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Review on the disease *Amavata* and its management in Ayurvedic literature

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ABSTRACT

In the present era *Amavata* is the most common disease affecting a large aged population. *Amavata* term derived from words as *Ama* & *Vata*. The word *Ama* is the condition in which various ailments in system create toxic effect. The *Ama* when combines with *Vatadosha* & occupies *Shleshmasthan* (*Asthisandhi*) results in painful disease. The clinical presentation of *Amavata* closely mimics with the special variety of Rheumatological disorders called Rheumatoid Arthritis in accordance with their similarities on clinical features like pain, swelling, stiffness, fever, redness, general debility, fatigue are almost identical to that of *Amavata*. The Rheumatological disorder is such a group of disease which has no specific medical management in any type of therapeutics. *Amavata* is one of the challenging diseases for the clinicians due to its chronicity, incurability, complications and morbidity. The allopathic treatment provides the symptomatic relief but the underlined pathology remains untreated due to absence of effective therapy and also giving rise to many side effects, toxic symptoms and adverse reactions also more serious complications like organic lesions. The treatment procedures described are *Langhan*, *Swedan*, *Tikta-Katu*, *Deepana*, *Virechana*, *Basti* etc. So, the present study deals with systemic review of *Amavata* from all the classics of Ayurveda and its management.

Key words: *Amavata*, *Ama*, *Vata*, *Rheumatoid Arthritis*.

INTRODUCTION

Amavata is manifested due to *Viruddha Ahara-chesta*, *Mandagni*, *Nischalatha* and doing *Vyayama* immediately after the intake of *Snigdha Bhojana*. These are the factors for the initiation of disease process as these will lead to the production of *Ama*. The persons who have proper *Agni* will not be affected by these *Nidana*. In the presence of sedentary life style and *Mandagni* if a person involve himself in *Viruddha Ahara* and *Cheshta* and does

exercise immediately after *Snigdha Ahara Sevana* leads to the manifestation of the disease. This could be because normally, the circulation of *Rasa and Rakta* is more towards *Koshta* for the digestion of meal. But when a person indulges in any type of *Vyayama* just after consuming meal, circulation is deviated from *Koshta* to the *Shakha* resulting in a relative decrease of supply to the *Koshta*. By this act, the process of digestion and absorption get hampered. Therefore, improper digestion leads to formation of *Ama* presenting with *Sama Lakshana* similar to the prodromal symptoms of Rheumatoid Arthritis like fatigue, weakness, joint stiffness, vague arthralgia and myalgia.

The exact etiopathogenesis of is unknown till date, but various theories have been put forth to explain the etiopathogenesis, the autoimmune mechanism which is most commonly implicated in Rheumatoid Arthritis. Rheumatoid joint is a site of intense oxidative stress and various free radicals are formed there, as a result of inflammatory response as well as immune response. In Rheumatoid Arthritis patients, the plasma levels of body antioxidant enzymes like sulphadryl groups and glutathione are decreased.

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Nirukti

Amavata consists of two different words *Ama* and *Vata* which are the two predominant pathological factors acting in the disease process. Both these words carry important meaning from point of understanding of the *Vyadhi "Amavata"*.^[1]

Vyutpatti of Ama

- *Ama (stree) – Aa + Am + Karmanimaatra = Paakarहितam* means being undigested.
- *Ama – "Aamyateishatpachyate Iti"* - means subjected to incomplete digestion.
- "*Aamdhatu + Nich*" *Pratyaya* constitutes the word *Ama*.

Lakshanas of Ama

Srotorodha Balabrahmsha Gourava Anilamudata | Alaya Apakti Nishtiva Malasanga Aruchi Klama||

The symptomatology of *Saamadosh* is described in *Ayurveda* as a guideline to decide the *Saama* and *Niramavastha*.

Samavata Lakshana

Vayu Saamo Vibhandagnisaadstambaantrakujanai| Vedanashophanistodai kramashoangani peedayan|| Vicharetdyugpaccapi Gruhanati Kupito Bhrusham| Snehadyaivriddimaayaati Suryameghodaye Nishi||

Niramavata Lakshana

Niramo Vishado Rooksho Nirvibhandalpavedanaha| Vipareetaganai Shanti Snigdhairyaati Visheshataha||

Ama and Agni

Charaka have classified *Agni* as 13 types among which *Jatharagni* occupies the central position and control the other *Agnis*. Then five types of *Bhutagni* have been enumerated as *Parthiva, Aapya, Taijasa, Vayavya and Nabhasa bhutagnis*. Seven types of *Dhatvagni* namely *Rasa, Rakta, Mamsa, Meda, Asthi, Majja* and *Shukra dhatvagni*. Food consumed is first digested by the *Jatharagni* in *Koshta*. Simultaneously it is acted upon by *Bhutagni & Dhatvagni* to nourish *Rasadi Dhatuas, Indriya* and *manas*.

Concept of Ama and contemporary science

Ama can be defined as intermediary product of metabolism of carbohydrates, fats and proteins. Improper metabolism of carbohydrates produces lactic acid, which is accumulated in muscle causing pain and is also common in Rheuma like condition. Lactic acid which accumulates in joints results in Gout.

Ama and free radicals

Free radicals are unstable and react quickly with other compounds attempting to capture the needed electron to gain stability. Generally, free radicals attack the nearest stable molecule stealing its electron. The molecule becomes a free radical itself and thus begins a chain reaction. Once the process is started, it can cascade, finally resulting in the destruction of a living cell.

Site of formulation of Ama

Agni is prevailing in every cell of the body. *Dhatvagnimandya* in cells leads to formation of *Ama*. So, it can be formed in any part of body, same as pre-production of free radicals' cells take place in any cell of the body.

Nidanapanchaka

The etiopathogenesis of disease can be studied with the knowledge of *Panchanidan*: *Nidana, Purvarupa, Rupa, Upashaya*² and *Samprapti*.^[2]

Nidana

The term *Nidana* relates both to the etiology as well as diagnosis of disease. Etiology helps in ascertaining the causative factors of a disease whereas diagnosis help in determination of the nature of disease based on the causative factors, premonitory symptoms, actual signs, exploratory therapy and pathogenesis. In the present context, the term *Nidana* refers to the causative factors of the disease *Amavata*.

According to *Charaka*, a single etiological factor may produce a single disease or many factors together may produce a single disease and vice-versa. *Amavata* is mostly a disease having a multi-factorial etiology. *Acharya Madhava* have given specific etiological

factors responsible for the causation of the disease *Amavata* as:

Viruddha Ahara Chestasya Mandagne Nischalasya cha|

Snigdham Bhuktivate hi Annam Vyayamakurvastata||

Explanation of various Etiological Factors

Viruddha Ahara

The dietetic articles which are unwholesome for the normal *Doshas* and *Dhatu*s of the body and tend to disagree with normalcy of the system are known as *Viruddha*. This *Viruddha Ahara* is considered to be most common etiological factor for most of the diseases and also is most important factor responsible for causation of *Amavata*.

Poorvaroopa

Poorvaroopa indicates the stage of *Dosha Dushya Sammurchana*.^[3] *Prakupita Dosha* which is in *Prasaravastha*, circulating all through the body, when encounters an obstruction in the path in the form of *Khavaigunya*, gets lodged in that place. This *Avastha* termed as *Sthana - Samshrashaya*, brings into being the disease entity and the first symptoms of the disease in the form of *Poorvaroopa* are exhibited.

Laghutrayees though have dealt with the disease *Amavata*, they do not mention *Poorvaroopas* specifically. In the context of *Vatavyadhi*, *Acharya Charaka* clearly points out *Avyakta Lakshanas* as the *Poorvaroopa* of *Vatavyadhi* and also, *Vagbhatacharya* mentions that some of the *Poorvaroopa* may continue as *Samanya Lakshana* of the disease.

Ama acts as the predisposing factor along with *Prakupita Vata*, in the onset of the disease *Amavata*. *Ama* and *Prakupita Vata Dosha* when undergoes *Dosha Dushya Sammurchana* i.e., in *Rasa* and *Sandhi* specifically, results in the disease *Amavata*. As the *Poorvaroopas* of the disease are not directly indicated, the *Samanya Lakshanas* of *Amavata* like *Angamarda*, *Aruchi*, *Trishna*, *Alasya*, *Gourava*, *Jwara Apakti* and *Anga Shunata*^[4] in a mild manner can be considered as *Poorvaroopa*.

Roopa

Roopa of a disease appears at the stage of *Vyaktavastha* of *Shat Kriyakala*. When the disease gets fully manifested after the stage of *Sthana Samshraya* followed by continues *Nidana Sevana*, the symptoms which surface are termed as *Roopa*.

Samprapti

Indulgence in incompatible foods and habits, lack of physical activity, or doing exercise after taking fatty foods and those who have poor digestive capacity even normally also; produce *Ama* (improperly digested food) in the body. This *Ama*, associating itself with *Vata*, moves quickly to the different seats of *Kapha* in the body filling them and the *Dhamanis* (blood vessels) with waxy material. Thus, the bad end product of digestion associated with *Vata*, *Pitta*, and *Kapha* assuming different colours, blocks the tissue pores and passages with thick waxy material. It produces weakness and heaviness of the heart, which becomes the seat of the disease. It also affects simultaneously the joints of the body such as those of waist, neck, shoulder, etc. This dreadful disease known as *Amavata* producing stiffness of the body. The unwholesomeness of the drugs and diets is because of their mutually contradictory qualities and specific actions. *Acharya Charaka* has described eighteen types of *Viruddha Ahara*.

Showing Samprapti Ghatak

Dosha	Vata: Samana Vayu and Vyana Vayu. Pitta: Pachaka Pitta. Kapha: Kledaka Kapha, Sleshaka Kapha and Avalambhaka kapha
Dushya	Rasa, Mamsa, Asthi, Majja, Mutra, Purisha.
Agni	Jataragni and Dhatvagni
Ama	Jataragni Janya and Dhatwagni Janya
Strotas	Rasavaha, Annavaha, Majjava, Asthivaha, Purishavaha, Mutravaha
Strotodusti Prakara	Sanga and Vimargagamana

Udbhavasthana	<i>Amashaya</i>
Sancharasthana	<i>Rasayani</i>
Vyaktasthana	<i>Sarva Shareera and Sandhies</i>
Adhishtana	<i>Hrudaya and Rasavaha srothas</i>
Rogamarga	<i>Madhyama Rogamarga</i>
Vyadhiswabhaba	<i>Chirakari</i>

Upashaya and Anupashaya

The *Lakshanas* which indicate the kind of *Oushadha*, *Anna* and *Viharas* antagonistic to the disease and what are agreeable to the patient's system are termed as *Upashaya*. *Anupashaya* is just opposite of *Upashaya*.

Any *Oushadha*, *Ahara* and *Vihara* either by being antagonistic to the *Hetu*, *Vyadhi* or *Hetu-Vyadhi* or by being similar to the *Hetu*, *Vyadhi* or *Hetu-Vyadhi* produces *Sukhanubandha* or *Dukhanubandha* respectively and will be called as *Upashaya* or *Anupashaya* respectively.

Similar types of *Lakshanas* are found in many diseases. For example, some *Lakshanas* of *Amavata* such as *Sandhi Shotha*, *Sandhi Shoola* etc. are found in other diseases like *Sandhi Vata*, *Vatarakta* etc. In such conditions, it is difficult to diagnose the disease and to adopt proper line of treatment. *Upashaya* and *Anupashaya* provide diagnostic aid for diseases in the form of therapeutic tests in such cases, which are otherwise difficult to diagnose.

Upashaya

Ama is an important factor in the production of *Amavata*. Hence the *Dravyas* which are antagonistic to the nature of *Ama* are considered as *Upashaya* of *Amavata* such as *Dravyas* having *Katu*, *Rooksha* and *Ushna*. *Dravyas* can be in the form of *Ahara* or *Vihara* or *Aushadha*.

Anupashaya

As *Anupashaya* is just opposite to *Upashaya*, the causative and aggravating factors of *Amavata* are to be considered as *Anupashaya*. The *Dravyas* which are

Guru, *Sheeta* and *Madhura* cause the aggravation of symptoms of *Amavata*. Hence these factors are *Anupashaya* of *Amavata*.

Cakradatta has given the *Varjya Ahara* in *Amavata Rogi* which is also to be considered under *Anupashaya*. *Dadhi*, *Matsya*, *Guda*, *Kshira*, *Masha*, *Pishtakadi Guru* and *Abhishyandakara Aharas* which are to be avoided by *Amavata Rogi*.

Bhavamishra while describing the condition of *Samavayu* stated that *Sama Vayu* gets increased by the use of *Sneha Dravyas*, during cloudy season, early morning and at night. The principle is applicable to *Amavata* also.

Amavata Chikitsa

The manoeuvres adopted with intention of attaining *Dhatu Samyata* in the body is termed as *Chikitsa*. Its goal is to correct disrupted *Doshas* and to preserve the integrity of the *Dosha*, *Dhatu* and *Mala*. The treatments of *Amavata* has been dealt in 2 stages, *Ama Avastha* and *Nirama Avastha*, i.e., the primary aim of the treatment is *Ama Pachana* and *Nirharana* with proper care of *Vata* followed by *Kevala Vata Chikitsa*. The authors of *Chakradatta*, *Bhavaprakasha*, *Yogaratanakara* and *Bhaishajya Ratnavali* confer clarity regarding the treatment of *Amavata Chikitsa Siddhanta* is *Langhana*, *Swedana*, *Deepana*, *Tikta Katu Rasa Pradhana Dravya Prayoga* in *Amavastha*, followed by *Virechana*, *Snehapana*, *Saindhavadi Anuvasana* and *Kshara Basthi*. *Bhavaprakasha* mentions *Snehana* in place of *Snehapana*. *Ruksha Sweda* with *Valuka Putaka* and *Sneha Vivarjita Upanaha* also are useful in treating *Amavata*.

Langhana

In *Amavata*, *Ama* is the primary cause of the disease caused due to *Agnimandya*. *Langhana* is the first and best line of treatment to get rid of *Ama*. Any factor which causes *Laghutwa* in the body is called *Langhana*. The *Gunas* of *Langhana dravyas* are *Laghu*, *Teekshna*, *Vishada*, *Ruksha* and *Sukshma*. These *Gunas* are antagonistic to the qualities of *Ama*. Though *Charaka* speaks of *Dashavidha Langhan* including *Vamana*, *Virechana*, *Asthapana* and

Shirovirechana along with *Pipasa*, *Maruta Sevana*, *Atapasevanadi*, *Pachana*, *Upavasa*, *Vyayama*, *Langhana* in the form of *Upavasa* or *Laghu Bhojana* (food prepared with *Deepana*, *Pachana* drugs) should be implemented in *Amavata*. The *Samyak Langhana Lakshanas* are: *Samyakh Visarjana* of *Vata*, *Mutra* and *Purisha*, *Laghutwa* of the body, *Hridaya Shuddhi* or *Prasannata*, *Mukha* and *Kantha Shuddhi*, *Tandra* and *Klama Nivrutti*, *Sweda Pravrutti*, *Ruchi Pravrutti*, appearance of *Kshudha* and *Pipasa* and absence of any discomfort in the patient. *Langhana* helps *Jatharagni* to recover its original strength. It does *Agni Sandhookshana*, checks the production of *Ama*, gives rest to *Avayavas* related to the process of digestion, allows *Agni* to digest what is left without properly being digested. If food intake is not restricted *Agnimandya* will continue and the disease gets further aggravated.

Swedana

The process which alleviates *Stambha* (stiffness), *Gaurava* (heaviness), *Shaitya* (coldness) and produce *Sweda* is called *Swedana*. *Ama* is *Guru*, *Snigdha* and *Sthira* in nature and *Swedana*, *Rooksha sweda* in particular, having opposite qualities reduce *Srotorodha* and thereby relieving pain. *Rooksha Sweda* with *Valuka Pottali* is recommended in *Amavata*.

Valuka Sweda has *Rooksha*, *Laghu* and *Ushna Gunas*. *Ushna Guna* liquefies the *Doshas* and also causes *Srotovikasana* which results in increased circulation. As a result, liquefied *Doshas* leave the *Sandhis* and travel towards the *Koshta*, bringing about reduction in *Sandhishoola* and *Sandhishotha*. The patient will be able to move the joints with least trouble. *Bhaishajya Ratnavali* mentions *Karpasasthyadi Shankara Sweda Sneha Vivarjitha Upanaha Sweda* also is recommended in *Amavata* by *Bhavamishra*. *Swedana* is done as a *Poorva Karma* of *Shodhana Karma*, but in *Amavata* it is used as an *Upakrama*.

Administration of Tikta, Katu and Deepana Dravyas

Katu and *Tikta Rasa Dravyas* are abundantly used in *Amavata*, which serves the purpose of *Amapachana* and *Vatanulomana*. *Tikta Rasa* is mentioned

specifically for alleviating vitiated *Pitta* and *Katu Rasa* for *Kapha*.

Ama has predominance of *Prithvi* and *Jala Mahabhootas*. *Katu Rasa* is *Agni* and *Vayu Mahabhoota Pradhana* and *Tikta Rasa* is *Vayu* and *Prithvi Mahabhoota Pradhana*. They are *Ushna* in *Veerya* and also have properties of *Deepana*, *Pachana* and *Vataghna*. *Katu Rasa Paradhana Dravyas* are *Uttama Kaphahara* but *Vata Pittakara*, whereas *Tikta Rasa Pradhana Dravyas* are *Kaphahara*, *Madhyama Vatakara* and *Pitta Shamaka*. By the virtue of these qualities, *Katu* and *Tikta Rasas* are antagonistic to *Kapha* and *Ama*, and are hence useful as *Deepana* and *Pachana*.

Deepana

A specific measure which causes *Agni Sandhookshana* is termed as *Deepana*. *Agnimandhya* is an important pathological event in *Amavata* which can be well combated by the use of *Deepaniya Dravyas* such as *Shunti*, *Trikatu* etc. This reduces the production of *Ama* due to *Jatharagni* and *Rasadhatwagni Mandya*. The above-mentioned therapeutic modalities are useful in the *Ama* stage of the disease. In the *Nirama* stage - *Virechana*, *Snehapana* and *Basti* are to be adopted.

Virechana

After *Langhana*, *Swedana* and *Shamana Chikitsa*, the *Doshas* attain *Nirama* stage, get liquefied and reach *Koshta*, from where they have to be eliminated through the nearest route. Hence *Virechana* which is a form of *Shodhana* is done for the elimination of *Pitta* and *Kapha* and for *Anulomana* of *Vayu*. Complete evacuation of *Doshas* by *Virechana* will prevent the tendency of the disease to recur again and again. In *Amavata*, *Eranda Taila* is the drug of choice for *Virechana*. It has *Pachana*, *Virechana* and *Vataghna* property. According to *Sushruta* it is also *Deepana*.

Snehapana

Sneha pacifies vitiated *Vata*, gives *Mrudutwa* to the body and removes the obstruction of the *Malas*. *Snehapana* is contraindicated in *Amavata*, but, when

the *Doshas* become *Nirama*, *Kevala Vatahara* treatment is indicated. In *Kevalavata Sneha* is the prime remedy.

In *Amavata*, the *Snehas* medicated with *Pachana and Deepana Dravyas* are useful. For internal use *Hriswa Matra Snehapana* is suitable, as the patients are weak due to the disease. *Snehana* does *Vatashamana*, *Agnideepti* and *Koshta Shuddhi* to the patient. *Bhavamishra* suggests repeated administration of *Sneha* in *Amavata*. Some scholars opine that *Eranda Taila* should be used for the purpose of *Snehapana* which also serves as *Dosha Virechaka* in *Amavata*.

Basti

Basti is the most effective treatment in *Vata* predominant diseases. *Charaka* expounds the effects of *Basti* as *Vayasthapaka*, *Dhatudhadyakara*, and *Agnivardhaka* etc. It normalizes the *Doshas Dhatus* and *Malas* and purifies the whole body.

Pathya-Apathya

The term *Pathya* means the diet that is suitable to both body and mind in normalcy as well as in ill health. Diseases can be controlled and cured by adopting *Pathya* which comprises wholesome and suitable *Ahara* and *Vihara*. Without following *Pathya* any amount of medicines may not help in curing the diseases. Therefore, *Pathya* is used as a synonym of *Chikitsa*.

Raja Nighantu has listed the following as *Hitakara Dravya Samooha* which are in general are *Pathya* for all diseases. *Ghrita*, *Saindhava*, *Dhanyaka*, *Jeeraka*, *Ardra*, *Tanduleeyaka*, *Patola*, *Alabu*, *Godhuma*, *Jeerna Shali*, *Gokshura*, *Hamsdaka* and *Mudga*. *Harita* indicates to follow the *Pathyas* detailed in the context of *Jwara* as *Pathyas* for *Amavata*.

In *Amavata*, the *Ahara* and *Vihara* which are *Vata-Kaphahara*, *Amapachaka*, *Agnideepaka* and *Rasaprasadaka* are considered as *Pathya*. So, the diet and the *Oushada* having *Katu*, *Tiktarasa*, *Ushna*, *Tikshna Guna* are *Pathya*.

Apathya

The *Ahara* and *Vihara* which add to the *Prakruti* of the *Vyadhi* are called as *Apathya*. In *Amavata*, the *Ahara*

and *Vihara* which are *Vata Prakopaka* and which leads to *Agnimandya*, *Amotpatti* and *Rasadhatu Vikruti* are considered as *Apathya*.

Harita especially contra-indicates the use of *Dwidala*, *Taila* and *Picchila Dravyas* in *Amavastha*. After *Amapachana* patient should not take *Ushna* and *Drava Padarthas*.

Aetiology

Rheumatoid arthritis is an unknown aetiology.^[6] It is thought to be multifactorial, with genetic factors (human leucocyte antigen [HLA] genes) and environmental factors (smoking, silica) playing important roles.

Notably, autoantibodies (RF, ACPAs) can be found in the sera years before the development of clinical symptoms. This suggests that initiating events incite a complex interaction between the innate and adaptive immune systems, which breaks tolerance and leads to autoreactivity. Over time, a critical immune threshold is breached resulting in clinical symptoms and tissue damage.

Genetic Factors

- Twin studies show that the concordance rate for RA in monozygotic twins is 12% to 15% and in fraternal twins is 2% to 3% compared to 1% in the general population. This suggests that genetic factors account for 60% of an individual's susceptibility to RA.
- The major histocompatibility complex (MHC) region coding for certain HLA- DR Genes account for 30% to 40% of this genetic predisposition. The susceptibility to RA is mainly associated with the third hypervariable region of DRβ chains from amino acids 70 to 74 (QKRAA). This susceptibility or shared epitope is found on HLA-DR4 (*0401,*0404) and, to a lesser extent, HLA-DR1 (*0101) and DR14 (*1402) β chains and is associated with a fourfold to fivefold increased risk of developing RA.
- However, this association is not found in all ethnic/racial groups (i.e., African- Americans) and

HLA-DR4 positivity occurs in 20% to 30% of the general population, most of whom do not develop RA. Therefore, other factors must be present for the disease to develop.

- Over 30 genetic loci outside the MHC have been associated with an increased risk (5% of genetic risk) of developing RA. Most loci increase the odds ratio of developing RA only 1.2-fold to twofold, but this varies among ethnicities.
- Polymorphisms of PTPN22, TRAF1-C5, STAT4, TNFAIP3, and PADI4 (Asians) are well established. Epigenetic factors (histone modification, DNA methylation) are also likely to be important.

Environmental Factors

- Smoking is the best characterized environmental risk factor and increases the odds ratio for developing RA 12-fold in susceptible monozygotic twins, 2.5-fold in dizygotic twins, and 1.8-fold in smokers (>20 pack-yrs). This risk persists for 10 to 20 years after a person quits smoking.
- Bacteria in the microbiomes of the mouth, lung, and gut may also be contributory. Smoking can alter microbiomes in the mouth and lung whereas diet and antibiotics can alter gut flora. *Porphyromonas gingivalis* in patients with chronic periodontitis can express PAD enzymes that can citrullinate proteins through the posttranslational modification of arginine to citrulline.
- Smoking can upregulate PAD enzymes in the lung resulting in protein citrullination. A similar process occurs with upregulation of myeloperoxidase that carbamylates proteins through modification of lysine to homocitrulline.

Treatment

- The original treatment pyramid for RA is now considered to be obsolete and has evolved into a new strategy that focuses on several goals:
 - 1) Early aggressive therapy to prevent joint damage and disability.

- 2) Frequent modification of therapy with utilization of combination therapy where appropriate.
- 3) Individualization of therapy in an attempt to maximize response and minimize side effects.
- 4) Achieving, whenever possible remission of clinical disease activity.

- Several developments during the past two decades have changed the therapeutic landscape in RA. They include;
 1. The emergence of methotrexate as the disease-modifying anti rheumatic drug (DMARD)⁵ of first choice for the treatment of early RA.
 2. The development of novel highly efficacious biologicals that can be used alone or in combination with methotrexate.
 3. The proven superiority of combination DMARD regimens over methotrexate alone.
- The medications used for the treatment of RA may be divided into broad categories: nonsteroidal anti-inflammatory drugs (NSAIDs); glucocorticoid, such as prednisone and methylprednisolone; conventional DMARDs; and biologic DMARDs.

DISCUSSION

As mentioned above detailed description of *Amavata* is given in term of detailed description of *Ama* with acute and gradual pathogenesis of *Ama* formation, *Nidana Panchaka*, *Upadrava*, *Sadhyasadhya*, *Pathyapathya* and *Chikitsa* etc., *Mandagni* is root cause of *Amavata* and treatment require complete digestion of *Ama* which occupied whole body. When by different procedure like *Langhana*, *Deepana*, and *Pachana* etc. *Agni* normalize, *Ama* at different level digested and stiffness decrease with all others cardinal symptoms like pain, swelling etc.

CONCLUSION

Amavata is a condition where stiffness of the body occurs due to lodging of vitiated *Ama* & *Vata* in *Trika Sandhi*, potent cause is diminished function of *Agni* at *Jatharagni*, *Bhutagni* and *Dhatwagni* level. *Amavata* is *Amashayoththa Vyadhi*, it is produced due to improper

functioning of digestive system i.e., Incomplete/ improper formation of *Annarasa* so treatment given in *Amavata* is 1st *Langhana* in terms of *Ahara* and *Vihara* then *Swedana*, *Tikta Katu Deepana Dravyas*, *Virechana*, *Snehapana* & *Basti*, Which ultimate leads to *Amapachana*, *Vatashamana* & *Strotoshodhana*.

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