Amavata (Rheumatoid arthritis): An overview

Minakshi Kumbhare (Patil)*1, V. Chaudhary2, Shilpa Varhade2

1. Asst. Professor,
2. Professor and Head,
3. Asso. Professor,
   Rachna Sharir Dept., Shri Ayurved Mahavidyalaya, Nagpur, Maharashtra, India

*Corresponding author: doc.minakshi12@gmail.com

Abstract: Rheumatoid arthritis is described as “Amavata” in Ayurveda. The word ‘Ama’ literally means, undigested, toxic or unwholesome product, which is produced in the body due to weakening of digestive fire(agni). This ‘Ama’ is then carried by vitiated ‘Vayu’ and travels throughout the body and accumulates in the joints, which is the seat of ‘Kapha’. As this process continues, all the joints are gradually affected, which results in severe pain and swelling in the joints. Here, pain is due to vitiated “Vata”, swelling due to affected Kapha. When ‘Pitta’ also gets aggravated, it causes burning sensation around the joint. Amavata is disease of Rasavaha strotas it is generally compared with Rheumatoid Arthritis. Many peoples in society are unaware about disease and its complications which is responsible for lifelong joint deformities. Many herbal as well as Ayurvedic preparations are mentioned in the classics which are very effective remedy in Amavata.

Keywords: amavata, rasavaha strotas

Introduction: The association of VataDosa with Ama is termed as Amavata. The propulsion of Ama by Vata in the whole body is illustrated with this derivation. Due to indigestion, Ama is produced and along with Vata it causes a well-known disease entity. The improperly formed Annarasa is known as Amavata.1 So above mentioned derivation emphasizes that the disease is based on Ama and Vata mainly which clarifies the importance of these two.

Definition:-The condition in which Vitiated Ama and Vata simultaneously lodge in Trika and Sandhi(Joints) leading to Stabdhata(Stiffness) of the body is known as Amavata.2

In modern era it is correlated with Rheumatoid arthritis. Rheumatoid arthritis is a chronic multisystem disease of unknown cause. The characteristic feature of RA is persistent inflammation which possess cavities, (known as synovial joints), usually involving peripheral joints in a symmetric distribution, where synovium becomes inflamed causing warmth, redness, swelling and pain. As the disease progresses, the inflamed synovium invades and damages the cartilage and bone of the joint. The potential of the synovial inflammation to cause cartilage destruction is the trademark of the disease.

Prevalence:-The prevalence is approximately 0.8% of the population
(Range 0.3% to 2.1%) women are affected approximately three times more than men. The prevalence increases with age and sex, difference diminish in the older age group. RA is seen throughout the world and affects all races. The onset is most frequent during 4th and 5th decades of life, with 80% of all patients developing the disease between the ages of 35 and 50.³

Aims and Objectives:
Aim : To study and determine an overview of Amavata according to Ayurveda as well as Modern science.

Objectives :
- To have an in depth knowledge of Amavata through literature review.
- To understand the etiopathogenesis of Amavata.
- To become aware of complications of Amavata.
- To have knowledge for diagnosis of Amavata according to Ayurveda as well as Modern science.
- To understand treatment modalities in Amavata.

Material and Methods:
A PUBMED, MEDLINE, Medknow literature search was conducted using keywords Amvata, Aam, Vata, Stabdhatva, Synovitis, Sandhishotha, Rheumatoid arthritis. Apart from indexed journals, peer reviewed and non-indexed journals were also reviewed.

3. Etiopathogenesis (Hetu)

Ayurved Context :
1) Viruddha Ahara (Incompatible food)
The food that provokes the Doshas but does not expel them out of the body is called viruddha.
Ex. Mixing of milk with fish in a diet. Viruddha ahara plays important role in causing Ama.

2) Viruddha Cheshta (Improper physical activity)
The physical activity performed without following the procedure is called viruddha cheshta.
Ex. Physical exercise or sexual act when an individual is already suffering from ajeerna.
Viruddha cheshta ---- Agnimandya ---- Ama visha.

3) Mandagni (Decreased digestive power)
:- Amavata is produced due to Mandagni.

4) Nischalata (Lack of physical activity) :-
Lack of physical activity or sedentary life style is the main cause of accumulation of Ama in the body.

5) Snigndham bhuktavato vyayaamam :
Performing physical exercise soon after intake of heavy food causes Ama in the body.

It is very difficult to elicit the exact cause of Amavata. The above mentioned etiologies are not satisfactory those are not frequently observed in the patients.

Modern context :
Though in modern medicine the etiology of the disease is unknown the above etiopathogenesis gives a clear idea about the disease manifestation. Many patient's history also support the above etiopathogenesis. Even the data of R.A. show that the disease onset is more in between 30 to 50 years of age, during which the possibility of formation of Amaras is higher.⁴

Present concept on etiology and pathogenesis proposes that Rheumatoid Arthritis occurs in an immunogenetically predisposed individual to the effect of microbial agents acting as trigger antigens which are produced by several microorganisms with capacity to bind to HLA-DR molecules has been proposed.⁵
**Signs and Symptoms:**

**Ayurved Context:**

Acharaya Madhavkara has clearly stated the Rupas (sign & symptoms) of Amavata in Madhav Nidana. The Pratyatma Laksana Pratytama Laksana (Main symptoms) are Gatrastabdhata, Sandhishula, Sandhishoth, Sparshasahyata and Samanya Laksana (General symptoms) are Angmarda, Aruchi, Trishna, Alashya, Gaurav, Jvara, Apaka, Angasunnata.

Lakshanas (Symptoms) of the disease are:-

1. **Angamardha**: Pain in different parts of the body.
2. **Aruchi**: Anorexia.
3. **Tirishna**: Thirst.
4. **Alasyam**: Fatigue.
5. **Gauravam**: Heaviness.
6. **Jvara**: Fever.
7. **Apakah**: Indigestion.
8. **Sunatanga**: Swelling in joints.

**Modern Context**: Cardinal features of disease.

<table>
<thead>
<tr>
<th></th>
<th>Morning stiffness</th>
<th>Morning stiffness in and around the joints, lasting at least 1 h before maximal improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Arthritis of 3 or more joint areas</td>
<td>At least 3 joint areas simultaneously have had soft tissue swelling or fluid (not bony overgrowth alone) observed by a physician. The 14 possible areas are right or left PIP, MCP, wrist, elbow, knee, ankle, and MTP joints</td>
</tr>
<tr>
<td>3</td>
<td>Arthritis of hand joints</td>
<td>At least 1 area swollen (as defined above) in a wrist, MCP, or PIP joint</td>
</tr>
<tr>
<td>4</td>
<td>Symmetric arthritis</td>
<td>Simultaneous involvement of the same joint areas (as defined in 2) on both sides of the body (bilateral involvement of PIPs, MCPs, or MTPs is acceptable without absolute symmetry)</td>
</tr>
<tr>
<td>5</td>
<td>. Rheumatoid nodules</td>
<td>Subcutaneous nodules, over bony prominences, or extensor surfaces, or in juxta-articular regions, observed by a physician</td>
</tr>
<tr>
<td>6</td>
<td><strong>RA Factor</strong></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td><strong>Joint erosions in radiography</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Associated features of disease**

Jwara (pyrexia), Alasya (laziness), Apaka (indigestion), Aruchi (anorexia), Gaurava (heaviness in the body), Asyavairasya (altered taste perception), Daurbalya (weakness), Akarmanyata (inability to do work), Utsahahani (laziness), Angamarda (body ache), Daha (burning sensation), Trishna (increased thirst), Bhutva bhutva pranashyanti punaravirbhavantica (remissions and exacerbations).

**Clinical features of Amavata in Comparison with Rheumatoid Arthritis**

1) **Hasta sandhi shotha & shoola** – Inflammation & severe pain in metacarpo-phalangeal joints & proximal inter phalangeal joints are affected most severely in Rheumatoid Arthritis.
2) **Paad sandhi shotha & shoola** – The feet are often involved especially the metatarso phalangeal joints & subtalar joints are affected.
3) **Jaanu gulfa sandhi shotha** – R.A. involves first smaller joints of hands &
feet and then symmetrically affects the joints of wrist, elbow, ankle & knee.
4) Angagourav – Feeling of heaviness in the body.
5) Stabdhata – In R.A. stiffness of joints, particularly observed in morning hours.
6) Jaadhya – Due to deformity limited movements in the joints, weakness in grip or triggering of fingers occurs in R.A.
7) Angavaikalya – Deformity in joints.
8) Sankocha – Contractures.
9) Vikunchana – This can be compared to volar subluxation, ulnar deviation which occurs at metatarsophalangeal joints and bilateral flexion contractures of the elbow are observed in R.A.
10) Angamarda – Body ache, myalgia occurs in R.A.

Complications of Amavata:
In MadhavNidana and AnjanaNidana the Upadrava(comlications) are stated as Jadya(Stiffness), Antrakujana(Blotting), Trit(Dypsia), Chardi(Chardi), Bahumutrata( Polyuria), Shula(Pain), Samkocha(Contraction),Khanjata(Limping) etc. In modern science complication of RA are septic arthritis, amyloidosis, pain and swelling behind knee may be caused by extension of inflamed synovium into the popliteal space called as Baker’s cyst.

Samprapti of Amavata:
When a person of sedentary habits with hypo functioning digestive mechanism indulge in incompatible diet and regimen (Virrudhaahara – vihar) or does physical exercise after taking fatty food the Ama is formed and propelled by Vayu and reaches the site of Sleshma. Here this Amarasa, get much vitiated by Vata, Pitta, and Kapha & then it is circulated (all over the body) through the vessels (Dhamini). It then takes on accumulates in the small channels & joint pores. It renders the patients weak and produces a feeling of heaviness & stiffness in whole body. This substance named Ama is the cause of so many distressing diseases. When this aggravated Ama simultaneously afflicts the (pelvic and shoulder) girdles, and other joints making the body stiff, this condition is known as Amavata.

Samprapti Ghatak of Amavata:-
- **Dosha** – Tridoshajmainlyvata (Vyana, Samana, Apana) andKapha (Kledak, Bhodhak, Sleshak).
- **Dushya**- Rasa, Mamsa, Asthi, Maija.
- **Upadhatu**- Snayu, Kundara.
- **Srotodusti**– Sanga, Vimargagaman.
- **Udbhavsthana** (origin) – AmaPakvasayotthaAmasaya- Chief site of production of Ama. Pakvasa MulaSthan of Vata.
- **Adhisthan**– Sandhi (Whole body)
- **VyadhiSheabhava**– Mainly Chirkari

Investigations: RA can be hard to detect because it may begin with subtle symptoms, such as achy joints or a little stiffness in the morning. Also, many diseases behave like RA early on. The diagnosis of RA depends on the symptoms and results of a physical examination, such as warmth, swelling and pain in the joints. Some blood tests also can help confirm RA.
- **CRP**: C - reactive protein; RA Factor: Rheumatoid Factor; Anti-
CCP: Antibodies to Cyclic Citrullinated Peptides

- **Elevated erythrocyte sedimentation rate** (a blood test that, in most patients with RA, confirms the amount of inflammation in the joints)
- **X-rays** can help in detecting RA, but may not show anything abnormal in early arthritis. Even so, these first X-rays may be useful later to show if the disease is progressing. Often, **MRI and ultrasound scanning** are done to help judge the severity of RA.

There is no single test that confirms an RA diagnosis for most patients with this disease. Rather, a doctor makes the diagnosis by looking at the symptoms and results from the physical examination, lab tests and X-rays.

**Principles of management of Amavata:**

The principles of management described in text can be categorized under following headings.

**Amavastha**: Langhana, Rukshana procedures, medicines.

**Niramavastha**: Shamana drugs and Panchakarma procedures.

The foremost treatment mentioned in classics for Vatarakta is Raktamokshana. Raktamokshana is a parasurgical procedure to expel out the vitiated blood from the selected areas of the body. Since the time of Veda, Ayurveda has much productive materials about Raktavsechana Karma as a part of treatment. Blood should be let out with horn, leech, needle, bottle gourd, scarifying or venesection according to morbidity and strength. Since the main doshas involved in the pathology of Vatarakta are Vitiated Vata and Rakta. Because of the vitiation of Rakta, shodhana of Rakta is essential. Raktamokshana is considered to be the supreme therapy as it drains out the impure blood and cures the disease. Acharyas have also quoted that it not only purifies the channels, but also lets the other parts become free from disease.

1) **Langhana**: - Langhana is the 1st line of treatment to digest Ama. Here langhana means not complete fasting but, intake of light food. The duration of langhana varies from person to person depending upon individual capacity.

2) **Swedana**: - Swedana is sudation therapy; in this disease swedana is done locally on affected joints. In amavata rooksha sweda is recommended (Sudation without oil/fat). For the procedure of rooksha sweda valuka (sand) is recommended. Snehana is contraindicated in amavata.

3) **Katu, Tikta & Pachak aahar & aushadhi**: - The drug which possess Katu (pungent), Tikta (bitter) and which act as deepana, pachana (appetizer) are recommended in amavata. These drugs, by virtue of their qualities does amapachana, hence may help in relieving shotha & shoola.

4) **Virechana**: - For virechana, erendataila and hareetaki are used. In amavata without any preoperative procedure virechana is recommended directly. Eranda acts as srotoshodhaka, shothahara, shoolahara and amavatahara.

5) **Basti chikitsa**: - Chakradatta recommends ksharabasti and anuvasanabasti in amavata. Following tailas are used in anuvasa and nirooha basti –

- Prasarani taila
• Bruhat saindhavadi taila
• Dashmooladi taila Eranda taila is used as base in preparation of these tailas

6) Shamanaushadhi

I. Kwath yoga
• Rasna panchak kwatha
• Rasna dwadashak kwatha
• Shunthi gokshur kwatha
• Dashmooladi yoga
• Shattyadi kwatha
• Rasonadi kashaya

II. Choorna yoga
• Pippalyadi choorna
• Amrutadi choorna
• Panchasama choorna
• Alambushadi choorna

III. Lepa in Amavata
• Shatapurushpadi lepa
• Ahimsradi lepa

IV. Guggulu in Amavata
• Simhanada guggulu
• Yogaraja guggulu

V. Ghrita in Amavata
• Nagaradi ghrita
• Shringaveradya ghrita

7) Shoola shamanarthta taila
• Vishgarbha taila
• Panchaguna taila
• Prasarini taila

8) Rasaushadhi in Amavata
• Amavata vidhwamsa rasa
• Amavatarirasa
• Amavatadri vajra rasa
• Suvarna bhasma

Modern treatment:
According to modern point of view main goals of therapy of R.A. are
1. Relief of pain
2. Reduction of inflammation.

The drugs of modern medicine are mainly divided into 3 groups :-
2. DMARDS- Disease modifying anti rheumatic drugs
3. Glucocorticoid drugs.
   a) As first line of treatment. normally aspirin like nonsteroid anti-inflammatory drugs along with low dose glucocorticoids are used.
   b) As second line of treatment DMARDS like gold compounds, D-pencillamine, Antimalarials, sulfa salazine etc. are used.
   c) Some times immuno suppressive drugs like Azathioprine, Cyclophosphamide etc are used. Though all the above drugs are in practice no drug is having satisfactory results. Almost all are having severe adverse effects. Even NSAIDS prolong use causes gastric irritaion, platelet dys-function, azotemia etc. DMARDS are not similar chemical compounds. They are having different mode of actions. One can not say which patient will respond to which DMARD drugs and also having adverse effects. Though glucocorticoid therapy gives temporary relief as it is not altering the course of the disease, in later days it further worsens the condition.Majority of these practical problems in the treatment of R.A. can be overcome by Ayurvedic line of treatment and Ayurvedic formulations. The important thing in Ayurvedic line of treatment is based on the etiopathogenesis of the disease and the drugs which are used can also be supported by the properties of those drugs.

Conclusion:
In ‘Amavata’ there is vitiation of Ama along with Vata, caused by the excess use of fatty & heavy meals, sedentary life style & heavy exertion just after heavy meals.
Stiffness & pain in joints are major symptoms along with other inflammatory systemic manifestations. Modern medicine has no effective & specific treatment. Steroids, DMRD’s & other drugs used are having serious side effects. The condition can be well managed with Ayurvedic drugs & regiments like Langhana, Pachna, Swedana & use of various drugs formulation which are free from any adverse effects.

References
1. Advances in Ayurvedic medicine, Disease of the Joints(Vol.5), RastogiSanjeev,

Cite this article:
Amavata (Rheumatoid arthritis): An overview
Minakshi Kumbhare (Patil), V. Chaudhary, Shilpa Varhade
Ayurline: International Journal of Research In Indian Medicine 2019; 3(1) : 1-7