its chronicity, incurability, complications and morbidity. Amavatais a rasa dushita vikara and is mainly due to the impairment of jataragni and dhatvagni, resulting in the production of ama. Such ama when gets associated with vikruta vata and gets located in sandhis it produces shoola (pain), shoitha (swelling) and sthabhdata (stiffness) of sandhis (joints). Amavata is having similarities with disease Rheumatoid arthritis explained in contemporary science. Many peoples in society are unaware about disease and its complications which is responsible for lifelong joint deformities. The exact cause of RA still remains unknown. Infectious agents or their products have been implicated without conclusive evidence. Hence an effort is made to understand the nidana of Amavata in the present day scenario.

Keywords: Amavata, Rheumatoid Arthritis, Mandagni, Viruddha ahara

INTRODUCTION: In Present era people are so busy in their profession and lifestyle. They show less interest in own health and they are unable to make a healthy life. The things that trouble most of people are faulty Dietary habit & not to follow daily seasonal regimen. Frequent indulgence of such factors leads to altered status of Jatharagni as well as Dhatvagni. Impaired status of Agni leads to develop various kinds of diseases. Amavata is a disease where stabdhata of the body occurs due to lodging of vitiated Ama and Vata in the Trika-sandhi and produces the symptoms like angamarda, aruchi, gourava, trishna, apaka etc. The term ‘yugapat’ means simultaneous vitiation of vata and kaphadosha, as main pathogenic factor of the disease. Role of hormones, pregnancy and related physiological alterations, foetal-maternal interactions have been implicated. Recently, a link between RA and smoking has been established.

The exact cause of RA still remains unknown. Infectious agents or their products have been implicated without conclusive evidence

AHARAJA NIDANA OF AMAVATA

According to Madhavanidana, nidana of Amavata are as follows:

1. Viruddha ahara:
   - The term ‘yugapat’ means simultaneous vitiation of vata and kaphadosha, as main pathogenic factor of the disease. Role of hormones, pregnancy and related physiological alterations, foetal-maternal interactions have been implicated. Recently, a link between RA and smoking has been established.

   Bhavaprakasha, Vangasena, Gadanigrahaanda Yogarathnakara have same opinion as that of Madhavanidana regarding hetu of Amavata.

   In HaritaSamhita, thenidana of Amavata are considered as guru ahara, mandagni, atitarpana, kanda and shaakasevana and indulgence in excessive vyavaya.

   1. Viruddha ahara:
   - Viruddhaahara means aharawhose gunas are similar to doshas and opposite in action to that of dhatus. They are of two kinds. First one is 18 types of viruddhaahara and second one is the dravyas which are viruddha to shareera by their swabhava. Charaka Samhita has
categorised viruddhaahara into 18 varieties. They are deshaviruddha, kala viruddha, agniviruddha, matraviruddha, satmyaviruddha, doshaviruddha, samskaraviruddha, veeryaviruddha, koshtaviruddha, avasthaviruddha, kramaviruddha, pariharaviruddha, upacharaviruddha, pakaviruddha, samyogaviruddha, hrithviruddha, sampathviruddha and vidhiviruddha. Excessive consumption of viruddhaahara leads to formation of ama and tridoshaprakopa which plays a major role in the manifestation of Amavata.

2. Kandamulasevana

The kandamulas and shakhas are explained in Hareeta Samhita as nidana for Amavata.

3. Mandagni

Jataragnimandya is the root cause of all the diseases.

The nidana which leads to amothpatti and doshaprakopa can be classified as follows:
(1) Aharajanidana
(2) Viharajanidana

AHARAJA NIDANA

Aharaja nidana includes,
- Viruddha aharasevana
- Improper following of Ashtavidha aharara vishesha ayatana
- Improper following of Dwadasha ashana pravicharana of aharara

Discussion on how Viruddha aharara acts as a causative factor in the pathogenesis of Amavata.

In the present day scenario Incompatible foods are the one prepared with odd combinations to enhance the taste, like milk processed with sour fruits (like mango), khova, lassie etc. Fast food like canned foods, preservatives in food and beverages have replaced the staple diet in several corners of the world. These fast foods generally fall in Viruddha Aharara, Improper following of Ashtavidha aharara vishesha ayatana and improper following of Dwadasha ashana pravicharana of aharara is the major causative factor for production of Áma.

- Certain food and food components may worsen the disease condition RA. Intestinal epithelium is an interface between mucosal immune system and external environment, and it is the interaction between intestinal epithelial cells and mucosal immune system which determines the resultant immune response to various food antigens. There are many references that show food acting as a potent antigen which pass through the gastrointestinal tract’s epithelium and further interact with mucosal immune system and move into circulation. Hence, the food acting as potential antigen evoking auto-immune responses in RA, can be understood as Viruddha aharara as an evidence for Amavata.

Discussion on how Kandamula and Shakha sevana acts as a causative factor in pathogenesis of Amavata.

- In Harita Samhita, the nidana of Amavata are considered as kanda and shakha sevana.

Excess consumption particular type of kanda and shakha can be considered to Solanine induced toxicity.

- Solanine is an alkaloid toxin which have pro-inflammatory properties in some individuals, which will be present in leaves, fruit, and roots of plants, like Potatoes, tomatoes, brinjal, bell peppers contain high quantity of Solanine alkaloid
- Excess consumption of above said vegetables may cause paralytic-like muscle spasm, aches, pains, tenderness, inflammation, and body stiffness.
• Solanine alkaloid consumption develops naturally the very active metabolite of vitamin D₃ (1-25 dihydroxycholecalciferol) that results in calcinosis of soft tissues, ligaments, and tendons, leading to joint pain and joint stiffness.

Concept of Advanced glycation end products (AGEs) in understanding Aharajanidana of Amavata
• Present day foods are largely heat-processed and as a result contain high levels of advanced glycation end products (AGEs). Dietary advanced glycation end products (dAGEs) are known to contribute to increased oxidant stress and inflammation, which are linked with Rheumatoid arthritis.
• Animal-derived foods that are high in fat and protein are generally AGE-rich and prone to new AGE formation during cooking.
• A receptor named RAGE, from receptor for advanced glycation end products receptor for, is found on many cells, including endothelial cells, smooth muscle, cells of the immune system.
• The pathogenesis of this process hypothesized to activation of the nuclear factor kappa B (NF-κB) following AGE binding. This receptor, when binding to AGEs, contributes to chronic inflammatory disease arthritis.
• Foods rich in Advanced Glycation End Products are Red meat (beef, lamb), pork, fish, chicken, eggs, Cheese, mayonnaise.

Discussion on how Mandagni acts as a causative factor in pathogenesis of Amavata.
• Jataragnimandya leading to amotheppati is one of the prime factor involved in the pathogenesis of the disease Amavata.

• Thus aharajanidanas which leads to mandagni and production of amaand prakopa of dosha includes excessive consumption of guru, snigdha and picchila gunayukta ahara, madhura rasa yuktahara and abhishyandi ahara. Viruddha ahara, abhojana, ajeerna bhojana, atibhojana, asaatmya ahara sevana and vishamashana also leads to mandagni and doshaprakopa.

Guru guna, snigdhaguna, madhura rasa pradhanan, picchila guna, abhishyandi ahara can be considered with the following foods.
• Omega-6 fatty acids : Boosts inflammation which are found in corn, sunflower, safflower, peanuts and soybean oils, and many snack and fried foods.
• Sugar and refined flour : Foods like sugary snacks and drinks, white-flour bread and pasta, and white rice, spike in blood sugar prompts the body to produce pro-inflammatory chemicals called cytokines, which can worsen RA symptoms.
• Gluten: Gluten, a protein found in grains such as wheat, rye may contribute to inflammation in some people with rheumatoid arthritis.

Mechanisms of Gut microbiome and T cell regulation in Autoimmunity

How Ama and Mandagni can be understood in Auto-immune pathology…??
• The intestine is the primary absorption interface for nutrients, vitamins, and water, and therefore constitutes a premier site to investigate dietary influences in autoimmune disease. The digestion of proteins, lipids, and carbohydrates in the gut is facilitated by host enzymes as well as handling by commensal bacteria (the “gut microbiota”) colonizing the human
gut. It is conceivable that the nutritional value of food is influenced by the composition and operation of a consumer’s gut microbiome, and that dietary components in turn shape the composition and functional status of the microbial community.

- In summary, the links between diet, gut microbiota, T cells, and autoimmunity are intriguing, and understanding the nexus of nutrition, metabolism, gut immunology, and systemic immune responses is key to explaining these interactions. Conceivably, effects of nutrition on the gut mucosal immune system, on sodium and fluid homeostasis, and on the metabolic state of the body could represent additive factors acting in concert with other (e.g., infectious) triggers in autoimmunity.

- Intestinal mucosa is able to selectively absorb the digested food and prevent the absorption of undigested, partially digested food or toxic substances in the body. Intestinal mucosal permeability and peristalsis is impaired in Amavata.

- Alteration of bacterial flora of the gut occurs because of lack of Agni and indiscriminate use of antibiotics. Impaired permeability and motility of the gut results in absorption of not fully digested and partially detoxified food.

CONCLUSION
Viruddhaahara causes changes in the body like – Dosha uthklesha, Amothpatti and Majjavahasrhotho dushti. According to Charaka samhita, majjavaha srotas is directly afflicted due to viruddhasevana. In Amavata, main affected sites are sandhi and Asthi which are the roots of majjavaha srotas.

Now a days, due to changed life style and improper diatery habits like pattern of spicy food, irregular timing of meals, over eating etc. causes agnimandya and it leads to production of Ama. All these faulty eating habits are almost always accompanied with faulty vihara like improper or over exercise, suppression of natural urges, excessive traveling etc. these are causes of vitiation of vata. This vitiated vata carries Ama to the all over body especially the kapha sthanas and produces symptoms like sandhi shotha, sandhi shoola, stabdhata (stiffness) and other systemic signs and symptoms. This dreadful disease is called as Amavata.

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