

A REVIEW ON THE THERAPEUTIC EFFECT OF HARITAKI GUGGUL IN THE MANAGEMENT OF AMAVATA

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ABSTRACT

Due to modernization and changing lifestyle, emotional stress, change in dietary habits such as intake of indigestible heavy foods, daily intake of milk products especially yogurt, lack of physical activity or doing exercise after having high calories/ fatty foods (*snigdha ahara*) can lead to impairment of digestive fire (*Mandagni*); formation of *ama* & vitiation of *vata*. *Ama* is formed as a result of *mandagni* and in *Ayurved* it is stated that *mandagni* is the main reason behind any disease to occur. This *ama* circulates in the whole body by the vitiated *vata* through *dhamanies* and gets accumulated in the *trika* and *shleshma sthana* & causes pain, swelling and stiffness over the big and small joints. The clinical features of *Amavata* resembles with

Rheumatoid arthritis, an autoimmune disease which causes chronic inflammatory and symmetrical polyarthritis with multisystem involvement. In *Brihat Nighantu Ratnakar Amavata karma vipaka Adhyaya Haritaki Guggul* is mentioned for the treatment of *amavata*. *Haritaki Guggul* is a polyherbal drug. It contains *Haritaki*, *Nagar*, *Vridhdharu*, *Erand* and *Guggul*. In this an attempt has been made to understand the possible mode of action of *Haritaki Guggul* in the management of *Amavata*.

KEYWORDS: *Amavata*, *Haritaki Guggul*, *Ama*, *Mandagni*, Rheumatoid arthritis.

INTRODUCTION

Today, man has adopted the mechanical life and incapable of following the principle of positive health, also because of the lack of knowledge about the *ahara* (Diet) and *vihara*, they

eat incoherent food (*Viruddha Ahara*). The reckless acceptance of modern cultural fashion and leaving behind the *Dincharya* (Daily regimen), *Ritucharya* (Seasonal regimen), *Ashta Ahara Vidhi Visheshaytan* (Eight basic principles of diet and regimen) and *Sadavritta* (Good conduct) has become primary causes of many health problems. Human are living in a tense society which is full of *Irshya* (Jealousy), *Krodh* (Anger), *Ghrina* (Aversion), *Bhaya* (Fear Complex), *Chinta* (Anxiety) etc, which causes mental disturbance and gives rise to many diseases, *Amavata* being one of them.

Amavata disease is not described as a separate disease in any *Brihatrayee*. *Acharya Madhava* is the first author of Ayurveda to give a detailed description of *Amavata* disease. Poor eating habits can potentially increase *Ama* in the first stage of digestion as a result of Agni's hypofunctioning (*Mandagni*). *Agnimandya* is the origin of all ailments. The pathophysiology of *amavata* mainly involves *ama* and *vata* (vitiated). The clinical presentation of *amavata* is characterized by *angamarda*, *aruchi*, *trishna*, *alasya*, *gaurava*, *jwara*, *apaka*, *shotha* etc which is very similar to the rheumatoid arthritis described in modern science. This is the most common form of chronic inflammatory joint disorder globally and in all ethnic groups, with a prevalence of about 1% of the total population. The prevalence of *amavata* have been increased dramatically in recent years due to our changing lifestyle. In India, Prevalance rate of rheumatoid arthritis is 0.75%.^[1] Females are affected three times more often than males. The prevalence increases with age, and sex differences, diminish in the older age group. RA is seen throughout the world and affects all races. The onset is most frequent during the fourth and fifth decades of life, with 80% of all patients developing the disease between the ages of 35 and 50.

REVIEW OF AMAVATA

Definition

स्तब्धम् च कुरुतो गात्रामवातः स उच्यते।
(मि. नि 25/5).^[2]

When vitiated *Ama* and *Vata* enter into the *Trika* and *Sandhi* leading to *stabdhata* of the body parts then this state is known as *Amavata*.

ऊष्मणोऽल्पबलत्वेन धातुमाद्यमापाचितम्।

दुष्टमाशयगतं रसमामं प्रवक्षते ॥ (अ.ह.सू 13/25).^[3]

That due to low strength of *Kayagni*, the improper *Adya Ahar Dhatu* (*Ras Dhatu*) formed in *Amashaya* is known as *Ama*. *Ama* is said to be root cause of all the diseases.

Nidan

Two major factors are responsible for the cause of *Amavata* i.e. *Ama* and *Vata*, both gets vitiated by their own reasons.

विरुद्धाहारचेष्टस्य मन्दोग्नेर्निश्चलस्य च ।

स्निग्धं भुक्तवतो ह्यन्नं व्यायामं कुर्वतस्तथा ॥ (मा.नि.आमवात 25/1).^[4]

1. *Viruddhahara*^[5] (Unwholesome food): Substance which are opposite to the *dehadhatus*, behave in opposition (*Virodh*) to them. This opposition can be in terms of *guna*, *sanyoga*, *sanskara*, *desha*, *kala*, *matra*, etc.
2. *Viruddha Cheshta* (Erroneous habits): Sleeping during the day (*Divaswap*), Night awakening (*Ratrijagaran*), Suppression of natural urges (*Vegavidharan*), Sleeping on an uneven bed, Doing things that are beyond one's ability (*Sahas*), Excessive involvement in sexual activity (*Atimaithun*), excessive physical work or leading a sedentary life increases the risk of diseases. Post-meal physical exercise of any kind disrupts blood circulation in the wall of the gastro-intestinal tract, resulting in inhibition of digestive juices and enzymes to mix up.
3. *Mandagni*: According to Ayurveda, *Mandagni* is the root cause of all diseases. It plays an important role in the manifestation of most diseases.

रोगाः सर्वेऽपि मंदाग्नौ ॥ (अ.ह.नि.12/1).^[6]

Mandagni arises from its own cause which results in the production of *ama*. *Mandagni* is necessary for the formation of *ama* and the main causative agent of *amavata* is *ama*.

4. *Nishchalta* (Sedentary habits): Any kind of physical inactivity is responsible for the aggravation of *Kapha* resulting in *Agnimandya* and consequently helps in the formation of *Ama*.
5. *Snigdha Bhuktavato Vyayama*: Although exercising after any type of meal is injurious to health, but exercise after consuming oily food (*Snigdha ahara*) has been specifically mentioned in the cause of *amavata*. Exercise here refers to any kind of physical activity. Normally a good blood supply in the gastrointestinal tract is very essential for the digestion of heavy food. Physical activity immediately after a meal increases circulation to skeletal muscle & decreases blood supply to the gastrointestinal tract. The process of

digestion and absorption gets disrupted. Due to which improper digestion occurs and *ama* is formed.

6. *Harita* also mentions excessive indulgence in *Guru Ahara and Kandashaka*^[7] as the cause of amavata.

Purvarupa

The *purvarupa* of *Amavata* is not explicitly mentioned in Ayurvedic classics. But the *avyakta lakshana* can be taken as the *purvarupa* before the disease appears.^[8]

Rupa

A. General Features (*Samanya Lakshana*)^[9]

1. *Angamarda*: Improper nourishment of *dhatu* and presence of *ama* leads to a feeling of pain in the body.
2. *Aruchi*: *Aruchi* occurs due to *Agnimandya* and excessive *doshaprakopa* of *annavaha shrotas*. In this condition the patient can digest the food but refuses to take it.
3. *Trishna*: *Ama* and *Pitta* are responsible for *Trishna* (*Amaprabhava Trishna*). Mostly in case of fever, the patient feels thirsty.
4. *Alasya*: Inability to perform normal duties.
5. *Gaurava*: Feeling of heaviness in the body. This is due to the presence of *ama* and *kapha* (Vitiated).
6. *Jwara*: *Agnimandya* and *Rasadushti* produces *Jwara* (Fever) in the body.
7. *Apaka*: Due to *Agnimandya*, digestion is not done properly. Patient feels heaviness in abdomen.
8. *Angashunata*: Inflammation of any part of the body except the swelling of joints occurs due to vitiation of *vata*, *pitta*, *kapha* and *rakta*.

B. Symptoms of Acute Exacerbation (*Pravridhha Rupa of Amavata*)^[10]

Amavata is the most painful disorder in the phase of acute exacerbation as comparison to other diseases. In this condition the following symptoms arise.

1. *Saruja Sandhi Shotha*: Pain in the joints of the hand, feet, ankles, sacrum and thighs and head. Where doshas accumulate, painful swelling appears and scorpion bite like pain occurs in that area. This single expression can be considered as of significant diagnostic value.
2. *Agnidaurbalya* (Indigestion)
3. *Prasek*: *Prasek* means excessive salivation which is the result of *sama rasa*. It is also called *Nishthivan*.

4. *Aruchi* (Anorexia).
5. *Gaurava* (Feeling of heaviness in the body)
6. *Utsahahani*: Due to the Recurrent remissions and exacerbations of the disease, the patient becomes exhausted and has a psychological feeling that the disease has become incurable. This leads to a decrease in enthusiasm (*Utsahahani*).
7. *Vairasya*: means sense of tastelessness. This is due to the *sama rasa* and vitiation of *bodhak kapha*.
8. *Daha*: *Daha* means *santapa*. This usually indicates the involvement of *pitta* present in the inflamed joints.
9. *Bahumutrata*: This is a symptom of *Mutravah Shrotodushti*. This is due to *ama* which builds up more *Kleda* in the body as *Kledavahana* is the function of *Mutra*.
10. *Kukshikathinya*: *Kukshikathinya* means rigidity of Abdomen. Abdomen becomes rigid to touch due to the accumulation of mala in the *annavah shrotas*; due to *ama* and vitiation of *samana* and *apana vata*.
11. *Kukshishoola*: Abdominal pain occurs due to vitiation of *samana* and *apana vata*, which is caused due to obstruction in normal movement.
12. *Nidraviparyaya*: The pain usually increases at night, so the patient remains awake due to the pain. Hence, daytime sleepiness is observed in patients.
13. *Trishna* (Polydipsia)
14. *Chardi*: Agitation of *amashaya* due to impaired *tridosha* causes vomiting.
15. *Bhrama*: *Bhrama* means giddiness. It is due to vitiated *vata*.
16. *Murccha*: The transient loss of consciousness i.e. the inability to perceive the object of the sensory organs is *murccha*. It is caused by the *uptapa* of *indriya* by the vitiated *dosha*.
17. *Hritgraha*: Heart is the place of *Vyana Vayu*, *Sadhak Pitta* and *Avalambaka Kapha*. In the state of *mandagni*, after digestion by *samana vayu*, *sama annarsa* goes into the heart, causing heaviness in the chest. So the vitiation of all these causes *Hritgraha*.
18. *Vid-Vivandhata*: Constipation is the result of excess mala that occurs due to improper digestion and its inability to be expelled out by vitiated *Apana Vayu*.
19. *Jadya*: *Jadya* means *Akarmanyata*. The patient is unable to perform his daily routine work due to pain, swelling, deformity etc.
20. *Antrakujana*: The sound of growling is heard due to the accumulation of *Vata* in the intestine.
21. *Anaha*: The impaired *vata* gets accumulated in the stomach and fails to move freely upwards and downwards. This causes abdominal distention.

Classification of Amavata**A. According to Doshanubandha^[11]**

1. *Anubandha* of one *Dosha*:

i. *Vatanuga Amavata*

ii. *Pittanuga Amavata*

iii. *Kaphanuga Amavata*

2. *Anubandha* of two *Dosha*:

i. *Vata Pittanuga Amavata*

ii. *Pitta Kaphanuga Amavata*

iii. *Kapha Vatanuga Amavata*

3. *Anubandha* of all *Dosha*:

i. *Tridoshaj Amavata*

B. Classification according to severity

1. *Samanya Amavata*

2. *Pravridhha Amavata*

In *Samanya Amavata*, symptoms are mild, less severe and are not associated with *upadrava* than in *Pravridhha Amavata*.

C. Classification according to Chronicity

1. *Navina Amavata*- For one year from the onset of *Amavata*

2. *Jirna Amavata* - For more than a year after onset of *Amavata*

D. Classification according to clinical manifestation

Acharya Harita has classified *Amavata* into following types^[12]

1. *Vishtambhi*: *Sharirgaurava*, *Adhman* and *Bastishoola* is present.

2. *Gulmi*: *Jathar garjana* (Peristaltic sounds), *Gulamavata Pida* and *Katijadata* is present.

3. *Snehi*: *Gatrasnigdhatta*, *Jadya*, *Mandagni* and excretion of *Vijjala* and *Snigdha Ama* is present.

4. *Pakvama*: Excretion of *Pita*, *Shyama*, *Vijjala ama*, *Shrama* and *Klama* are present in this type.

5. *Sarvanga*: *Kati-prishtha-vaksha toda*, *Basthishoola*, *Shirogaurava*, *jathargarjan* is present.

SAMPRAPTI (Pathogenesis)^[13]

“विरुद्धाहारवेष्टस्य मन्दाग्नेर्निश्चलस्य च ।

स्निग्धं भुक्तवतो ह्यन्नं व्यायामं कुर्वतस्तथा॥

वायुना प्रेरितो ह्यामः श्लेष्मस्थानं प्रधावति ।

तेनात्यर्थमपक्वोऽसौ धमनीभिः प्रतिपद्यते ॥

वातपित्तकफैर्भूयो दूषितः सोऽन्नजो रसः ।

स्रोतांस्यभिष्यन्दयति नानावर्णोऽतिपिच्छिलः ॥

जनयत्यग्निदौर्बल्यं हृदयस्य च गौरवं ।

व्याधिनामाश्रयो ह्येष आमसञ्ज्ञोऽतिदारुणः॥” (भा. प्र. म. आमवाताधिकार 26/1-4)

Mainly *ama* (Indigestion or improperly digested chyle) produced from various factors in the digestive system such as improper eating and food habits, mental state during eating, *Viruddhahara*, *Acheshta*, *Snigdha ahara* etc., which have an adverse effect on *agni*. *Dushti* of *Agni* also occurs at the level of the *dhatu*. The *rasadhatu* is not formed up to the standard level due to *mandagni*; it is considered as *ama*.

Simultaneously, *Vata* is aggravated by its etiological factors. This ‘*ama*’ along with *vayu* (vitiated) and also by virtue of its *vishakari guna* it quickly moves to all *kapha sthanas*, through *hridaya* and *dhamanis*. During systemic circulation this *Ama* mixes with *Tridosha* (*Vata*, *Pitta* and *Kapha*) present in *dhamanis* and is further contaminated by *doshas* and becomes *guru*, *atipicchil* and attains different colours thus produces *kledatwa* in different regions in the body.

On the *dhamanies* with the other *doshas* it facilitates *shrotoabhishyanda* and *shrotorodha* causing *sthanasanshraya* manifested by *stabdhata* (Stiffness), *sandhishoola* (Joint-pain), *sandhishotha* (Swelling), *angamarda* (Bodyache), *apaka* (Indigestion), *jwara* (Fever), *anga gaurava* (Heaviness of body), *alasya* etc symptoms of *amavata*. This *Amavisha* enters into *Koshtha*, *trika* and *sandhipradesha*, which are *Vyakta Sthana* of *Amavata* produces stiffness and inflammation of joints. Blocked channels get inflamed and further transformation of the nutrient materials does not take place resulting in diffusion of this material into surrounding tissue, causing permanent and chronic damage of *Shleshma Sthana*.

SADHYA-ASADHYATVA^[14]

Sadhya: When the disease is *Ekdoshaja*, having few signs and symptoms and which has arisen recently, it is *sadhya*.

Yapya: When the disease is *Dwidoshaja*, chronic, with multiple causative factors, signs and symptoms, it is *yapya*.

Kricchasadhya: *Tridoshaja Amavata* and associated with generalized oedema (*Sarvanga shotha*) is *kricchasadhya*. As there is involvement of *Madhyam rogamarga* (*Sandhi*) it is *Kricchasadhya*.

AMAVATA CHIKITSA SIDDHANT

The first and foremost aim of the *Chikitsa* is to do *Sampraptivighatana*. *Chakrapani* was the pioneer who laid down the principle and line of treatment of *Amavata*. He has described *Laghana*, *Swedana*, use of *Tikta -Deepana* and *Katu dravya*, *Snehapana*, *virechana* and *Basti* measure for the treatment of *amavata* in his text *Chakradatta*. Later *Bhavaprakash* and *Yogratnakar* added *Rukshasweda* and *Upnaha* to the above said measure by *Chakrapani*.

“लघनं स्वेदनं तिक्तं दीपनानि कटूनि च।

विरचनं स्नेहनञ्च वस्तयश्चाममारुते ॥१४॥

रुक्षः स्वेदो विधातव्यो बालुकापोटलैस्तथा।

उपनाहश्च कर्तव्यास्तेऽपि स्नेहविवर्जिताः॥१५॥” (भा. प्र. म. आमवाताधिकार 26/14-15)^[15]

Ama and *Vata* are the two chief pathognomic factors in production of *Amavata*. *Ama* is *Guru*, *Snigdha*, *Sthira*, *Sthula* and *Picchila* while the *Vata* have the properties like *Laghu*, *Ruksha*, *Chala*, *Sukshma* and *Vishada*. The properties of both lies on opposite pole of each other. Only the *Sheeta Guna* is common to both. While treating *amavata*, the measures adopted will largely contradict each other. Therefore a very careful approach can benefit the patient.

| No | Drug Name | Rasa | Virya | Vipaka | Guna | Karma | Useful part | Matra |
|----|---|------------------------|-------|---------|--|--|-------------|---------|
| 1. | Haritaki (Terminalia chebula) ^[17] | Pancharas (lavanrahit) | Ushna | Madhura | Laghu, Ruksha | Tridoshahara, Shothahara, Vedanasthapana, Deepana-Pachana, Jwaraghna | Phal | 1 Part |
| 2. | Nagar (Zingiber officinale) ^[18] | Katu | Ushna | Madhura | Laghu, Snigdha | Kaphavatashamak, Amapachak, Shothahara, Vedanasthapana, Deepana-Pachana, Triptighna, Jwaraghna, Rochan, Vatanulomana | kand | 1 Part |
| 3. | Vridhdharu (Argyrea speciosa) ^[19] | Katu, Tikta, Kashaya | Ushna | Madhura | Laghu, Snigdha | Kaphavatashamak, Shothahara, Pachana, Shodhan | Mool | 1 Part |
| 4. | Guggul (Commiphora mukul) ^[20] | Tikta, Katu | Ushna | Katu | Laghu, Ruksha, Tikshna, Sukshma, Vishada, Sara, Sugandhi | Tridoshahara, Shothahara, Vedanasthapana, Deepana, Anulomana, Lekhan | Niryas | 6 Parts |
| 5. | Erand (Ricinus communis) ^[21] | Madhura, Katu, Kashaya | Ushna | Madhura | Tikshna, Snigdha, Sukshma | Kaphavatashamak, Amapachak, Shothahara, Vedanasthapana, Deepana, Balya, Swedopaga, Jwaraghna | Beej (tail) | Q.S. |

HARITAKI GUGGUL

“हरीतकी नागरं च वृद्धदारुसमं समम् ।

वृद्धगुणं गुग्गुलं दत्वा तैलमैरंडजं तथा ॥

मर्दयेदिनमेकं तु भक्षयेदामवातनुत् ॥”

(बृ.नि.२.आमवातकर्मविपाकः)^[16]

Mode of Action of different ingredients (Modern point of view).

Haritaki has immunomodulatory, anti-inflammatory activity & Anti-arthritic activity^[22]; *Nagar* has Anti-inflammatory effect^[23]; *Vridhdharu* has immunomodulatory, anti-inflammatory activity & Analgesic effect^[24]; *Guggul* has anti-inflammatory activity & Anti-arthritic activity^[25]; *Erand* has immunomodulatory, anti-inflammatory activity & Anti-arthritic activity, laxative and central analgesic activity.^[26]

Mode of Action of different ingredients (Ayurvedic Aspect).

The ingredients of *Haritaki Guggul* are mostly *Tikta*, *Katu*, *Kashaya Rasatmak*, *Ushna Virya*, *Madhura Vipaki* and are *Balya* and *Rasayan* in nature. Due to the predominance of *ushna virya*, *katu rasa* in this medicine, it increases the *agni*, because *jatharagni* and *dhatvagimandya* are seen in *Amavata*.

In *Amavata*, *ama* is the main cause of disease; *Haritaki* and *Nagar* have *Deepana-Pachana* property & *Vridhdharu* has *Pachana* property due to which *agnimandya* is improved & *pachana* of *ama* occurs.

Due to *sukshma guna* of *Erand* & *guggul* it penetrates into micro channels and removes the obstruction (*Shrotorodha*) thus *Haritaki guggul* reduces the accumulation of *ama* and pacifies *vata* by *Madhura Vipaka*, *Ushna Virya* & *snigdha guna* of *Nagar*, *vridhdharu* and *Erand*.

Haritaki, *Nagar*, *Erand* & *Guggul* have *Vedanasthapak* property. *Ushna virya* and *Swedopaga* property of *Erand* decreases the *Sheeta* and *Stambha* caused by vitiated *vata* and *ama* and thus reduces the pain and stiffness of the joint area of *Amavata* disease.

Haritaki Guggul act as *Tridosahara*, *Shoolaghna*, *Shothahara* and *Stambhanashak*. All the above properties of the *Haritaki Guggul* lead to expected *Sampraptibhanga* (breaking of pathophysiology) in *Amavata*. *Haritaki guggul* also improves general health and increases the strength of all body parts as it contains *Haritaki*, *Vridhdharu* which are *Rasayan* in nature.

CONCLUSION

Rheumatoid arthritis (RA) is a chronic inflammatory disease of unknown etiology characterized by a symmetric polyarthritis, the most common form of chronic inflammatory arthritis with significant morbidity. NSAIDs, DMARDs (Methotrexate), steroids are used in the treatment of R.A. They have serious adverse effects and have limitation for a long-term therapy. After reviewing the properties of the ingredients it can be concluded that *Haritaki Guggul* described in *Brihat Nighantu Ratnakar Amavata Karma Vipaka* chapter has good efficacy in the management of *Amavata*. *Ama* & *Vitiated Vata* are the main causative factor of *Amavata*. Therefore, for the treatment of *Amavata*, medicines with properties like *Amapachak*, *Vatashamak*, *Vedanasthapak*, *Shothahara* should be used. The ingredients of *Haritaki Guggul* mainly have *Agnivardhak*, *Amapachak*, *Tridosahara* (mainly *Kaphavatashamak*), *Vedanasthapak*, *Shothahara*, *Jwaraghna*, *Swedopaga* & *Anulomana* properties; by virtue of which *Haritaki Guggul* pacifies *Vata*, does *Pachan* of *Ama*, removes obstruction caused by *ama* in *shrotas*, reduces *shoola*, *shotha* & *stambha* of *Amavata*.

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