



## Review on *Nidana* (Etiology) of *Amavata* (Rheumatoid Arthritis)

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### Abstract

*Amavata* is more similar to Rheumatoid arthritis on the basis of its clinical manifestation and pathogenesis. *Acharya Madhavakar* mentioned first *Amavata* as a special disease entity in his famous treatise *MadhavaNidanam*. *Ama* (biotoxin) and *Vata* (biophysical force or kinetics) are playing an important role in the *samprapti* (pathogenesis) of *Amavata* (Rheumatoid arthritis). The term *Nidana* means cause or etiology of the disease. *Amavata* (Rheumatoid arthritis) is a multifactorial disease. In *Amavata*, mainly *sandhishula* (joint pain), *sandhisotha* (joint swelling) and *sandhigraha* (stiffness of joint) lead to the restricted movements of the joints and patients become crippled gradually due to vitiation of *Vata* with *Ama*. In *MadhavaNidanam* etiology or *Nidana* of *Amavata* (Rheumatoid arthritis) is vividly mentioned. *Viruddhahara* (Unwholesome Diet), *Viruddhacheshhta* (Erroneous Habits), *Mandagni* (Diminished Agni), *Nishchalata* (Sedentary Life), Exertion immediately after taking *Snigdha Ahara* are specific etiological factors or *Nidanans* for *Ama* formation, *Vatadosha* vitiation and ultimately produce *Amavata* (Rheumatoid arthritis) manifestation.

**Key words:** *Ama*, *Vata*, *Nidana*, *Amavata*, Rheumatoid arthritis.

### Introduction

In *Ayurveda* *Acharya Madhavakar* mentioned first the *Amavata* as a special disease entity and where *Ama* (biotoxin) and *Vata* (biophysical force or kinetics) are taking an important role in the *samprapti* (pathogenesis) of *Amavata*. The term *Nidana* means cause or etiology of the disease<sup>1</sup>. Rheumatoid arthritis

is a chronic, progressive autoimmune arthropathy and characterized by bilateral symmetrical involvement of joints with some systemic clinical manifestations<sup>2</sup>. According to the clinical manifestations and pathogenesis *Amavata* very closely resembles with the Rheumatoid arthritis. The term *Amavata* consists of two words *Ama* and *Vata*. *Ama* is being a predominant factor of the disease and it is associated with the *Vata* thus causing the disease *Amavata*. *Ama* is also considered the root cause of the maximum number of disease as per the Ayurvedic concept. In this case *Ama* and *Vata* play major role in the manifestation of the disease. In Ayurveda, most of the diseases are named taking into consideration of the vitiated *dosha*, *dushya*, *marga*, *avayava*, *lakshan* and *Karma*. In the same way *Amavata* has been nomenclatured taking into two predominant pathological factors i.e. *Ama* and *Vata* having their important role in *Nidana* (etiology) and *Chikitsa* (treatment). The entity *Amavata* and its *Nidana* is available since the period of *Charaka* in different context. The *Nidana* of *Amavata* is more clearly and specifically described in *Madhava Nidana*. In modern medicine etiology of Rheumatoid arthritis remains obscure.

### ***Ama***

Faulty digestive mechanism at the level of G.I.T. and faulty metabolism in the level of tissue and cellular i.e. termed as *Mandagni* (poor digestive capacity) is mainly responsible for the genesis of *Ama*. In ordinary parlance the term *Ama* means unripe and partially digested food that is unwholesome to the body<sup>3</sup>. Thus it is a product due to defect in digestion and or metabolism and it is directly related with the state of *Agni* (digestion or metabolism capacity). So, it is an important factor for the pathogenesis of the most of the diseases and predominant cause of *Amavata*.

### **Etymology of *Ama*:**

In *Vachaspathyam* the word *Ama* is derived as the word *Ama* is derived from the 'Am' *Dhatu* with the suffix 'A'. It means improper or partially digested matter<sup>4</sup>. In *Amarkosha* the word *Ama* is derived as Combination of 'Am' *Dhatu* with 'Nich' *Pratyaya* forms the word *Ama* which means the substance subjected to digestion and that damages or is harmful to the different of *Srotasa* (channel) is known as *Ama*<sup>5</sup>.

### ***Vata* or *Vayu*:**

*Vata* or *Vayu* is the chief functional component of living human body and it gives rise to good and bad consequences according its normal or abnormal condition. All the life activities of the body especially voluntary and involuntary movements are performed under the control of *Vata dosha*. It is another important pathogenic factor of *Amavata*. In *Amavata*, mainly *sandhishula* (joint pain), *sandhisotha* (joint swelling) and *sandhigraha* (stiffness of joint) lead to the restricted movements of the joints and patients become crippled gradually due to vitiation of *Vata* with *Ama*. Besides that other functions of *Vata* are also disturbed in *Amavata*.

### **Etymology of *Vata* or *Vayu* :**

"*Vati Iti Vayu*" substance which has got movement, is known as *Vayu* (*Vachaspathyam*, *Shabdakalpadruma*)<sup>6</sup>. The term 'Vata' is derived from root 'Va *Gatigandhanayoh*' which means to move, to enthuse, to make known and become of (*Amarkosha*, *Shabdastoma Mahanidhi*). In classics it is also referred by synonyms like *Anila*, *Marut*, *Pavana* etc<sup>7</sup>.

### ***Nidana*:**

It has been well accepted by almost all *Acharyas* that causative factors of *Mandagni* are also responsible for the formation of *Ama* into the body. Further *Ama* also causes *Agnimandya* due to *Tridosha Prakopa*. Thus it can be said that cyclic mechanism takes place in production of *Agnimandya* and *Ama*. *Nidana* of

*Agnimandya* and *Ama* can be divided and described as *Aharajanya Nidana*, *Viharajanya Nidana*, *Manasika Nidana*, *Mithyopacharajanya Nidana*.

**Aharajanya Nidana** :It includes inake of *Atimatra Ahara* or fasting for long time, untimely intake of *Annapana*, excessive drinking of water and excessive intake of *Guru-Ruksha-Sheeta-Dvishta-Vishtambhi-Vidahi-Ashuchi-Viruddha or Asatmya Ahara*<sup>8</sup>.

**Viharajanya Nidana** :It includes that *Vega Sandharana*(avoid essential urges), *Swapna Viparyaya* (day sleep and awakening at night) etc. act as causative factors of *Ama* formation in to the body<sup>9</sup>.

**Manasika Nidana** : If any person, affected with *Irshya, Bhaya, Krodha, Lobha, Shoka, Dainya, Dvesha, Kama, Moha, Lajja, Mana, Udvega* etc. and takes food, his/her *Agni* can not digest it properly and produces *Ama*.<sup>10</sup>

**Mithyopacharajanya Nidana** : Improper management of *Vamana, Virechana* or *Snehapana*, incompatibility of season may produce *Ama*<sup>11</sup>.

In the context of *Amavata* it is a disease having multi-factorial etiology. *Amavata* as a separate disease entity was described first time in detail by *Acharya Madhavakarain* his famous Ayurvedic book *MadhavNidana*. He has given specific etiological factors responsible for the causation of *Amavata* which are *Viruddhahara* (Unwholesome Diet), *Viruddhacheshta* (Erroneous Habits), *Mandagni* (Diminished *Agni*), *Nishchalata* (Sedentary Life), Exertion immediately after taking *Snigdha Ahara*.<sup>12</sup>

**ViruddhaAhara**: Factors, which provoke *doshas* but do not eliminate them out of the body, are called *Viruddha*. There are 18 types of *VirudhaAharas* (both drug and diet) mentioned by *Acharya Charaka* those are *Desha* (Place) *viruddha*, *Kaal* (Time) *viruddha*, *Agni* (Digestion power) *viruddha*, *Matra* (Dose) *viruddha*, *Satmya* (Suitability) *viruddha*, *Sanskara* (Processing) *viruddha*, *Doshaviruddha*, *Virya* (Active Principle) *viruddha*, *Koshtha* (Bowels) *viruddha*, *Avastha* (State of health) *viruddha*, *Krama* (Order) *viruddha*, *Parihara* (Contra Indication) *viruddha*, *Upachara* (Prescription) *viruddha*, *Paka* (Cooking) *viruddha*, *Sanyoga* (Combination) *viruddha*, *Hrita* (Palatability) *viruddha*, *Sampat* (Richness in properties) *viruddha*, *Vidhi* (Rules of eating) *viruddha*<sup>13</sup>.

Besides these, foods taking without following the *Ashta-Ahara-Vidhi-Visheshayatana* are also considered as *Viruddha* which are *Prakriti* (Nature of food), *Karana* (Method of processing), *Samyoga* (Combination), *Rashi* (Quantity), *Desha* (Habitat), *Kaal* (Stage of disease or state of individual), *Upyogasanstha* (Rules governing intake of food), *Upayokta* (Individual who takes ahara).<sup>14</sup>

*Dwadashapravichara* should also be followed while taking food otherwise it is considered as *Viruddha* and these are *Ushna* (Warm), *Snigdha* (Unctuous), *Matravata* (In proper quantity), *Jeerna* (After the previous food is digested), *ViryaAviruddhama* (Non-antagonistic), *Ishatadesha* (In favorable place), *Ishatasarvopakarana* (With all the favorable accessories), *Natidrutama* (Not too fast), *Nativilambitama* (Not too slow), *Ajalpam* (Without talking), *Ahasana* (Without laughing), *Tanmanabhunjit* (With full concentration on eating), *Atmanamabhisamikshya* (Thinking of once self)<sup>15</sup>.

**ViruddhaCheshta**: The habits, which exert unfavorable effect on body, are considered as *viruddhacheshta*. In our classics *viruddhaahara* has been described vividly, but *viruddhacheshta* is not mentioned clearly. *Viruddhacheshta* are responsible for *doshautklesha*. Some factors may be considered as *Viruddhacheshta* those are *Vega vidharana* (avoid essential urges), *Vega udirana* (intentionally increase urges), *Divaswapa* (day sleep), *Ratrijagarana* (awakening at night), *Ativyayama* (excessive physical exercise), *Vishamashayashayana* (sleeping in improper posture), *Ativyavaya* (excessive sexual intercourse). *Asthis* (bones) and *Sandhis* (joints) are the most affected parts in *Amavata*. Root source of these are *Majjavaha Srotas* and it is directly afflicted with *Viruddhasevana*. So it may say that *ViruddhaAhara* and *ViruddhaCheshta* both contribute as *nidanas* in pathogenesis of *Amavata*.<sup>16</sup>

**Mandagni**: *Mandagni* is the root cause of all diseases. It means hypo functioning of various forms of *dehagni* (i.e. *Jatharagni, Bhutagni* and *Dhatvagni*). The ingested food is digested by these three types of *Agni*

to form healthy *dhatu*s in the body. *Mandagni* leads to formation of *Ama* which causes *srotorodha* and results in reduced *Dhatuposhana*. Ultimately it's causing *Dhatukshaya* and this *Dhatukshaya* leads to *vata prakopa*.<sup>17</sup>

**Nishchalata:** Any type of physical inactiveness can be termed as *Nishchalata*. It is responsible for *KaphaVridhhi* which results in *Agnimandya* and consequently leads to the formation of *Ama* which is main pathogenic factor for the manifestation of *Amavata*. Thus it may say that life style plays a great role in the formation of disease and physically inactive patients are more prone to *Amavata*.

**Snigdhambhuktavatohiannamvyayamam:** Most of the blood of circulation is supplied to the digestive system after consumption of food. But, if a person starts exercise or exertion immediately after taking food especially rich in *Snigdha*, maximum circulation of blood will be shifted to skeletal muscles, resulting in hampered digestion and absorption which leads to *Ama* formation. Also exercise after taking food causes *vata prakopa* which affects the normal metabolism and assimilation of *ahara*.

### Discussion:

*Amavata* is more similar to Rheumatoid arthritis on the basis of its clinical manifestation and pathogenesis. *Amavata* has been nomenclatured consisting into two predominant pathological factors i.e. *Ama* and *Vata* having their important role in *Nidana* (etiology) and *Chikitsa* (treatment). Faulty digestive mechanism at the level of G.I.T. and faulty metabolism in the tissue and cellular level i.e. termed as *Mandagni* is largely responsible for the formation of *Ama*. *Nidana* of *Agnimandya* and *Ama* can be divided and described as *Aharajanya Nidana*, *Viharajanya Nidana*, *Manasika Nidana*, *Mithyopacharajanya Nidana*. *Vata* is another important pathogenic factor of *Amavata*. *Amavata* is a disease having multi-factorial etiology. *Acharya Madhava Kar* has given specific etiological factors responsible for the causation of *Amavata* which are *Viruddhahara* (Unwholesome Diet), *Viruddhacheshhta* (Erroneous Habits), *Mandagni* (Diminished Agni), *Nishchalata* (Sedentary Life), Exertion immediately after taking *Snigdha Ahara*.<sup>18</sup> types of *Virudha Aharas* (both drug and diet) mentioned by *Acharya Charak* in *sutrasthan*. Foods taken without following the *Ashta-Ahara-Vidhi-Visheshayatana* are also considered as *Viruddha*. *Dwadashapravichara* should also be followed while taking food otherwise it is considered as *Viruddha*. The habits, which exert unfavorable effect on body, are considered as *viruddhacheshhta*. *Mandagni* means hypo functioning of various forms of *dehagni* (i.e. *Jatharagni*, *Bhutagni* and *Dhatvagni*). Any type of physical inactiveness can be termed as *Nishchalata*. It is responsible for *KaphaVridhhi* which results in *Agnimandya*. Exertion immediately after taking *Snigdha Ahara* is also responsible for *mandagni* and formation of *Ama*. So, these are the important causative factors for *Mandagni* generation, *Ama* formation and *Vatadosha* vitiation and ultimately to produce the *Amavata* manifestation.

### Conclusion:

*Amavata* (Rheumatoid arthritis) is a multifactorial disease. *Ama* (biotoxin) and *Vata* (biophysical force or kinetics) both are playing important role in the *samprapti* (pathogenesis) of *Amavata* (Rheumatoid arthritis). *Viruddhahara* (Unwholesome Diet), *Viruddhacheshhta* (Erroneous Habits), *Mandagni* (Diminished Agni), *Nishchalata* (Sedentary Life), Exertion immediately after taking *Snigdha Ahara* are specific etiological factors or *Nidanas* for *Amavata* (Rheumatoid arthritis).

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