A REVIEW ON THE CONCEPT OF AMAVATA (RHEUMATOID ARTHRITIS) AS PER AYURVEDA

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ABSTRACT

Ama is produced whenever the factors governing mechanisms that render the gross nutrients assimilable and compatible to the body elements are overwhelmed both at the digestive and metabolic levels. Though the major sources of Ama is from the Adishtana of Jatharagni initiated by Prakupita Doshas, it is also produced at the Dhatwagni level when the inherent compatibility of an equilibrium of contradictions in the Gunas of Doshas are disrupted, a concept consistent with the description of autoimmunity in modern medicine. The Ayurvedic approach to the treatment is the need of the hour as no system is successful in providing the complete cure to this disease. A comprehensive Ayurvedic management with Langhana - a concept overlooked by the modern scientists as accidental and inconsequential - promises to make a significant difference in the management of R.A. The treatment modalities for Amavata listed by Chakradatta can be organized into three groups, to be administered in the following order. The treatment aimed at Amapachana - Langhana, Swedana, Tikta, Katu, Deepana drugs. Shodhana - Virechana and Basti. ShAman - Snehapana.

Keywords: Amavata, Rheumatoid Arthritis, Agni, Ama

INTRODUCTION

The history of medical science hence begins with the advent of Ayurveda and takes many twists and turns gifting the modern world with awesome discoveries and inventions enough to create a revolution. The process of research hence continues with renewed momentum whenever a medical problem is encountered especially that which becomes more knotty and mysterious each time attempts are made to decipher it. Ama Vata or Rheumatoid arthritis as perceived in modern parlance is one such medical problems that cripples a man to an extent to render him unfit for independent living. The patient experiences pain, which is so miserable as to promote a statistical study on the suicide rates in Rheumatoid Arthritis (RA) patients. Leave alone the articular manifestation the extra articular effects on the other systems are even more deleterious. In the musculoskeletal system it causes skeletal muscle atrophy and osteoporosis, pleuropulmonary manifestation of respiratory system, the vasculitis phenomenon of the vascular system peripheral neuropathies of nervous system,
scleritis and other manifestation of ophthalmic system, haematological manifestation like anaemia and splenomegaly are the common complications of the disease. R.A. effects approximately 0.8% of the population without race bias. Females are affected three times more than males. Interestingly, studies indicate that climate and urbanization have a major effect on the incident and severity of R.A. studies to discover the mechanism of etiology, pathogenesis and treatment have been inconclusive at best and the disease continues to elude the modern researches in all perspectives of objectivity.

In this situation, the Ayurvedic viewpoint on the disease assumes significant relevance, according to which Ama the toxic byproduct of a transformative error in body’s metabolic homeostasis conjugates with Vata the supreme controller of homeostasis and the prime Dosha to manifest the symptoms of Amavata.

The factors governing mechanisms that render the gross nutrients assimilable and compatible to the body elements are overwhelmed both at the digestive and metabolic levels leads to the production of Ama. The major source of Ama is from the Adishtana of Jatharagni initiated by Prakupita Doshas, it is also produced at the Dhatwagni level. The Ayurvedic approach to the treatment is the need of the hour as no system is successful in providing the complete cure.

**Vyutpatti of Amavata:** The word Amavata comprises of two meaningful terms Ama and Vata which form the pathogenic basis of the disease. It signifies the propulsion of Ama by Vata to produce Amavata. It is the result of improper digestion is Ama and with Vata the disease is popularly known as Amavata.

**Definition:** Amavata is a condition where Stabdhatu of the body occurs due to lodging of vitiated Ama and Vata in the Trika Sandhi. From the above definition it is clear that for well understanding of the disease Amavata, it is necessary to know the role of Ama and Vata in detail.

**Ama:** The first twin of the pathological duo of Amavata, Ama is the root cause of all Vikaras more so in Amavata and it prompts a detailed study as discussed below.

**Etymology:** “Am+Nich”: ‘Am’ Dhathu with ‘Nich’ Pratyaya constitutes the word Ama. The substance which goes into the process of digestion is Ama. The substance which is incompletely digested or uncooked is Ama. Substance which harms a group of Srotas is Ama. This etymology of Ama is nearer to the disease Amavata.

**Etiological factors:** Invariably two factors are responsible for the manifestation of the disease Amavata. As the name indicates, Ama and Vata are those two factors. Ama and Vata get vitiated due to their own respective causes to promote disease. Hence, individual etiological factors responsible for the vitiation of Vata and those etiological factors which produce Ama may also be considered as etiological factors of Amavata.

Following Nidanas for Amavata are explained: Viruddha Ahara (incompatible diet), Viruddha Cheshta (Erroneous habit), Mandagni (diminished digestive fire), Nischalata (Sedentary habits), VyayAma soon after Snigdha Ahara. Besides this, consuming Guru Ahara, Kanda Shaka (tubers) in excess and indulging in excessive Vyavaya is the Nidana of Amavata.

The disease Amavata is best compared with Rheumatoid arthritis in the modern parlance. Rheumatoid arthritis (RA) is a chronic multisystem disease of unknown cause. It has been suggested that RA might be a manifestation of the response to an infectious agent in a genetically susceptible host. Because of the worldwide distribution of RA, it has been hypothesized that if an infectious agent is involved, the organism must be ubiquitous. A number of possible causative agents have been suggested, including Mycoplasma, Epstein-Barr virus (EBV), cytomegalovirus, parvovirus, and rubella virus, but convincing evidence that these or other infectious agents cause RA has not emerged.
The process by which an infectious agent might cause chronic inflammatory arthritis with a characteristic distribution also remains a matter of controversy. Recent work has focused on the possible role of "super antigens" produced by a number of microorganisms, including staphylococci, streptococci, and M. arthritidis. Super antigens are proteins with the capacity to bind to HLA-DR molecules and particular \( V_b \) segments of the heterodimeric T cell receptor and stimulate specific T cells expressing the \( V_b \) gene products. The role of super antigens in the etiology of RA remains speculative. Of all the potential environmental triggers, the only one clearly associated with the development of RA is cigarette smoking. Sero positive RA aggregates in families Genetic factors versus their interaction with environmental facilitators is unclear HLA DR4 is found in 70% of caucasian sero positive patients compared to 25% of controls. Increased relative risk of 4-5 times for the DR4 positive persons, although a minority are affected African Americans tend not to exhibit this predilection.

**Pathogenesis of Rheumatoid Arthritis:**

In contemporary medical science, Amavata can be best correlated to Rheumatoid Arthritis. It is described as an autoimmune disorder. The propagation of Rheumatoid Arthritis is an immunologically mediated event, although the original initiating stimulus has not been clear. One view is that the inflammatory process in the tissue is driven by T\(_4\) helper cells infiltrating the synovium. Evidence for this includes: The predominance of T\(_4\) cells in the synovium. The local production of lymphokines by these infiltrating T cells. Amelioration of the disease by removal of T cells by thoracic duct drainage or suppression of their function by total lymphoid irradiation. Since T lymphocytes produce a variety of cytokines that promote B cell proliferation and differentiation into antibody forming cells. T cell activation may also produce local B cell stimulation. The resultant production of immunoglobulin is rheumatoid factor that can lead to immune complex formation. With consequent compliment activation there will be exacerbation of inflammatory process by the production of anaphylatoxins and haemostatic factors. This tissue inflammation is reminiscent of delayed type of hypersensitivity reaction occurring in response to soluble antigens or micro organisms. It is how ever unclear that whether this represents a response to persistent exogenous antigens or to altered auto antigen such as collagen or immunoglobulins.

**Signs & Symptoms of Amavata & Chikitsa:**

Lakshanas can be broadly classified into 3 categories. Lakshana specific to involvement of Sandhi, Lakshana specific to involvement of Ama, Lakshanas produced as a consequence of the disease process. They are elaborated below:

**Lakshana specific to involvement of Sandhi:** The Lakshanas such as Shoola and Shotha in Hasta, Pada, Shira, Gulpha, Trika, Janu\(^2\) and so on are very specific to involved Sandhi. Further Lakshanas like Shunata Anganam\(^3\) (swelling in Sandhi), Gatrasthabdhata, Jadyata (unable to do the physical work due to Vedana in the Sandhi Pradesha) Sandhi Vikunchana, Sankocha, Kanja and so on deformities in the limbs further show involvement of Sandhi\(^4\). As seen in the Samprapti, the vitiated Dosha and Ama will move to the Kaphasthana\(^5\) i.e. Sandhi Pradeshha. The involvement of the Asthi and Sandhi is very much pathognomonic of the disease. Hence, it can be said that Sandhi Shoola and Shotha\(^2\) is one of the cardinal features of this disease. But keeping in mind the narration of multiple joints involvement in other diseases in the text, we should consider multiple joint involvement with Ama Lakshana only as the cardinal symptom of the disease Amavata.
**Lakshana specific to involvement of Ama:** Most of the Lakshanas other than Lakshana related with the Sandhi will refer to Ama Dosha in the body. If we scrutinize these Lakshanas some of them are specific to Ama in the Annavahasrotas, where as some other refer to effect of Ama on the Rasavahasrotas. Chardi, Arochaka and so on are the features suggestive of Annavahasrotodushti specifically by Ama. The symptoms produced due to Rasavahasrotodushti can be considered at two dimensional levels, the Sthanika and Sarvadaihika Lakshanas. Aruchi, Anaha and so on are the Sthanika Lakshanas suggestive of Ama, whereas AngAmarada, Alasya are Sarvadaihika Lakshanas suggestive of Ama.

**Lakshanas produced as a consequence of the disease process:** Remaining few symptoms such as Nidraviparyaya, BhrAma Murcha, are neither the cardinal features nor the Ama Lakshanas. Basically they are the effect of pathological process in the body. Shoola is the culprit behind Nidraviparyaya, where as BhrAma and Murcha point towards the involvement of Majjavahasrotas. Though in this disease is Vata predominant, involvement of Ama is invariable. Hence, we see Sama Vata Lakshanas in the patients of Amavata. This might be the reason for not mentioning the disease Amavata separately by Charaka.

Among the different scholars of Ayurveda, there is a wide range of difference in relation to Amavata Upadrava. Yogaratnakara has included all the advanced stage manifestations as its complications whereas Vachaspati includes all Vatavyadhis as its Upadravas. But, other Acharyas differentiate symptoms of Amavata from its complications. Vijayarakshita mentions Sankocha and Khanja specifically. Others include Kalaya Khanja. Anjana Nidana includes Jadya, Antrakujana, Anaha, Trushna, Chardi, Bahumootrata, Shoola, Shayananasha as Upadrava of Amavata.

**Chikitsa:** The treatment modalities for Amavata listed by Chakradatta can be organized into three groups, to be administered in the following order. The treatment aimed at Amapachana - Langhana, Swedana, Tikta, Katu, Deepana drugs. Shodhana - Virechana and Basti. ShAmana - Snehapana.

**DISCUSSION**

Following are the Upadravas which are elaborated:

**Granthi (Rheumatoid nodules):** Granthi is one of the features of Snayu Dushti. Develops in 20-30% of persons with RA. They are usually found on the peri-articular structures, extensor surfaces and other areas subjected to mechanical pressure, but are also seen in pleura and meninges. Common locations include Olecranon bursa, Proximal ulna and so on. Nodules vary in size and consistency.

**Angavaikalya:** Angavaikalya, one of the Lakshana mentioned by Harita can be considered as an Upadrava of Amavata as most of the different deformities of the body parts are produced in the later part of the disease RA.

**Deformity of joints:**
- Swan neck deformity
- Boutonniere deformity
- Ulnar deviation
- Eversion at the hind foot, plantar subluxation of the metatarsal heads, widening of the forefoot, hallux vulgus, lateral deviation and dorsal subluxation of the toes.
- Z-Deformity of wrist and fingers.

**Vatavyadhi:** Vachaspati mentions Vatavyadhi to manifest in the Upadravavastha of Amavata. But, Vijayarakshita mentions Khanja, Sankocha. Different neurological manifestations in RA are: The subluxation of Atlantoaxial joint is a severe complication and may lead to compression of spinal cord by the Odontoid process producing symptoms like bladder dysfunction, sphincter laxity, circummonal hypesthesia, and long tract signs may
occur. It may even lead to sudden death due to the laceration of the cord by the Odontoid process. Affliction of Crico-arytenoid joints leads to hoarseness of voice and even life threatening upper airway obstruction. Tenosynovitis in wrist causes Carpal tunnel syndrome due to median nerve compression. Vasculitis vasonervorum cause motor and sensory type of neuropathy. Compression. Carpal tunnel syndrome due to median nerve is minimal because, 13 the Amapachana methods of Langhana, Swedana and Tikta Katu Deepana drugs are administered only

Chatushprakara samshudhi, cannot be employed because Samshodhana is contraindicated in the Amavastha of a disease. 4 Pipasa cannot be employed because in morbid patients Jala is Pranadharaka. Maruta and Atapa Sevana are less efficient for Jatharagni impairment when compared to Upavasa. Deepana, Pachana cannot be employed as Agni affected by Ama is incapable of Dosha, Ahara and Oushadhha Pachana. 6 Vyaya, Ama is incompatible in the disease Amavata. For these reasons, Upavasa is the ideal method of achieving Langhana in Amavata, which can be achieved by Anashana or Alpabhohan. The Langhana thus achieved will have Amapachaka effects at the Koshta level as well as Sarvadaihika level. 7

Swedana: The definition of Sweda 8 includes its benefits, viz. Stambha, Gourava and Sheetagna. Since these are antagonistic to the qualities of Kapha and Ama, Swedana has an important role to play in the treatment of Amavata. Snigdha Sweda, Ruksha Sweda and Ekangasweda, Sarvangasweda are the two fold classifications of Sweda 9 and in Amavata, the Ruksha type of Sweda should be administered for the following reasons; The pathogenesis of Amavata involves spread of Ama and Vata to the Sleshmasthan, specifically Amashaya and Sandhi. 10 In all conditions of Amashayagata Vata, Ruksha Sweda should be administered. 11 As disease is localized in Sandhipradesha, Ekangasweda is ideal. The Rukhasweda can be advised to the affected Sandhi using Valukapottali or Rukshopanaha. 12

Tikta Katu Deepana Katuni Cha: Administration of Tikta, Katu Deepana oushadhis in Ama achieves Ama pachana both at the Koshta level and Sarvadaihika level. The methods used for Ama Pachana are potentially Vataprapopaka. But as Langhana is indicated in SAMA Vata condition the danger of Vata Prakopa is minimal because, 13 the Amapachana methods of Langhana, Swedana and Tikta Katu Deepana drugs are administered only
until NirAmavastha is achieved. After this, NirAma Doshas have to be eliminated from the body by Shodhana. The Shodhana methods which can be employed are Virechana and Basti.

Virechana: Virechana is the best preferred form of Shodhana in Amavata because Vamana (Ullekhana), though indicated by Charaka in Ama chikitsa is unsuitable here as it aggravates the symptoms of Amavata caused by Pratilomagati of Vayu like Anaha, Vibandha and Antrakoojana. They can best be relieved by Virechana. Besides, the production of Ama involves the Avarana of the Avarana Pachaka Pitta by Kledaka Kapha. Virechana administered here provides dual benefits of removing the Avarana produced by Kledaka Kapha and acting on the Sthanika Pitta Dosha.

Basti: Basti forms the second method of Shodhana. Both Niruha and Anuvasa Bastis should be employed here. The Niruha Basti does the Shodhana of the Doshas brought to Pakvashaya and the Anuvasa Basti alleviates Prakupita vata as a consequence of Niruha Basti.

Shamana Snehapana: This is a third component in the plan of management of Amavata. The objective of Snehapana here is ShAmana. It is important to administer Sneha only after the disease has become NirAma. ShAmana Snehapana in Amavata provides the following benefits; Snehapana prevents the aggravation of Vata and Rukshata as a result of the previously employed therapeutic measures. It helps in increasing the Bala of the patient who has been debilitated as a result of previously employed therapeutic measures. ShAmana Sneha stimulates the Agni which is an important component in the treatment of Amavata. Since the Snehapana has been prescribed in Asthi Majja Gata Vata, it can be comfortably used in Amavata. Vataharana is the inherent property of Sneha, an essential requirement in the treatment of Amavata.

CONCLUSION
Amavata is a condition where Stabdhata of the body occurs due to lodging of vitiated Ama and Vata in the Trika Sandhi. Viruddha Ahara (incompatible diet), Viruddha Cheshta (Erroneous habit), Mandagni (diminished digestive fire), Nischalata (Sedentary habits), VyayAma soon after Snigdha Ahara. Besides this, consuming Guru Ahara, Kanda Shaka (tubers) in excess and indulging in excessive Vyavaya is the Nidana of Amavata. Lakshanas can be broadly classified into 3 categories. Lakshana specific to involvement of Sandhi, Lakshana specific to involvement of Ama, Lakshanas produced as a consequence of the disease process. The treatment aimed at Amapachana - Langhana, Swedana, Tikta, Katu, Deepana drugs. Shodhana - Virechana and Basti. ShAmana - Snehapana.

REFERENCES
2. Agnivesha; Charaka Samhita; redacted by Charaka and Dridabala with Ayurveda Dipika Commentary by Chakrapanidutta; English translation edition 1997; by Ram Karan Sharma and Vaidya Bhagwan Dash; Chaukhambha Sanskrit Series Office, Varanasi, Uttar Pradesh.
3. Ama rasinha; Ama rakosh; with RAmasrani commentary of Bhanuji Diksita, edited with the easy Maniprabha hindi commentary by Haragovinda Shastri; 3rd edition, 1997; Chaukambha Sanskrit Samsthan, Varanasi.
5. Baghel M. S.; Researches in Ayurveda; Ed. Gajendra Kumar Jain; 1st edition, 1997; Mridu Ayurvedic Publication and Sales, Jamnagar, Gujarat.
6. Bahadur Raja Radhakanthadeva; Shabda Kalpadruma; Reprint 1998; published by Nag Sharan Singh for Nag publishers; Delhi.
7. Basavaraj; Basavarajeyam: edited by Goverdan Sharma; published by Gorakshanantralaya Nagpur; Also Chaukambha Sanskrit orientalia; Varanasi.
8. Bhavamishra; Bhavaprakasha; with Vidyothini Hindi tika by Bhishakratna Shri Bhamashankara Shastri and Sri Roopalal Vaishya; 8th edition, 1997; Chaukhambha Sanskrit Bhavan; Varanasi; Uttar Pradesh.
10. Chakrapanidatta; Chakradatta with Vaidyaprabha hindi commentary by Dr. Indradeva Tripathi; 1997; Chaukambha Sanskrit Sansthan; Varanasi.
20. Harita; Harita Samhita; 1985, 1st edition; with Asha Hindi commentary by Ramavalamba Shastri; Prachya Prakashan; Varanasi.

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