

# WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

SJIF Impact Factor: 5.922

Review Article

ISSN 2455-3301 WJPMR

# AMAVATA: A CONCEPTUAL STUDY

Dr. Sakshi\*1 and Dr. S. D. Pandey2

<sup>1</sup>Ph.D Scholar, Department of Kayachikitsa, Desh Bhagat Ayurvedic College and Hospital, Mandi Gobindgarh, Punjab.

<sup>2</sup>Professor and HOD, Department of Kayachikitsa, Desh Bhagat Ayurvedic College and Hospital, Mandi Gobindgarh, Punjab.

\*Corresponding Author: Dr. Sakshi

Ph.D Scholar, Department of Kayachikitsa, Desh Bhagat Ayurvedic College and Hospital, Mandi Gobindgarh, Punjab.

Article Received on 21/05/2023

Article Revised on 11/06/2023

Article Accepted on 01/07/2023

#### ABSTRACT

Amavata is made up of two words: Ama and Vata. Ama refers to incomplete digestion of food, which results in incomplete/impure formation of Annarasa, which circulates in the body and reaches target cells, where it causes pathology such as heaviness, loss of strength, drowsiness, Vata aggravation, and improper waste elimination. Amavata symptoms include body aches, a lack of appetite, thirst, fever, and inadequate digestion of meals. since the condition progresses, it becomes more difficult to treat, since it affects the hands, feet, head, ankles, and knees, causing pain, swelling, stiffness, and soreness in the afflicted joints. Amavata is a form of sickness that has been referenced in Ayurveda from the time of Madhavkara (16th century A.D.). Vata-Kaphaja diseases fall under this group. Amavata nidanas recounted by Madhavkara include Viruddhahara, Viruddhachesta, Mandagni, and Exercise after Snigdhahar, among others. Amavata is a difficult condition for physicians to treat owing to its chronicity, incurability, comorbidities, and morbidity. Allopathic treatment gives symptomatic alleviation, but the underlying disease remains untreated owing to a lack of effective therapy, resulting in many side effects, toxic symptoms, and unpleasant responses, as well as more significant problems such as organic lesions. Langhan, Swedan, Tikta-katu dravyas Deepana, Virechan, Basti, and other procedures are explained.

KEYWORDS: Amavata, Ama, Vata, Mandagni, Langhan etc.

# INTRODUCTION

People nowadays are preoccupied with their success rate and way of life. They are more concerned about their personal health, yet owing to their hectic schedule, they are unable to live a healthy lifestyle. Most people are bothered by poor dietary habits and a failure to adhere to a regular seasonal routine. Frequent indulging in such elements changes the state of both *Jatharagni* and *Dhatvagni*. *Agni* deficiency leads to the development of numerous illnesses. [1] *Mandagni* is a causative factor for a variety of diseases. [2]

Rheumatoid arthritis (RA) has become increasingly widespread and unpleasant among all joint problems in the twenty-first century. Rheumatoid arthritis affects around 0.8% of the world's population. Females are impacted three times more than guys. It is a chronic inflammatory joint disease that affects several systems. The start is commonly in the fourth and fifth decades of life, however persons of any age might be affected in any environment. Rheumatoid arthritis renders the patient incapable for independent living.

Because Rheumatoid arthritis is a severe illness, total cure is extremely unusual. Infectious causes, genetic

predisposition, and autoimmune response are all factors that contribute to rheumatoid arthritis. Insidious onset with tiredness, anorexia, and weakness, as well as abrupt onset with fast development of polyarthritis and constitutional symptoms such as fever. lymphadenopathy, and splenomegaly. The involvement of joints is generally symmetrical. It is distinguished by discomfort, swelling, soreness, and severe mobility limitations. Although general stiffness can develop, morning stiffness that lasts more than an hour is a distinguishing trait. The most common joints involved metacarpophalangeal and interphalangeal joints of the hands, wrists, knees, and metatarsophalangeal and proximal interphalangeal joints of the feet. Even in modern medical science with extreme advancement in diagnostic approach, only symptomatic relief and no permanent cure is provided. [3] It is a difficult ailment for clinicians and the medical sector to treat. There is currently no viable medication for this condition in modern science. All of current medicine relies on DMARD, steroids, and NSAIDs, which have a severe influence on the immune system and provide only short relief. However, no appropriate current medical therapy for this condition has been established so far. As a result, other medical systems' therapy of this ailment is simply inadequate, and people

www.wjpmr.com Vol 9, Issue 7, 2023. ISO 9001:2015 Certified Journal 248

continue to resort to Ayurveda for help in overcoming this issue. As a result, it is a difficult sickness for Ayurvedic academics, and it is their responsibility to focus on many aspects of this condition. Because of the similarity in clinical presentation, Amavata can be linked to Rheumatoid Arthritis. It is Madhyam rogamarg illness. Sandhi and Asthi are the primary sites for the expression of cardinal symptoms such as Sandhishool, Shandhishoth, and Sandhigraha, among others. All three Doshas are involved in illness development, but Ama and vitiated Vata play the most important roles.

#### AIMS AND OBJECTIVE

To evaluate *Ama* and provide an in-depth explanation of the illness *Amavata*.

## MATERIAL AND METHOD

For this study, literary resources including references to "Ama and Amavata" were gathered from Ayurvedic texts, namely Madhav Nidana, Charka Samhita, and Astang Hridaya, as well as complementary Ayurvedic Books and their accessible commentary.

### Concept of Ama

Ama is the product of the Agnimandya procedure. Furthermore, it has been emphasised that all forms of Ajirnas play a role in the creation of Ama.

#### **Etymology**

- The term *Ama* is formed from the root word "*Am*" with the suffix "*ninj*." It refers to improperly digested or partly digested materials.
- In which things are digested but not totally digested.
- Ama is either not entirely or only partially digested. [4]
- Ama refers to substances that do not adequately digest and yet need to go through the digestion process.<sup>[5]</sup>
- *Ama* is a substance that causes discomfort or pressure on the *Srotomukha* and accumulates on the *Srotomukha*. <sup>[6]</sup>

## Definition of Ama

These are the multiple definitions of Ama found in various classics. Some examples are shown below.

ऊष्मणोऽल्पबलत्वन धातमाद्यमपाचितम् |

दृष्टमामाशयगतं रसमामं प्रचक्षत् ॥ <sup>[7]</sup>

Because of *Ushma* (*Agni*) hypofunction, the initial *Dhatu* '*Rasa*' is not adequately digested; instead, the *Anna Rasa* ferments or putrefies (*Dusta*) and is retained in the *Amashaya*. This *Rasa* is known as *Ama*.

# Ama Svarupa<sup>[8]</sup>

The qualities listed above can be categorised in the following ways.

Properties which can be felt by touch

- a. Dravatva.
- b. Pichchilatva.
- c. Snigdhatatva

Properties which can be perceived by eyes

- a. Tantumatva
- b. Avipakvata
- c. Asamyuktata
- d. Anekavarnayuktata
- e. Pichchilata

Properties which can be perceived by smell:

a. Durgandha

Properties which can be known by questioning:

- a. Guruta
- b. Avipakvata

#### Sama Dosha

आमेन तेन सम्पृक्ता दोषा दृष्याश्च दृषिताः।

सामा इत्युपदिश्यन्ते ये च रोगास्तदुद्भवाः ||<sup>[9]</sup>

Sama is the combination of *Dosha* and *Dushya* with *Ama*, and diseases brought on by this combination are known as *Sama* diseases.

It is important to understand the characteristics of the *Doshas* in *Samavastha* and *Niramavastha* in order to understand the pathological condition of *Ama* in the body. *Samavastha* is the term used to describe *Samadosha* and related symptoms.

# **Process of Ama Formation**

Ama formation in body take place by two ways.

- a. Acute *Ama* formation<sup>[10]</sup>
- b. Gradual Ama formation<sup>[11]</sup>

*Trividh Kukshiya Vimana*, which is responsible for the emergence of diseases like *Alasaka* and *Visuchika*, describes acute *Ama* production.

While the occurrence of systemic diseases like *Amavata* are brought on by the gradual buildup of *ama*.

## **Line of Treatment**

*Langhana*: The first is *Langhana*, which aids in *Agni* load shedding and decreases *Ama* formation.

**Deepana:** The usage of *Deepana Dravya*, which aids in strengthening *Agni's* state and intensifying its effect.

**Pachana:** Pachana Dravyas aid in the digestion of already generated Ama.

## **AMAVATA**

#### Etymology

The term *Amavata* is made up of the words *ama* and *vata*. This denotes the disease's pathogenesis's involvement with *Ama* and *Vata*. [12]

*Ama*, which is created as a result of indigestion, is a well-known illness entity along with Vata. <sup>[13]</sup>

#### **Definition**

युगपत्तुमितावन्तस्त्रिकसन्धप्रवेशकौ |

स्तब्धं च कुरुतो गात्रमामवातः स उच्यते ॥<sup>[14]</sup>

Amavata refers to the simultaneous presence of vitiated Ama and Vata in the Trika-Sandh that leads to that body part's Stabdhata.

## Nidana of Amavata

The following are distinct etiological factors for *Amavata*, according to *Madhava Nidana*<sup>[15]</sup>

- Viruddhahara
- Viruddhachesta
- Mandagni
- Nishchalata
- The key trigger for the creation of *Amavata* is engaging in any form of exercise right after consuming *Snigdha Ahara*.

# Viruddha Ahara

#### Definition

उत्वलश्य दोषान्न ह्रेस द्रन्यं यत्तत्समासतः।

विरुद्धं तद्धि धातनां प्रत्यनीकतया स्थितम ॥ [16

The *Viruddha Ahar* is the reverse of *Sapta Datu* and refers to the *Ahar dravyas* that cause *Dosha* but are unable to expel it from the body.

These are *Dhatushaithilyakara* and *Doshaprakopaka*.

Acharya charaka coined term Ahita for Viruddhaahar. [17]

One of the most significant causes of *Amavata* is *Viruddha Ahara*.

The following are the 18 varieties of *Viruddha Ahara* that *Charaka Samhita* follows.<sup>[18]</sup>

- Desha Viruddha (Place)
- Kaal Viruddha (Time)
- Agni Viruddha (Digestion Power)
- Matra Viruddha (Dose)
- Satmya Viruddha (Suitability)
- Dosha Viruddha (against of dosha)
- Sanskara Viruddha (processing)
- Virya Viruddha (Active Principles)
- Kostha Viruddha (bowels)
- Avastha Viruddha (state of health)
- Karma Viruddha (order)
- Parihar Viruddha (contraindications)
- *Upchara Viruddha* (prescription)
- Paka Viruddha (cooking)
- Samyog Viruddha (combination)

- Harita Viruddha (palatability)
- Sampat Viruddha (richness of quality)
- Vidhi Viruddha (rules of eating)

## Viruddha Cheshta

Viruddhacheshta is not explicitly addressed in the classics. All bodily functions that have a negative impact on the body's typical physiology are indicated by the Viruddha Cheshta. Thus, the vitiation of Agni occurs when the body's regular physiology is interrupted. Ama is produced as a result of this vitiated Agni. Vata is also vitiated by Viruddha Cheshta. When combined, both elements result in Amavata.

The following elements, which are responsible for *Dosha Utklesha*, can be considered in *Viruddha Cheshta*.

- Vega Vidharana
- Anudirna Vega Udirana
- Diwaswapa
- Ratrijagarana
- Ativyayama
- Vishama Shayya Shayana
- Ativyavaya

### Mandagni

Mandagni is defined as a decreased function of Jatharagni, Dhatwagni, and Bhutagni, however it is conceivable that the function of Jatharagni is normal in the patient, but owing to the decreased function of Dhatwagni and Bhutagni, Ama production occurs, which circulates in the blood and is coupled with Vata. Mandagni is a risk factor for all illnesses. If people take other Nidanas without considering Agni, they are more likely to be impacted by Ama illness. Jatharagni is the most essential of the three forms of Agni. The swallowed food is digested by all of these forms of Agni, and the quickness of Jatharagni's power is critical since it also augments the activities of Bhutagni and Dhatvagni.

#### Nischalata

A person who is naturally sedentary and inactive. Continuous eating of healthy or even typical food results in the buildup of *Kapha* dominance *Dhatus* in such a person. Sedentary habits also cause *Agni* to become vitiated, which leads to *Dosha* vitiation and the creation of *Ama*, which together with *Ama* produces the pathophysiology of *Amavata*.

## Exercise after Snigdh Ahar

Agni in the body becomes vitiated due to Snigdha Ahara, which is Guru, and Ama is produced as a result. Whereas in Sandhis, Vyayama immediately following Snigdha Bhojana promotes the vitiation of both Vayu and Khavaigunya. There is an over mobilisation of Sandhis during Vyayama. They could develop khavaigunya as a result of using Sandhi excessively. Therefore, Vyayama after eating acts as khavaigunya creating Nidana, and when combined with Snigdha Bhojana, it creates a particular Nidana for Amavata. One of the factors that

causes the *Dosha* to move outside of *Koshtha* and find refuge in *Sandhi* is *Vyayam*.

#### Purvarupa

In *Brihattayi*, *Amavata* is not specifically named. *Shiroruja* and *Gatraruja* are the only two named as *Purvarupa* of *Amavata* by *Vangasena*. [19] Early clinical manifestations of the symptoms/signs may be taken into consideration as the disease's *Purvarupa*.

#### Rupa (Signs and symptoms)

Others, including *Madhavakara* and *Bhavamishra*, have provided descriptions of the *Rupa* of *Amavata*. These fall under the following categories:

- Pratyatma Rupa
- Samanya Rupa
- Doshanubandha Rupa
- Pravriddha Rupa

Pratyatma	Samanya	Pravriddha	Doshanubandha vata	Doshanubandha pitta	Doshanubandha kapha
Sandhishool	Angmard	Vrishchikvat Vedana	Shoola	Daaha	Staimitya
Sandhishotha	Aruchi	Agnidaurbalya		Raga	Guruta
Stabdhata	Trishna	Praseka			Kandu
Sparshasahatva	Alasya	Nidra Viparayaya			
	Gaurav	Vidvibaddhata			
	Jwara	Vairasaya			
	Apaka	Daha			
_	Shuntaanganama	Bahumutrata			
		Antrakunjan			

## Upashaya – Anupashaya

Five variables have been identified by *Charaka* when defining the process of illness diagnosis: For an intellectual scholar or physician, the first three are sufficient to understand the disease before breaking the *Samprapti* (pathology) or halting the aggravation of diseases. Nidana (etiological causes), *Purva Rupa, Rupa, Upashaya*, and *Samprapti. Upashaya* is the term for the use of medications, food plans, and Viharas that provide long-lasting relief. *Anupashaya*, on the other hand, exacerbates the illness.

Upashaya: Ushna, Tikta, Katu, Deepana, Laghu Ahara, and Ushna Vihara are used to treat Amavata symptoms such joint pain, Jwara, Angamarda, and Ama. The Agni is strengthened by Langhan, which aids in the digestion of the underlying Ama cause and normalisation of symptoms like Guruta, Praseka, Alasya, and Aruchi, among others.

Anupashaya: By boosting Amavriddhi, Santarpana worsens the disease's state, and Snigdhata causes Srotoabhishyanda. Due to Sheeta and Kleda Vriddhi, they also regard oiling, overcast weather, and early hours to be Anupashaya for Amavata. Because of this, the Samavastha of Amavata uses the use of oil as a diagnostic method. Additionally, due to the tension on the joints, hard labour and excessive physical exercise exacerbate joint discomfort.

## Samprapti

As discussed earlier whenever the function of agni is disturbed in the body ama is produced. This produced ama is slimy in nature, such ama get together with Dushit vata / prakopit vata and circulates all over the body through shira and dhamani and gets lodeged in kaphasthana i.e. sandhi because shleshak kapha is located in sandhi and amavata is developed.

## Samprapti Ghataka

Dosha	Tridosha, mainly Vata (Vyana, Shamana, Apana) and Kapha (Kledaka, Bodhaka, Sleshmaka)	
Dhatu	Rasa, Mansa, Asthi, Majja	
Updathu	Snayu, Kandara	
Srotasa	Annavaha, Rasavaha, Asthivaha, Majjavaha	
Srotodushti	Sanga and Vimarg gaman	
Udbhava sthana	Amashaya – chiefly production of Ama, Pakvashaya – Mula Sthana of Vata	
Adhisthana	Whole body	
Vyakiti Sthana	Whole body (Sandhi)	
Roga Marga	Madhyama Roga Marga	
Avayava	Sandhi	
Vyadhi Svabhava	Mainly Chirakari	

# $Classification ^{[20]} \\$

Acharya Madhavakara stated according to Dosha which are as follows in Madhava Nidana.

# Eka Doshaja

- 1) Vataja
- 2) Pittaja

www.wjpmr.com | Vol 9, Issue 7, 2023. | ISO 9001:2015 Certified Journal 251

3) Kaphaja

#### Dwi Doshaja

- 1) Vataja-pittaja
- 2) Pitta-kaphaja
- 3) Kapha-vataja

## Tridoshaja

All three *Dosha* symptoms are present in the *Tridoshaja* forms of *Amavata*. Both *Bhavaprakasha* and *Yogaratnakara* classify things similarly.

## According to Acharya Sharangadhara<sup>[21]</sup>

- 1) Vataja
- 2) Pittaja
- 3) Kaphaja
- 4) Sannipataja

A four-type classification of *Amavata* has been established by *Acharya Harita* based on its clinical presentation. These are listed below.

- 1) Vishtambhi: Gatra Gaurava, Adhmana, and Bastishula are present in this kind of Amavata.
- Gulmi: This variety of Amavata has the peristaltic sounds Jathara Garjana, Gulmavat Pida, and Kati Jadata.
- 3) Snehi: This form of Amavata contains Gatra Snigdhata, Jadya, Mandagni, as well as the excretions of Vijala and Snigdha Ama.
- 4) Sarvangi: This kind contains the excretions of Pitta, Shyama, Vijjala Ama, Shrama, and Klama.

#### Upadrava

*Upadrava* is a sequel that follows the symptoms of the primary illness. [22] According to *Acharya Dalhan*, symptoms that are linked to a sickness over a longer period of time are referred to as *upadravas*. Disease either erupts and takes on a terrible form or remains persistent in nature. *Upadrava* are not a necessary consequence of the illness.

Yogaratnakara inserts the Pravriddha Lakshana of Amavata that Madhava had previously mentioned in Upadrava. It is also possible to classify Angavaikalya, a manifestation of Amavata reported by Harita, as an Upadrava of the disease. Eight Upadravas are specifically stated in Anjana Nidana, including Jadya, Antrakujana, Anaha, Trishna, Chhardi, Bahumutrata, Shula Shayanasha, etc. The most of the difficulties have been discussed in depth, and the remaining Rupa are depicted as follows.

# Sadhyasadhyata

*Mahasrotasa* is also involved in the pathophysiology of *Amavata*, which is primarily a *Madhyama Roga Marga* illness.

When just a few *Hetus* are involved in the production of the disease, when only one *Dosha* is involved, when there are few indications and symptoms, and when the

ailment is recent in onset, then the disease is classified as *Sadhya*.

When two *doshas* are involved, the condition is chronic, has several contributing elements, and many signs and symptoms, at that point it is classified as *Yapya*.

*Kricchra Sadhya* and the condition known as *Sarvanga Shotha*, which causes generalised edoema, are *Sannipatika* Amavata. [23]

#### Chikitsa Sidhanta

According to Chakradatta, the discoverer of Amavata Chikitsa, Langhana, Swedana, Tikta, Deepana, and Katu medicines, Virechana, Snehapana, and Saindhavadi Anuvasana, and Kshara Basti are all beneficial to Amavata. Upanaha without Sneha has been added to these therapeutic procedures by Bhavamishra and Yogaratnakara, while Yogaratnakara has also included Ruksha Baluka Sweda, among other things. The details are as follows. [24]

तंघनं स्वेदनं तिक्तं दीपनानि कटूनि च | विस्वनं स्नेहपानं बस्त्याश्वाममारुते || सैन्धवाद्येनानुवास्य क्षारवस्तिः प्रशस्यते ||

#### DISCUSSION

As mentioned above, a detailed description of *Amavata* is given in terms of *Ama* with acute and gradual pathogenesis of *Ama* formation, *Nidana Panchaka*, *Upadrava*, *Sadhyasadhyata*, *Pathyapathya*, and *Chikitsa*, among others. *Mandagni* is the root cause of *Amavata*, and treatment requires complete digestion of *Ama*, which occupies the entire body. When *Agni* is normalised by various procedures such as *Langhana*, *Deepana*, and *Pachana*, *Ama* is digested at various levels, and stiffness decreases, along with all other cardinal symptoms such as pain, edoema, and so on.

### CONCLUSION

Amavata is a condition that causes the body to become stiff as a result of vitiated Ama and Vata lodging in the Trika Sandhi. A significant contributing factor is the decreased function of Agni at the Jatharagni, Bhutagni, and Dhatwagni levels. Amavata is Amashayothha Vyadhi and is treated with Langhana in terms of Ahar and Vihara, Swedana, Tikta Katu Deepana Dravyas, Virechana, Snehapana, and Basti, which ultimately results in Amapachana, Vatashamana, and Strotoshodhana. Amavata is caused by the incomplete or improper formation of Annarasa.

## REFERENCES

 Madhav nidana commented by vijay rakshit & shri kanthadutta, madhukosh teeka by madhavkara chapter 25 Amavata nidana, 508/2009.

- Astang Hridaya nidana chapter 12 (udar roga nidana), 358.
- 3. http://en.wikipedia.org/wiki/Rheumatoid arthritis, dated, 20/01/17.
- 4. Shabdkalpdrum by Raja Radhakant deva Part 1, pg no; 180, published by Chaukhambha Sanskrit series 3<sup>rd</sup> edition, 1967.
- Amarkosha Namalinganushasanama by Pandit shree Madamara singh Part 1 pg no. 320 revised by Narayana Ram Acharya published by Satyabhamabai pandurang Bombay, 1944.
- Amarkosha Namalinganushasanama by Pandit shree Madamara singh Part 1 pg no; 321 revised by Narayana Ram Acharya published by Satyabhamabai pandurang Bombay, 1944.
- Astang Hridaya Sutra sthana chapter 13/25, vidhyotini Hindi commentary by Kaviraj Atrideva gupta revised by vaidhya Yadunandana Upadhyaya published by Chaukhambha Sanskrit series, 2012; 132.
- 8. Madhav nidana commented by vijay rakshit & shri kanthadutta, madhukosh teeka by madhavkara chapter 25/1-5, Amavata nidana, 508-09/2009.
- Astang Hridaya Sutra sthana chapter 13/27, vidhyotini Hindi commentary by Kaviraj Atrideva gupta revised by vaidhya Yadunandana Upadhyaya published by Chaukhambha Sanskrit series, 2012; 133.
- Charaka Samhita vimana sthana 2/12, vidhyotini Hindi commentary by Padmbhushana vaidhya samrata shree Satyanarayana shastri explained by Kashinath shastri and Gorakhnath chaturvedi published by Chaukhambha Sanskrit series, 2009; 688.
- Charaka Samhita chikitsa sthana 15/22, vidhyotini Hindi commentary by Padmbhushana vaidhya samrata shree Satyanarayana shastri explained by Kashinath shastri and Gorakhnath chaturvedi published by Chaukhambha Sanskrit series, 2009; 457.
- 12. Shabdastoma mahanidhi by Shree Taranath Bhattacharya published by chaukhambha Sanskrit series Varanasi 3rd edition, 1967.
- 13. Shabdkalpdrum by Raja Radhakant deva Part 4, pg no; 326, published by Chaukhambha Sanskrit series 3rd edition, 1967.
- 14. Madhav nidana commented by vijay rakshit, madhukosh teeka by madhavkara chapter 25/5 Amavata nidana, 509/2009.
- Sushruta Samhita, Uttara Sthana 1/25
   Nibandhasangraha Commentary of Shri Dalhanacharya, Chaukhambha Orientalia Varanasi, Reprint Edition, 2010; 14.
- 16. Astanga Sangraha sutra sthana 9/25, Saroj Hindi commentary by Ravidatt Tripathi Chowkhama prakashana Varanasi, 2006; 192.
- 17. Charaka Samhita sutra sthana 26/85, vidhyotini Hindi commentary by Padmbhushana vaidhya samrata shree Satyanarayana shastri explained by Kashinath shastri and Gorakhnath chaturvedi

- published by Chaukhambha Sanskrit series, 2009; 521
- 18. Charaka Samhita sutra sthana 26/86-87, vidhyotini Hindi commentary by Padmbhushana vaidhya samrata shree Satyanarayana shastri explained by Kashinath shastri and Gorakhnath chaturvedi published by Chaukhambha Sanskrit series, 2009; 521.
- 19. Vangsen Samhita Amavatarogadhikara, 5: 399.
- Madhav nidana commented by vijay rakshit, madhukosh teeka by madhavkara chapter 25/12 Amavata nidana. 512/2009.
- 21. Sharangdhara Samhita Purvakhand 7/41 jeevanaprada Hindi commentary, 80.
- 22. Charaka Samhita chikitsa sthana 21/40, vidhyotini Hindi commentary by Padmbhushana vaidhya samrata shree Satyanarayana shastri explained by Kashinath shastri and Gorakhnath chaturvedi published by Chaukhambha Sanskrit series 2009 pg no.597 and Sushruta sutra sthana 35/20 by Ambikadatt Shastri part 1 published by Chaukhambha Sanskrit series Varanasi, 2009; 171.
- 23. Madhukosha commentary on Madhavam Nidana 25/12, Chowkhamba Orientalia Prakashana, Varanasi, Reprint, 2008; 512.
- 24. Chakradutta with Ratnaprabha commentary edited by Priyavat Sharma, Swami Jayaram das Prakashana Jaipur, Reprint 2000, Amavata chi.25/1 pg no.423 and Bhaishajya Ratnavali, Edited with Siddhiprada Hindi Commentary by Siddhinandan Mishra, Published by Caukhambha Surbharati Prakashana, 29/13 Varanasi, Edition, 2007; 198.

www.wjpmr.com Vol 9, Issue 7, 2023. ISO 9001:2015 Certified Journal 253