

**HETU AND SAMPRAPTI OF AMAVATA (RHEUMATOID ARTHRITIS) - A
SYSTEMATIC REVIEW**

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Article Received on 25/02/2020

Article Revised on 15/03/2020

Article Accepted on 05/04/2020

ABSTRACT

According to *ayurveda* concept, the inequity of basic constituents causes different diseases. The balance of different fundamental elements in the body (*sharir*) is the sign of good health. *Ayurvedic* remedies are found very effective and useful to sustain the equilibrium. *Amavata*, *vatarakta*, *sandhivata*, etc are few *vata* related diseases. Among these *amavata* is a chronic joint and body pain disease accompanied by a swelling of some or all of the synovial joints which involve *ama* and *vata*. It is a disease of *madhyam roga marga* as it affects *sandhi* and *hridaya marma*. The present life style not only disturb the healthy *ahar* (diet) but *vihar* (daily exercise etc.) also. Whenever the function of *agni* is disturbed in the body, *ama* is produced. Such produced *ama* is slimy in nature, this *ama* gets together with *dushit vata / prakopit vata* and circulates all over the body through *shira* and *dhamani* and gets stuck in *kaphasthana* i.e. *sandhi* because *shleshak kapha* is located in *sandhi* and *amavata* is developed resulting patient suffer from lifelong joint deformities and acute condition.

KEYWORDS: *Amavata*, Rheumatoid arthritis, Diagnosis, Prognosis, Joint pain.**INTRODUCTION**

Although, *Ayurveda* is an ancient medical and health care science which is accepted worldwide to manage chronic diseases. Then also new researches and revalidation of old *ayurvedic* principles mentioned in *ayurvedic* classics are in progress worldwide. *Vata* related diseases are very common and global. *Amavata* is a chronic joint disorder accompanied by a swelling of the synovial joints which involve *ama* and *vata*^[1]. It is a disease of *madhyam roga marga* as it affects *sandhi* and *hridaya marma*. Though *ama* and *vata* are the predominant pathogenic factors but the disease represents *tridoshic* vitiation. The affliction of *sandhis* by *vata dosha* in association with *ama*, reflects the equal role of both *dosha* and *dushya* in the causation of this disease.

In brief, it is a chronic immune - inflammatory systemic disorder mainly affecting synovial joints, caused due to formation of *ama* and its association with vitiated *vatadosha*. It deposits in joints. Clinical feature of *amavata* resembles with Rheumatoid Arthritis.

Aims and Objective

1. The conceptual study of *amavata*.
2. To review the *amavata* in context of Rheumatoid Arthritis
3. Co-relation between *amavata* and Rheumatoid Arthritis.

This conceptual study will be helpful in understanding of pathogenesis of *amavata* in successive stages.

MATERIAL AND METHOD

Different *Ayurveda* texts, journals, research papers, articles are referred to study the concept of *ayurvedic vivechana* of *amavata* and its usefulness in manifestation and Sequelae of the *amavata*.

OBSERVATION

Changing life-style is playing a vital role in disturbing *agni* to manifest with several diseases. *Agnimandya* leads to formation of *ama* which is again root cause for many diseases. It can be produced as a consequence of – *jatharagnimandya*, *prathama dosha dushti janya* which is referred as *rasadhatvagnimadyajanya* and *malasanchayajanya*. Unhealthy eating and behaviour habits in pre-existing *agnimandya* leads to further vitiation of *ama* which can be considered as *rasadhatvagnimandyajanya ama* or *sama rasa dhatu* which is said to gain *vidagdhatu*. When it is carried with *samavayu* and takes shelter in *kaphasthana-sandhi*, it produces *amavata* with *sandhishool*, *sandhishotha*, *sandhigraha*, *angamarda*, *aruchi*, *trishna*, *jwara*, *gaurava*. It may further produce complications as *nidraviparyaya*, *bahumutrata*, *hridgraha* according to *dosha dushti*.^[2-3]

Nidana

Nidana is defined as the factors which disturbs the active state of *doshic* equilibrium aggravates the disease is known as *nidana*. This *nidana* not only supports us to decide the line of treatment as well as prognosis of the disease but management of the disease also. *Amavata nidana* is of many-sided various acharyas mentioned their different views for the productions of *ama* in *amavata*. A separate *nidana* according to Madhavakara³ is mentioned hereunder

1. *Viruddha Ahara* (Incompatible food)
2. *Viruddha Chestha* (Incompatible actions)
3. *Mandagni* (Hypo functioning of *agni*)
4. *Nischala* (Lack of exercise)
5. *Snigdha Ahara* followed by immediate exercise.

Besides these intakes of kanda mula, sakha and excessive exertion are etiological factors opined by Harita.^[4-5] In Anjana Nidana, the factors which vitiates *vata*, *pitta* and *kapha* are considered under *Nidana*.^[6] These all above *nidana* can be included in two headings.

- 1). Unwholesome diet.
- 2). Erroneous habits.

Unwholesome diet means “which aggravates the body humours but not expel them out of the body”. Charaka has mentioned 18 types of unwholesome diet (*viruddha ahara*), some of the *virudha ahara* are mentioned here under^[7]

1. Milk along-with *kulatha*,
2. *Panasa* fruit with *matsya*
3. Mixtures of equal quantities of honey & ghee
4. Boiled curd.^[8]

Wrong habits (*viruddha chesta*) mainly included alternate use of cold and heat, suppression of natural impulses, sleeping during daytime, walking at night, over indulgence in work etc.

Samprapti of amavata^[9]

The impairment of *agni* produces the condition of *ama*. Mainly *agnimandya* initially affects digestion followed by metabolism. Hence in this state of *agni*, the *rasadhātu* is not formed up to the standard level and it is considered as *ama*. This ‘*ama*’ along with *vyana vayu* and also by virtue of its *vishakari guna* it quickly moves to all *kapha sthanas*, through *hridaya* and *dhamanis*. This *vidhagada ama*, in *kapha sthana* is further contaminated by *doshas* and assumes different colours, because of the *atipichhilata*. If *ama* gets obstructed in to channels and promotes further vitiation of *vata dosha*, this morbid *ama* circulates universally in the body propelled by vitiated *vata* with predilection for *sleshma sthana*. On the *dhamanies* with the other *doshas* it facilitates *srotoabhisrayanda* and *srotorodha* causing *sthanasmsraya* manifested *stabdhata* (stiffness), *sandhisula* (joint-pain), *sandhishotha* (swelling), *angamarda* (bodyache), *apaka* (indigestion), *jwara* (fever), *anga gourava* (heaviness of body), *alasya* (laoghess) etc symptoms of *amavata*. According to the commentators on Madhava Nidana the *samprapti* of *amavata* can be summarized according to *shatkriyakal*.^[10-17](Fig No.1)

Symptoms of amavata

Amavata is a condition which presents with the symptoms like pain, swelling, stiffness and loss of function of the affected joints. It is due to the formation of *ama* which gets associated with the *dosha* forming *sama* state and gets mobilized by *vata dosha*. It later enters the *kaphasthana* and produces the disease. Its clinical presentation resembles with the condition Rheumatoid arthritis (RA).^[18] The various stages of *amavata* is described by *ayurvedic acharyas* in three categories, based on its symptoms, condition and complication of the disease. The details are given in Table No. 1.

Table 1: Stages of amavata and its syntoms.

Sr. No.	Nava Amavata	Pravrudha Amavata	Jeerna Amavata
1	<i>Aruchi</i>	<i>Involvement of hasta, pada siro, gulpha, trika etc</i>	Destruction of Articular cartilage
2	<i>Alasya</i>	<i>Shotha, stabdhata</i>	Osteoporosis
3	<i>Gourava</i>	Extreme pain	Deformities
4	<i>Jwara</i>	<i>Praseka, aruchi</i>	Poly arthritis
5	<i>Hrillasa</i>	<i>Hridaya gourava and hritgraha</i>	-
6	<i>Apakthi</i>	<i>Chardi, bhrama moorcha anaham</i>	-

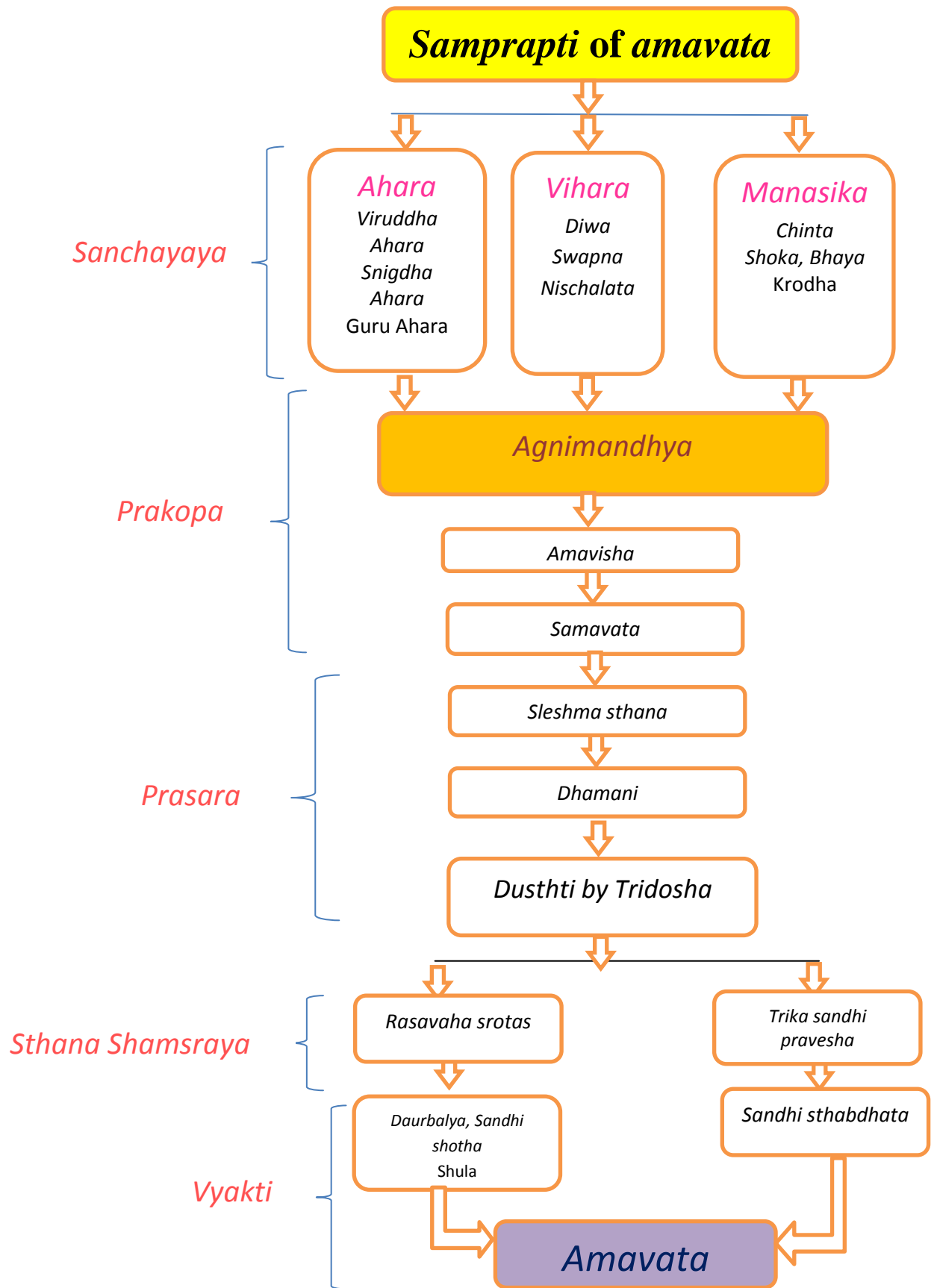


Fig. 1: Shatkriyakala and Samprapti of Amavata.

Rheumatoid Arthritis (RA)

Rheumatoid Arthritis (RA) is a long lasting auto immune disorder that primarily effects joints. One of the main problems in RA is joint inflammation. The joints swell and the cartilage protecting the end of the bones in the joints get damaged. Rheumatoid arthritis (RA) is a chronic systemic inflammatory polyarthritis that primarily affects small arthrodial joints of the hands and feet in a symmetrical pattern. It is a heterogeneous disease with variable severity, unpredictable course and a variable response to drug treatment. The disease prevalence worldwide is approximately 0.8 % (0.3% to 2.1%) of the total population. In India, the prevalence of RA is 0.5% to 0.75%. More than 75% patients develop the disease between the age group of 30yrs and 50 yrs. Women are found to be affected with RA 2 to 4 times more often than men.^[19]

Some characteristics of rheumatoid arthritis are mentioned here under.^[20-21]

1. It commonly affects women between 24-40 years age.
2. Characteristically it is bilaterally symmetrical affecting the small joints of the hand or foot and may spread to large joints.
3. Periodic painful swelling of the joints with stiffness and deformity. (e.g. ulnar deviation of the hand, flexion deformity etc.) may occur. (Fig No.2)

- a. Swan neck deformity is a deformed position of the finger, in which the joint closest to the fingertip is permanently bent toward the palm while the nearest joint to the palm is bent away from it (DIP flexion with PIP hyperextension).
 - b. Boutonniere's deformity: a fixed deformity of the finger consisting of flexion of the PIP joint and extension of the DIP joint.
 - c. A mallet finger is a deformity of the finger caused when the tendon that straightens our finger (the extensor tendon) is damaged.
 - d. Ulnar deviation, also known as ulnar drift, is a hand deformity in which the swelling of the metacarpophalangeal joints causes the fingers to become displaced, tending towards the little finger. Its name comes from the displacement toward the ulna.
 - e. Z deformity- It is seen at the thumb and consists of hyperextension of the interphalangeal joint, and fixed flexion and subluxation of the metacarpophalangeal joint.
4. Muscle spasm and muscle wasting may be present.
 5. Restriction of movement is common
 6. X-ray: Decalcification and diminished joint space may be seen.

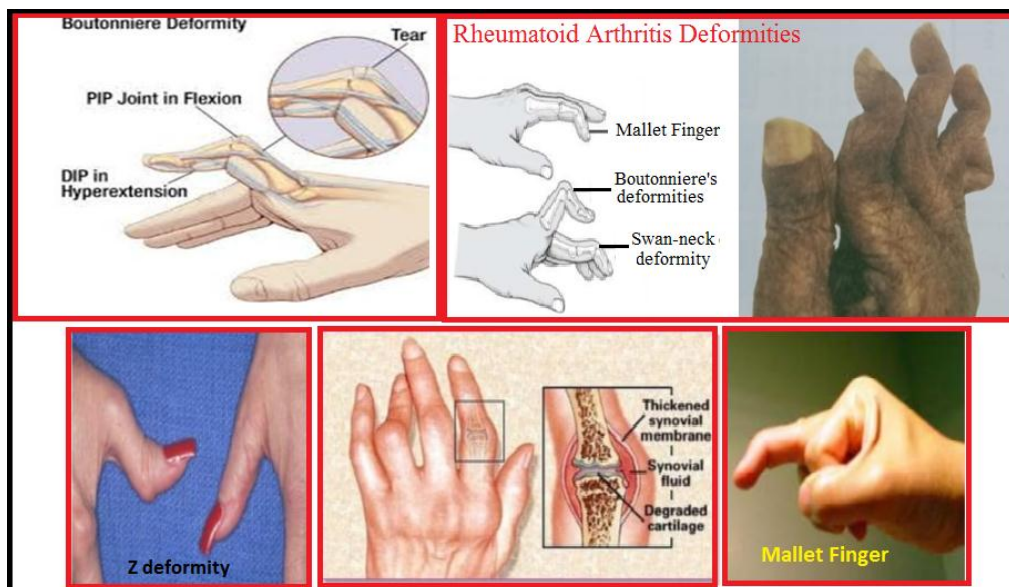


Fig. 2: Rheumatoid Arthritis (RA) Deformities.

DISCUSSION

Amavata occurs in all over the world in all races, genders, age, and climates. It is equated with Rheumatoid arthritis. *amavata* is caused due to *amadosha* and *vadosha*. *Ama* produces metabolic disorders. *amavisha* is an important factor for the pathogenesis of the most of the diseases. *Amavata* occurred by combination of *ama* and *prakupitavadosha* due to *nidanasevana* and *agnimandya*. The stage of vitiation of *ama* and aggravation of *vata* should be

proper analysed. When *amadosha* undergoes to fermentation and forms *amavisha*. This *amavisha* absorbed in the body through gastrointestinal tract due to its properties like *sukshma*, *laghu* and *tikshana*. Then *amavisha* circulates in whole body and produces many diseases. We should know about presence and absence of *ama* in a patient before commencing the treatment because in case of presence of *ama* (*samavastha*) and absence of *ama* (*niramavastha*), line of treatment is totally different.

CONCLUSION

Amavata is also a *vata vyadhi* disease and it can be correlated to Rheumatoid arthritis based on similarities in symptoms received from classic *Ayurveda* and modern medical science literature.

It is an auto-immune ailment of unknown aetiology characterised by chronic persistent symmetrical poly arthritis, joint erosion and destruction disorder which require for an early diagnosis and management at the right time to avoid further progression of the disease. The negligence of disease may bring acute condition and lifelong joint deformities. Therefore, suitable therapy must be employed for the patients of the *amavata* so the progressive nature of the disease could be stopped at an early stage.

In short, it can be summarised that the diet and lifestyle causing *mandagni* resulting in *ama* formation and vitiation of *vata* are responsible for the disease *Amavata*. Treating *amavisha* / *rheumatoid arthritis* (RA) is a challenge for the medical health professional's due to chronicity of the disease, severe pain and swelling associated with the disease in the acute stage and due to crippling nature of disease in the advanced stages resulting in decreased quality of life. The principle line of treatment includes the *langhan*, *deepana*, *pachana chikitsa* for the digestion of *ama* and the use of *shothahara*, *vednathapana*, *shulaprashaman dravyas* etc. For subsiding the symptoms. *hingwadi churna* and *rasnadashmula kwatha* due to their contents will be beneficial in alleviating *amavata*.

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