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# AN ELABORATED ASPECT OF TREATMENT PROTOCOL IN AMAVATA

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## ABSTRACT

**Background:** It is not an easy task to treat chronic inflammatory joint disorders like amavata. Treating such kind of diseases needs stepwise and stage wise treatment plan. In ayurveda for the disease like amavata *(*Acute to chronic inflammatory joint disorder), specific treatment regimen is explained which is meant for break-down the samprapti (pathogenesis). **Aims and objectives:** Aim is to elaborate significance of treatment regimen of amavata and its probable action against pathogenesis of disease. **Methodology:** keen review of Classical ayurveda texts with modern science literature is done to elaborate scientific reasoning behind the fact. **Result and Conclusion:** Stepwise and stage wise treatment regimen is very much helpful to target against pathogenesis of amavata.

**KEYWORDS: a**mavata, ayurveda, samprapti, Treatment regimen.

## INTRODUCTION OF AMAVATA

In ayurveda nomenclature of a disease is very important, as it gives a brief description of diseases. Ayurveda defines three dynamic pathophysiological doṣa (entities), as the basis for

all body function. Amavata described as tridoṣa *along* with ama enters in Trika Sandhi (joints) and doing stiffness in body parts.[1]

युगपत्कुपितावन्तस्त्रिकसन्धिप्रवेशकौ|

स्तब्धं च कुरुतो गात्रमामवातः स उच्यते ||5||

According to modern science disease which having similarity with these symptoms is Rheumatoid Arthritis.

Rheumatoid Arthritis is a chronic inflammatory disease of unknown aetiology marked by a symmetric, peripheral polyarthritis. It is the most common form of chronic inflammatory arthritis and often results in joint disease, RA may result in a variety of extra articular manifestation, including fatigue, subcutaneous nodules, lung involvement, pericarditis, peripheral neuropathy, vacuities and hematologic abnormalities.[2]

**SAMPRAPTI OF AMAVATA (STEPWISE EXPLANATION ETIOPATHOGENESIS OF AMAVATA)**

सनिदानसंप्राप्तिमाह

विरुद्धाहार चेष्टस्य मन्दाग्ने निश्चलस्य च |

स्निग्धं भुक्तवतो ह्यन्नं व्यायामं कुर्वतस्तथा ||

वायुना प्रेरितो ह्यामः श्लेष्मस्थानं प्रधावति |

तेनात्यर्थं विदग्धोऽसौधमनीः प्रतिपधयते ||

वातपित्तकफैर्भूयो दूषितः सोऽन्नजो रसः |

स्रोतांस्यभिष्यन्दयति नानावर्णोऽतिपिच्छिलः ||

जनयत्याशु दौर्बल्यं गौरवं हृदयस्य च |

व्याधीनामाश्रयो ह्येष आमसंज्ञोऽतिदारुणः ||5||[3]

**1. विरुद्धाहार चेष्टस्य (Dietetic Incompatibilities)**

It means doing physical activity after having virudhahara (incompatible foods) or vice versa. Any dietary medicine or ahara (food) which accumulates or uprooted the doṣa from its place

but not able to eliminate them from the body are known as virudhahara (Dietetic Incompatibilities).[4,5]

यत् किञ्चिद्दोषमास्त्राव्य न निर्हरति कायतः |

आहारजातं तत् सर्वमाहतायोपपधते ||85|| (च.सू. 26/85)

यत्किञ्चित्दोषमुत्क्लेश्य भुक्तं कायान्न निर्हरेत् |

रसादिष्वयथर्थां वा तद्विकाराय कल्पते ||20|| (सु.सू. 20/20)

Eighteen types of virudhahara have been described in caraka *samhita.*[6]

Excessive indulge of any of these virudhahara leads to production of ama. Ama is a toxic, heavy, unctuous, and sticky juice which originates as a waste-product of digestion and metabolism. Indeed, the word ama can be translated to mean "immature" or "incompletely digested." Ama builds up in individuals whose digestion is either weak or overloaded with the wrong foods. For example - Exercise, excess sex, swimming in condition of ajīrṇa *(*indigestion*)*.[7]

**2. मन्दाग्ने निश्चलस्य च**

Depending upon the stage of metabolism where a specific agni is functionally active, agni has been classified into three sub-classes: ′ jaṭharagni′, ′ bhūtagni ′ and dhatvagni.

Mandagni is subdued in its activity. This agni is unable to digest and metabolize even a small quantity of food.

It means Physical inactivity while having mandagni.Mandagni is root cause of all diseases.[8]

रोगाः सर्वेऽपि मन्दाग्नौ.....||1||

It results in production of ama.

Niṣceṣṭha - Any type of physical inactivity is responsible for kapha Vitiation, which results in mandagni and consequently helps in formation of ama.

**3. स्निग्धं भुक्तवतो ह्यन्नं व्यायामं कुर्वतस्तथा|**

**वायुना प्रेरितो ह्यामः श्लेष्मस्थानं प्रधावति||**

Due to exercise after snigdhahara (blemishing) ama moves to seat of kapha doṣa because doṣa moves from the koṣṭha to the śakha.[9]

व्यायामादूष्मणस्तैक्ष्ण्याद्धितस्यानवचारणात् |

कोष्ठाच्छाखा मलायान्ति द्रुतत्वान् मारुतस्य च ||31||

Here exercise means any type of physical activity. Normally, a good supply of blood is very essential in gastrointestinal tract for the digestion of heavy meal.[10] The blood circulation to the skeletal muscle increases, resulting in decrease of blood supply to the gastrointestinal tract comparatively.[11] This hampers the process of digestion and absorption of food. Therefore improper digestion of food leads to formation of ama.

Vata leads ama to the śleṣma sthana (ura, kaṇṭha, śira, kloma, parva, amaśya, parva, jivha etc.).[12]

**Etymology of Ama**

The word ama is derived from the root of ama with prefix ‘A’.

आम्यते ईषत् पच्यते आ+अम्+कर्माणि यत्र ||29||

शब्दकल्पद्रुम (वाचस्पत्यम 2/29)

Due to poor strength of digestive fire, the ahara rasa (food) is not properly formed in the stomach and in this state it is known as ama. In other sense it is told that the first dhatu that is rasa dhatu is not forms properly and then first unconverted rasa dhatu (food) is termed as ama.[13] The word ama can be translated to mean immature or incompletely digested ama builds up in individuals whose digestion is either weak or overloaded with the wrong foods.[14]

आमाशयस्थः कायाग्ने दौर्बल्यादिविपाचितः |

आध आहारधातुर्यः स आम इति कीर्तितः इति ||1-5 (मा.नि. मधुकोष 25/1-5)

**Modern concept of Ama**

Ama is vast term, it includes deranged metabolism of carbohydrates, fats, proteins.

**E.g.** - Improper metabolism of carbohydrates produces lactic acid, which accumulates in muscle causing pain and is also common in rheumatism like condition; improper metabolism of proteins produces lactic acid which accumulates in joints causing gout; improper metabolism of fats leads to Dyslipidaemia.

**Vata**

suśruta defined this word as vagatigandhanayo.[16]

तत्र 'वा' गतिगन्धनयोरिति धातुः.....||5||

The meaning of the word gati is movement, moving, going etc.

caraka clearly indicates the vata is responsible for all activities of the body.

**4. तेनात्यर्थं विदग्धोऽसौधमनीः प्रतिपधयते ||**

Vidagdh (ingenious) - Whenever Jatharagni becomes manda by the doṣa, anna (food) also becomes Vidagdh. That Anna becomes śukta and situated in amaśaya.[17]

विदग्ध=अम्लता

Role of rasa dhatu is to give nutrition to the body tissues where it's required. If rasa dhatu is not properly formed than it does not get easily assimilated by body tissues and results in lack of nutrition.

The part of rasa dhatu which is not get assimilated by the tissues remains in circulation and which may further treated as foreign body by the immune system.

That unassimilated and improperly formed rasa dhatu remains unconverted. Anything which remains unconverted or unstable becomes Vidagdh.

**Auto-immune diseases**

Auto-immune disease is defined as a condition in which the immune system mistakenly attacks body's own cells and tissues. Normally, an antigen induces the immune response in the body. The condition in which the immune system fails to give response to antigen is called tolerance. This is true with respect to body's own antigens that are called self- antigens or auto antigens. Normally, body has the tolerance against self-antigens. However, in some occasions, the tolerance fails or becomes incomplete against self-antigens. This state is called

auto immunity and it leads to the activation of T-lymphocytes or production of auto antibodies from B-lymphocytes. The T-lymphocytes (cytotoxic T- cells) or auto antibodies attack the body's normal cells whose surface contains the self-antigen or auto-antigen.[18]

**5. वातपित्तकफैर्भूयो दूषितः सोऽन्नजो रसः |**

**स्रोतांस्यभिष्यन्दयति नानावर्णोऽतिपिच्छिलः ||**

Such vidagdh dhatu circulates in the body accompanying with tridoṣa which causes kleda/abhiṣyanda and in strotasa with different coloured picchila (viscous) ama rasa.

**vyana vayu**

सर्वदेहचरोव्यानोरससंवहनोधतः।।

स्वेदा सृक्स्रावणश्चापि पञ्चधर चेष्टयत्यपि ॥ (सु.नि.१/१७)

vyana vayu is believed to be situated in the whole body. It is mainly used to conduct convection of rasa in the body.[19]

By stimulation of vyana vayu circumambulation of rasa and doṣa occurs in the body. Wherever doṣa get space due to dissimilation of strotasa they procreate the disease.[20]

कुपितानां हि दोषाणां शरीरे परिधावताम |

यत्र सङ्गः खवैगुण्यात् व्याधिस्तत्रोपजायतै ||19||

**6. जनयत्याशु दौर्बल्यं गौरवं हृदयस्य च |**

**Daurbalya** Due to improper digestion, Dhatu are deprived of sufficient nutrition/nourishment, which leads to daurbalya. Seat of rasa dhatu is hradaya.[21]

तस्य चं हृदय स्थानं||3||

According to modern, Carbohydrates, protein, fats, vitamin, salt and water are the 6 essential parts of food.

Carbohydrate get absorbed by the villi in the small intestine, then moves to cisterna chyli and mixes with blood in superior vena cava through lymphatic duct.

Protein and carbohydrate reaches liver via blood through portal vein. Due to increase in blood viscosity, peripheral blood supply decreases so oxygen supply and energy level also decreases which leads to daurbalya (weakness).

**TREATMENT PROTOCOL**

लंघनं स्वेदनं तिक्तं दीपनानि कटूनि च |

विरेचनं स्नेहपानं वस्तयश्चाम मारुते |

सैन्धवाध्येनानुवास्य क्षारवस्तिः प्रशस्यते ||1||[22]

**LANGHANA** - Ten types of langhana are mentioned in caraka.[23]

The pathology originates from amaśaya due to poor digestion ultimately resulting in the formation of ama, so langhana prevents further formation of ama. So langhana is the first measure for the management of Amavata.

**Svedana**- Rukṣa sveda is advocated and it is beneficial because of its ūṣṇa guṇa it digests the ama presented in affected area and also dilates the channels. Then obstruction of channel is removed and results in perspiration.

**Capillary circulation**- The arterioles divide into smaller muscle walled vessels called metarterioles and these in turn feed into capillaries. The opening of capillaries is surrounded on the upstream side by minute smooth muscle pre capillary sphincters. It is unsettled whether the metarterioles are innervated, and it appears that the precapillary sphincters are not. However, they can of course respond to local or circulating vasoconstrictor substances.

In resting tissue, most of capillary collapsed. In active tissue, the metaarterioles and precapillary sphincter dilates. The intracapillary pressure rise, overcoming the critical closing pressure of the vessels, and blood flows through all of the capillaries. Relaxation of the smooth muscles of metarterioles and precapillary sphincters is due to action of vasodilator metabolites formed in active tissue.

When capillaries are stimulated mechanically, they empty probably due to contraction of pre capillary sphincter.[24]

So due to svedana, paused/ vidagdh (ingenious) rasa comes in re-transmission.

**TIKTA KAṬU RASA** – These dravya are laghu,uṣṇa and tīkṣṇa in properties, which are useful for ama pacana and margavivaraka. So they do pacana of doṣa and strotośodhana so doṣa comes towards koṣṭha from śakha.[25]

वृद्धया विष्यन्दनात् पाकात् स्त्रोतोमुखविशोधनात् |

शाखा मुक्तवा मलाः कोष्ठं यान्ति वायोश्चनिग्रहात् ||33||

So when doṣa again comes in koṣṭha from śakha then after we should do virecana.

**VIRECANA** – Virecana (Therapeutic purgation) is a śodhana therapy (biopurification therapy) by virtue of which the doṣa are eliminated via adhomarga.[26]

According to line of treatment Virecana should administered after langhana, svedana, dīpana and pacana because doṣa are in nirama state and migrate from śakha to koṣṭha, so Virecana with suitable drugs should be administered.

Eraṇḍa taila is the drug of choice for purpose of Virecana in amavata. It not only performs virecana action but also control the vata doṣa by its snigdha guṇa.[27]

**SNEHAPANA**- The therapeutic measures so far employed are likely to cause rukṣata in dhatu and sandhi (joints) and provocation of vata which any further aggravation of disease. Snehapana should be done after virecana karma not before.

**BASTI**- In sequence of treatment protocol basti is the last procedure because as diseases attain chronicity the vata becomes more Pravridha and basti is very useful in this stage.

Basti acts as rasayana in line of treatment.

Cakrapaṇi has recommended saindhavadi taila as anuvasana basti and kṣara basti for niruha basti.

**NIRUHA BASTI (KṢARA BASTI)** – It eliminates the residual ama/ doṣa brought to the koṣṭha and is helpful in anaha, vibandha etc.

**ANNUVASANA BASTI** is helpful in the rukṣata of sandhi and control vata by snehana guṇa and nourishes the body.

## DISCUSSION AND CONCLUSION

With above discussion of treatment protocol it can be concluded that Stepwise and stage wise treatment regimen is very much helpful to target against pathogenesis of amavata. Amavata can be managing well with this line of treatment. By the prevention of formation of ama, Using dīpana pacana dravya and cleansing of body through virecana snehpana and basti).

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