

A CRITICAL STUDY ON THE HISTORICAL PERSPECTIVES OF AMAVATA (~RHEUMATOID ARTHRITIS)

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ABSTRACT

The historical review involves the careful study and analysis of past events. History is such an important subject and plays a very vital role when it comes to the shaping of society. History offers a storehouse of information about how people and societies behave. It is a critical investigation of events, their development, experiences of past. The purpose of historical review is to gain a clear understanding of the impact of past on the present and future events related to the life process. The verification of old fact guides us to find out the new fact in research work. Amavata is a conglomeration of Ama and aggravated Vata, traveling through Dhamanis and get lodged in various joints and manifested in the form of pricking type of pain, inflammation, and restricted movements, which can be similar to the symptoms of Rheumatoid Arthritis. *Amavata* (~Rheumatoid Arthritis) is not mentioned in *Brihatrayi* (the greater trio of Ayurvedic literature) as a special chapter and introduced by Acharya Madhavakara, one of the authors of *Laghutrayi*, in the 7th century A.D. in his treatise 'Madhavanidana' (a treatise on ayurvedic diagnostics). Hence, the present work focused on the historical review of *Amavata* as it reveals the evolution of the disease, which helps to a better understanding of the etiological factors that changed the lifestyle of that people drastically, thereby it helps in plan the treatment protocol in a more precise way.

Keywords: Ayurveda, *Amavata*, *Brihatrayi*, *Laghutaryi*, Madhavakara

Introduction:

".....the knowledge which is your privilege today to acquire so early has cost others. We are, all of us, debtors to our profession." - William Osler¹

“Medical historians do need to remember that the content of medical knowledge ought not to be buried beside the great men”. - C. Boyce. Lancet 2011; 378 : 655-56

The historical review involves the careful study and analysis of past events. It is a critical investigation of events, their development, and experiences of the past. The purpose of historical review is to gain a clear understanding of the impact of past on the present and future events related to the life process. The historical review not only involves the review of written materials but may also include the oral documents as well. It typically relies on available data, which are in the form of diaries, letters, newspapers, reports, and so on. Historical significance is the process used to evaluate what was significant about selected events, people, and developments in the past. The theoretical framework plays a vital role in guiding the entire process of the research study. Theories are constructed in order to explain, predict, and master phenomena (e.g., relationships, events, or behavior). The research aims to find out the new fact or verification of old facts. The verification of old facts guides us to find out the new fact in research work.

The origin of Ayurveda is attributed to Atharvaveda, where several diseases with their treatments have been mentioned. Later, from the 6th Century BC-7th Century A.D. there was systematic development of the science, and it is called the Samhita period. When several authors produced many classical works, and during this period, there is evidence of organized medical care.

Amavata is a disease that's known from the ancient ages. Later on, the *Amavata* description is available in Samhita, like Charaka Samhita, one of *Bhrihatrayi*. However, *Amavata* is a separate disease entity described for the first time in detail by Acharya Madhavakara (900 AD), who devoted a full chapter (25th) of *Amavata* in his famous treatise **Madhavanidana** where etiopathogenesis of the disease was described systematically and also incorporated the signs, symptoms, complications, and prognosis etc. considering the above facts in view, the present work has been taken to explore the references of *Amavata* in ancient literature and to find out the circumstances that lead to introduce *Amavata* as a particular disease by Acharya Madhavakara.

OBSERVATIONS

After a thorough screening of available literature, the references where *Amavata* and its related subject matter dealt collected and arranged systematically, all the references are classified as under Pre-Vedic, Vedic, Samhita period, the medieval period, and the Modern era.

The following is the chronological order about the mentioning of *Amavata* in various treatises ranging from the Vedic era to the modern era.

In the Vedic era (5000 BC-800BC):

- Atharvaveda forms the structural foundation for the emergence of Ayurveda as a separate branch of science by way of it advocates the guiding principles, medicinal effects of herbs etc. in abundantly. The word '*Vatika roga*' is found in Atharvaveda, which means the diseases which manifest from *Vata Prakriti*. The words "*Amaya*," "*Amayam*" were mentioned in Atharvaveda in the sense of a disease caused by a toxic substance *Ama*. Five types of *Vata Dosha* viz. *Prana*, *Samana*, *Udana*, *Vyana*, and *Apana* (At. V.-10, 12, 13). Also, the reference about *Sandhi Vikriti* (At. V.12-9:3) was caused by *Sleshma Vikriti* and claimed to cure with prayers.
- The word '*Ama*' and its related terms like '*Amayet*' are found in Rigveda^{2, 3}.
- The word '*Ama*' is also found in other similar works of same period such as Paniniya Unadi sutra (vedanga – Prakash Ajmer 19/6) and Hiranyaksha Grihyasutra (1/17/2).
- In the later period of Upanishads, the word "*Amayet*" is found in Jaiminiya Upanishad Brahmana.

So, it is evident that *Ama* and *Vata* have been described separately, but the direct reference of the disease *Amavata* is not available during the Vedic period.

In Purana Kala: Mahabharata and Ramayana are two major Puranagranthas of Hindus. In both the epics, no reference has been found about the disease *Amavata*.

In the Samhita era (800 BC – 600 AD):

The duration of the Samhita era lies between Acharya Atreya and Gautama Buddha, which is generally termed as the Samhita era in the history of Ayurveda. A series of treatises enriched Ayurveda by different ayurvedic seers in the span between 800 B.C. – 600 A.D. Charaka Samhita, Sushruta Samhita, Ashtanga Samgraha, Kashyapa Samhita, Harita Samhita, Bhela Samhita belongs to this period.

Charaka Samhita (1st-2nd Century A.D.):

- The disease '*Amavata*' is not mentioned in Charaka Samhita directly. However, the signs and symptoms of *Sama Tridosha* are mentioned in different chapters. The description of '*Ama*' has been found in many contexts, which is one causative factor of *Amavata*. *Ama* was recognized as a disease-causing factor.⁴ The treatment of *Shariragata ama* explained by acharya Charaka is almost similar to that of *Amavata Chikitsa* described by other authors.⁵

- In the second chapter of Charaka Vimana Sthana, i.e., '*Trividhakukshiya Viamanam*,' the description of '*Ama*,' causes for the overproduction of '*Ama*,' manifestation and management of *Amapradoshaja Vikaras* are dealt in a lucid manner which gives a proper guideline to approach the disease *Amavata* in clinical aspect is available⁶.
- In the 28th chapter of Chikitsa Sthana, i.e., '*Vatavyadhi Chikitsitam*,' the detailed treatment of '*Amavrita Vata*' is described.⁷
- The description of '*Ama-Jwara*' and '*Amatisara*' was found in the third and 12th chapters of Chikitsasthana, respectively.^{8,9} it is also stated that in the *Shleshmaja Jwara* and *Amavata* conditions, the fever will be in a mild form that is *Anushna*, and predominance of *Kapha dosha* prevails.¹⁰
- The individual entity of the disease '*Amavata*' is not found in Charaka Samhita. However, it has been found in the indications of three different therapeutic preparations. They are:
 - i. Therapeutic uses of *Vishaladi Phanta* in *Pandu Chikitsa*¹¹
 - ii. *Kamsa Haritaki* in *Shwayathu Chikitsa*¹²
 - iii. The similarity in the treatment protocol of *Prameha*, *Vata*, and *Medas* with *Amavata*.¹³
- The complete description of *Vata* is found in the 12th chapter of Sutrasthana, i.e., '*Vatakalakaleeyam*.'
- **Agnivesha's Anjana Nidana (1000 B.C.)** is one of the concise books on Ayurveda-Rigvinischaya, focusing on *Pratyatma Lakshanas* (cardinal symptoms) of various diseases observed in daily routine, composed in around 250 verses. In which the author has stated that the *Sweeyaprakopa* (self aggravation) of *Vata* and *Ama* causes *Amavata*. The clinical features of *Amavata*, four types of *Amavata* along with their differential diagnosis, and the *Upadravas* (complications) were also delineated concisely.¹⁴

Sushruta Samhita (2nd Century A.D.):

- There is no direct description of '*Amavata*' found in Sushruta Samhita. However, detailed descriptions of *Vata* and *Vatavikaras* was found in the 1st chapter of Nidanasthana.

Kashyapa Samhita (6th Century A.D.):

- There is no direct description of '*Amavata*' found in Kashyapa Samhita. However, the terms *Amadosha*, *Amajirna* is used to describe the pathogenesis of *Ama* and *Ajirna*.

Bhela Samhita (7th Century A.D.)¹⁵:

- It is stated that '*Ama*' is produced by the hypo-functioning of *Jatharagni* (digestive power), and a complete chapter about *Ama* is described as an '*Atha Amapradoshiya Adhyaya*.' Even

though ‘*Amavata*’ is not mentioned directly, the symptoms and treatments are very much similar to ‘*Amavata*.’

Ashtanga Hridayam (7th Century A.D.):

- There is no direct reference to *Amavata* in Ashtanga Hridayam as a specific disease entity. However, The wide range of description was found in the 13th chapter of Sutrasthana, i.e. ‘*Doshopakramaneyadhyayam*.’ It has been mentioned that the signs and symptoms of *Samavata* are similar to *Amavata*.¹⁶
- The term ‘*Amavata*’ is used in many contexts like the therapeutic uses of *Vyoshadi Yoga*, *Vatsakadi yoga*, *Haridradi yoga*, etc. in *Vatavyadhi Chikitsa*.¹⁷ Another condition called “*Vatashonita*” is described in this treatise, which has the common clinical features with *Amavata* but with a different etiology. The word “*Adhyavata*” is used for this.

Harita Samhita¹⁸ (6th- 7th Century A.D.):

- A separate chapter has been mentioned on ‘*Amavata*.’ *Ama* has been classified into five types: *Vishtambhi Ama*, *Gulmi Ama*, *Snehi Ama*, *Pakvama*, and *Sarvangi Ama*. The descriptions are not similar to the descriptions of Madhava Nidana.

In the Medieval era (7th century A.D.- 18th Century A.D.):

Madhava Nidana (7th Century A.D.)¹⁹:

- Acharya Madhavakara was the first author who has mentioned ‘*Amavata*’ as a specific disease entity for the first time and described its etiology, pathogenesis, signs, symptoms, classification, and prognosis.

Vrindamahdava (9th Century A.D.)²⁰:

- It is also named as ‘*Siddhayoga Samgraham*.’ In the 31st chapter of the treatise, the etiology, premonitory symptoms, general symptoms, specific symptoms, prognosis, line of treatment, different therapeutic preparations along with wholesome and unwholesome factors related to diet and lifestyle has been stated lucidly.

Chakradutta (11th Century A.D.)²¹:

- In this treatise, the general treatment protocol of *Amavata*, along with different therapeutic preparations, has been described as the 25th chapter. In *Niruhadikara*, *Vaitarana Basti* has been mentioned for the first time in the management of *Amavata*.

Vangasena (12th Century A.D.)²²:

- This treatise is also called as ‘*Chikitsasara Samgraham*’. Vangasena, the author, described *Amavata* in the 31st chapter of the treatise.

Gadanigraha (12th Century A.D.)²³:

- Vaidya Shodhala, the author of Gadanigraha, has delineated the etiology, pathogenesis, along with management of *Amavata* very precisely in the 22nd chapter of *Kayachikitsakhanda*, i.e., *Amavata Adhikara*.

Rasaratna Samuchchaya (13th century A.D.)²⁴:

- The entire treatise consists of 30 chapters. Acharya Rasa-Vagbhata, the author of the compendia, explained about the etiology, signs & symptoms, and treatment in a concise manner in the 21st chapter under '*Sarvavata-Amavata-Vatavyadhi chikitsa Prakaranam*'. The author has clearly explained the importance of *Erandataila* in the management of *Amavata*.

Sharangadhara Samhita (13th-14th Century A.D.)²⁵:

- In the seventh chapter of *Prathama Khanda* that is '*Rogaganana Adhyaya*', Acharya Sharangadhara has mentioned the four types of *Amavata*, viz. *Vataja*, *Pittaja*, *Kaphaja*, and *Sannipataja Amavata*.

Bhavaprakasha (16th Century A.D.)²⁶:

- In the 26th chapter of *Madhyamakhanda* of *Bhavaprakasha*, entitled "*Amavatadhikara*", *Nidana*, *Samprapti*, *Swaroopo*, *Samanya Lakshana*, *Vishishta Lakshanas*, *Sadhyaasadhyata*, *chikitsa*, different *yogas*, and *Pathya-Apathya* are mentioned.

Yogaratanakara (17th Century A.D.)²⁷:

- It is a compilation of all the medieval works. In the chapter entitled '*Amavata Adhikara*', the author, *Yogaratanaka* has delineated the etiology, pathogenesis, the cardinal features of *Amavata*, general as well as specific symptomatology, its complications, prognosis, and line of treatment along with different therapeutic preparations like *Kwathas* (decoctions), *Churnas* (powders), *Guggulu* preparations, *Rasaushadhis*, *Lepas* (external applications), and *Pathya-Apathya Ahara* and *Vihara* (wholesome and unwholesome food substances and lifestyle) in a detailed manner.

Bhaishjaya Ratnavali (18th century A.D.)²⁸:

- It is an exhaustive compilation of all the medieval works. The author, *Kaviraj Shri Govindadas sen*, in the 29th chapter of the treatise, exclusively dealt with *Amavata*, in which he has explained the line of management, different types of *Swedas* (fomentations), *Lepas* (external applications), *Pathya-Apathya* (wholesome-Unwholesome diet), single recipes, and various therapeutic preparations for the treatment of *Amavata*. The author has mentioned a total of 65 preparations. Out of them, 23 were of his own, and the remaining

42 preparations were the contributions of Chakradutta, Bhavaprakasha, and Raseandra Sara Samgraha.

Basavarajeeyam (18th century A.D.)²⁹:

- In this compendium, Basavaraja, the author of the work, has not mentioned *Amavata* as a special chapter. However, in the 6th Prakarana, i.e., *Vataroga Prakaranam*, the symptoms, and management of *Amavata* have been stated concisely. Particularly, *Panchavakra Rasa*, *Vatari rasa* are to be administered along with *Eranda Taila* for the successful management of *Amavata*.

In the modern era (19th century onwards):

- In the modern era, Shri Gananathasen (1943) has contributed significant work in this field. Gananatha Sen has used the word “*Sandhivata*” for all types of arthritis and classified them into five types. Viz. *Rasavata*, *Raktavata*, *Vishavata*, *Jirnavata*, and *Jaravata*. Out of them, *Rasavata* has been suggested as the synonym of *Amavata*³⁰.
- Prof. Yadunandan Upadhyaya has suggested in his commentary on Madhava Nidana that Rheumatoid arthritis may be considered as *Amavata* as one of the types of *Sannipatika Jwara*.
- The fifth part of Brihat Nighantu Ratnakara (published in the year 1970), a vast compilation of various diseases, after the description of *Urustambha*, the author Gangavishu Shri Krishnadas has delineated the disease *Amavata* very lucidly. For the first time, it is stated that improper *Agnivisarjana* after *Havanakarma* and those who have *Guru* predominance in *Ashtamasthana* (lord Jupiter in the 8th house at the time of birth) of their *Janma-Kundali* (birth-chart) are the causative factors for *Amavata*. *Vaidika karmas* such as Chanting of *Gayatri mantra* for 10,000 times, *Tilahavana* (offering sesame to the god of fire), and *Ghrita-Havana* (offering ghee to the god of fire) during *Homa*, *Swarana-dana* (sacrifice of gold), and *Anna-dana* (sacrifice of food) are advised to substantiate the harmful effects of above said etiology³¹.

DISCUSSION

Ayurveda is the oldest system of medical science; most of its knowledge is embedded in *Brihatrayi* and *Laghutrayi*. *Brihatrayi*, the greater trio of ayurvedic literature, composed of Charaka Samhita, Sushruta Samhita, Ashtangahridayam, which deals with the concepts of Ayurveda in a detailed manner. *Laghutrayi*, the lesser trio of ayurvedic literature, consists of Madhava Nidana, Sharangadhara Samhita, and Bhavaprakasha, which deals with the concepts of Ayurveda succinctly. The present disease *Amavata* has been described for the first time as a

specific chapter by Acharya Madhavakara, in his treatise that is Madhava Nidana. In which the signs, symptoms, etiological factors, *Samprapti* (pathogenesis), types, complications, and prognosis in a systematic way. Earlier than Madhavakara, *Amavata* has been not focused. However, the detailed description of *Ama* formation, *Lakshanas of Amadosha*, *Amavisha*, its types and effects on the body along with management has been delineated lucidly in Charaka Samhita, Sushruta Samhita, Ashtangahridayam, Ashtangasangraha, and Kashyasa Samhita too.

Acharya Madhavakara, son of Indukara, belongs to the 7th century A.D. and from Vangadesha, which is the Bengal region at present. Apart from *Amavata*, Madhavakara also described some diseases for the first time, such as *Medoroga*, *Amlapitta*, *Annadravashoola*, *Parinamashula* etc. These diseases have a similar etiological background like consumption of food in excess amount, intake of *Guru*, *Snigdha Ahara*, sedentary lifestyle etc. In Charaka Samhita, 80 exclusively *Vataja Nanatmaja* diseases have been enlisted, in which envelopes *Stambha* (stiffness), *Sankocha* (constriction), and *Parva-asthi bheda* (pain in the bones and joints) and they are the symptoms of the *Nirama* stage of *Amavata*. The etiological background of the above-said diseases is different from the etiology of *Amavata* as it is caused by the consumption of *Guru* (heavy), *Snigdha Ahara* (unctuous food), in excess amount. Before the 7th century A.D., the concept of *Amavata* was vague, and at the end of 6th century A.D. there were no such diseases known to be *Amavata*.

Nevertheless, there is an extensive description of *Amadosha* and other joint disorders. Old shreds of evidence also support this view. Historical pieces of evidence have revealed that drastic changes have been taken place in the fields of agriculture, socio-culture, and dietary habits of people who lived in the Indian subcontinent at the period of 6th -8th century A.D. Adaptation of cultivating commercial crops like sugarcane, Banana, and cotton, which require plenty of water. Radical changes have been taken place in the dietary patterns like usage of cottonseed oil instead of sunflower oil or groundnut oil, excessive consumption of *Guru* (Heavy), *Snigdha* (unctuous), and *Madhura Ahara* (sweet food substances), intake of food more than the requirement. Based on these etiological circumstances, it can be assumed that the citizen of that period has been suffered from *Amavata*. So, at that period, that is 6th-7th century A.D. Acharya Madhavakara had felt that there is a need to introduce the disease as it might be newly emerging due to changing lifestyle and dietary patterns.

All the successive authors have followed the path of Madhavakara in comprehensively explaining the disease. While Madhavakara emphasized mainly on the etiology, pathogenesis, symptomatology, other acharyas like Vrindamadhava, Chakradutta, Rasa Vagbhata (author of Rasaratnasamucchaya), and Kaviraja Govindadas sen (author of Bhaishajya Ratnavali) have

focused more on the treatment perspectives only. All the articulations revealed that *Amavata* is manifested from the conglomeration of *Ama* and aggravated *Vata dosha*, gets accumulated at joints. The treatment protocol involves *Langhana* (depletion therapy), *Swedana* (fomentation therapy), *Tiktarasa dravya* (pharmacologically having the function of bitter), *Dipaniya dravya* (appetizers), *Katu rasa dravya* (pharmacologically having the function of pungent), *Virechana* (Purgation), *Snehapana* (Oleation therapy), and Administration of *Vasti*.

CONCLUSION

Finally, it can be concluded that the disease *Amavata* is not mentioned before Acharya Madhavakara. Even though there are extensive descriptions of *Amadosha* and aggravation of *Vata* in Brihatrayi, there is no particular chapter on *Amavata* as a single disease entity. For the first time, Acharya Madhavakara has described the etiology, pathogenesis, signs & symptoms, types, and the prognosis of *Amavata* has delineated lucidly, which have been followed by the other followers. Acharya Madhavakara's descriptions not only helped the other physicians to prescribe the line of treatment but also to enlist the wholesome diet and regimen to be followed in *Amavata* condition.

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