

EFFECT OF *NIRGUNDI (VITEX NEGUNDO L)* AND *SURANJAN (COLCHICUM LUTEUM BAKER)* ON *AMAVATA*- A LITERARY REVIEW

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ABSTRACT

Amavata 1st described by *Acharya Madhava* has striking resemblance to Rheumatoid arthritis which is a chronic multi system disease of unknown cause. Rheumatoid arthritis is a persistent inflammatory synovitis usually involving peripheral joints in symmetric distribution. In *Amavata*, *Ama* and vitiated *vayudosha* are the causative factors which are due to the various dietary and lifestyle related etiological factors which further leads to subnormal functions of *jatharagni* leading to *agnimandya*, affecting normal digestive process leading to appearance of *ama dosha*. Biologically, *Ama* is nothing but a true mixture of undigested protein, carbohydrate, fat and some bacterial flora. This *ama dosha* if gets stagnant particularly at the site of *kapha- sthana* vitiates *vayu* and ultimately gives rise to a clinical picture known as *Amavata*. The present work is to evaluate the efficacy of *Nirgundi* and *Suranjan* on the *samprapti vighatana* of *Amavata*

Keywords: *Amavata, Mandagni, Amadosha, Nirgundi, Suranjan, Rasa panchaka, sampraptivighatana*

INTRODUCTION

Amavata is a constitutional disorder with the clinical manifestation of joint inflammation along with gastro intestinal manifestation. *Madhava* was the 1st person to give a full length description about it. Though, *Acharya Charaka* was the first to mention about *Amavata* as an indication of *kansa haritaki* (a medicine in *shotha adhyaya*) and *vishaaladi churna* (a medicine in *pandu adhyaya*). Besides these, he also mentioned *Amavata* in *kamla* and

Vatavyadhi adhyaya. *Bhavaprakasha*, *Yoga Ratnakara* followed *Madhava* and included it in their treatise. The word *Amavata* includes combination of the two main internal causes of the disease viz. *Ama* and *vata*. Due to independent origin *Ama* and *Vata*, the word *Amavata* originates. *ShabdaKalpadruma* has given the meaning of *Amavata* as “*Swanamakyatha Roga Vishesa*”. It implies *Amavata* as a disease named after its causative factors. The word *Amavata*

means “*Amo apakwa hetuhvatah*” (*Vachaspathyam* Vol.1) i.e. *Amavata* is the result of the morbid combination of *Ama* and vitiated *vata*. According to *Madhava nidana*¹ *Amavata* is a disease caused by unwholesome food, sedentary lifestyle and if a person exercises after intake of oily food. This results in the movement of *ama* rasa by vitiated *vata* to the sites of *shleshma* in the body viz. *amashaya* (Stomach), *sandhi* (joints), *ura* (Chest), *shira* (head), and *kantha* (throat). On further formation of *ama* and vitiation of *vata*, *ama* and *vata* reach *dhamani* (arteries), thereby it reaches the *hridaya* (heart) resulting in weakness and heaviness. This is followed by body ache, loss of appetite, excessive thirst, lethargy, heaviness, fever, indigestion, swelling of different parts of the body. *Amavata* is marked by scorpion bite like pain and swelling of hands, feet, head, ankles, sacrum, knees, thighs and other joints. *Nirgundi* (*Vitex negundo*) and *Suranjan* (*Colchicum luteum*) both are *Katu*, *tikta rasa*, *Laghu guna*, *ushna virya*, which is why they are *Vata kapha hara*. *Ama* having properties similar to *kapha*, *vata kapha hara dravya* are expected to act against *amavata* as per *samanya vishesha sidhhanta*.

Aims and Objectives

1. To understand the properties of *ama* and *vata* in forming the disease.
2. To understand the *sampraptivighatana* of *amavata*.
3. To evaluate the properties and action of *nirgundi* and *suranjan* in the management of *Amavata*.

Materials and Methods-

Classical texts and commentaries were studied to understand the underlying pathology of

Amavata and texts were referred for the properties of *Nirgundi* and *Suranjan*.

CRITICAL REVIEW OF THE CONCEPT OF AMA: *Ama Vimarsha*

Ama means “*Amayateishatpachayat*” i.e. *apakvaahara rasa*- a result of *agnilaghutwa*/ impairment of *agni*. Formation of *ama* is the primary event in the pathogenesis of the disease *Amavata*. *Vagbhatta* defined *ama* as a pathological entity which forms due to hypo functioning of *ushma* i.e. *agni* and as a result of which the 1st *dhatu rasa* isn't formed properly, instead the *apakwaanna rasa* retained in the *amashaya* undergoes fermentation and putrefaction (*dush-tatva*)². It is this state of *apakwa rasa* which is termed as *ama*.

Sarangdhara views *samyakapakvaahara rasa* as *rasa* and *apakvaahara* as *ama*³.

Biophysical properties of *Ama* as described by *Vagbhatta* and *Madhavkara* can be summarized as follows⁴:

1. *Ama rasa* is in liquid form
2. It is *guru* in nature i.e. of high molecular weight
3. *Snigdhatwa*-moist
4. *Bahupichhilatwam* - viscid or mucoid
5. *Tantumata*- having the property of stickiness
6. *Nana varnatwa*- having different colours
7. *Asamyuktam*- non-homogenous
8. *Durgandhatwa*- foul smelling

Arundattain his commentary have stated that the impaired *agni* is responsible for the formation of *Ama*. But *Hemadari* stated in his commentary that formation of *ama* need not be due to *jatharagnimandya* only, but may also occur due to *dhatwagni vyapara*⁵.

Properties of *Vata*: According to *Acharaya-Charakavata* has following properties⁶:-

- *Ruksha*

- Sheeta
- Laghu
- Sukshma
- Chala
- Vishad
- Khara

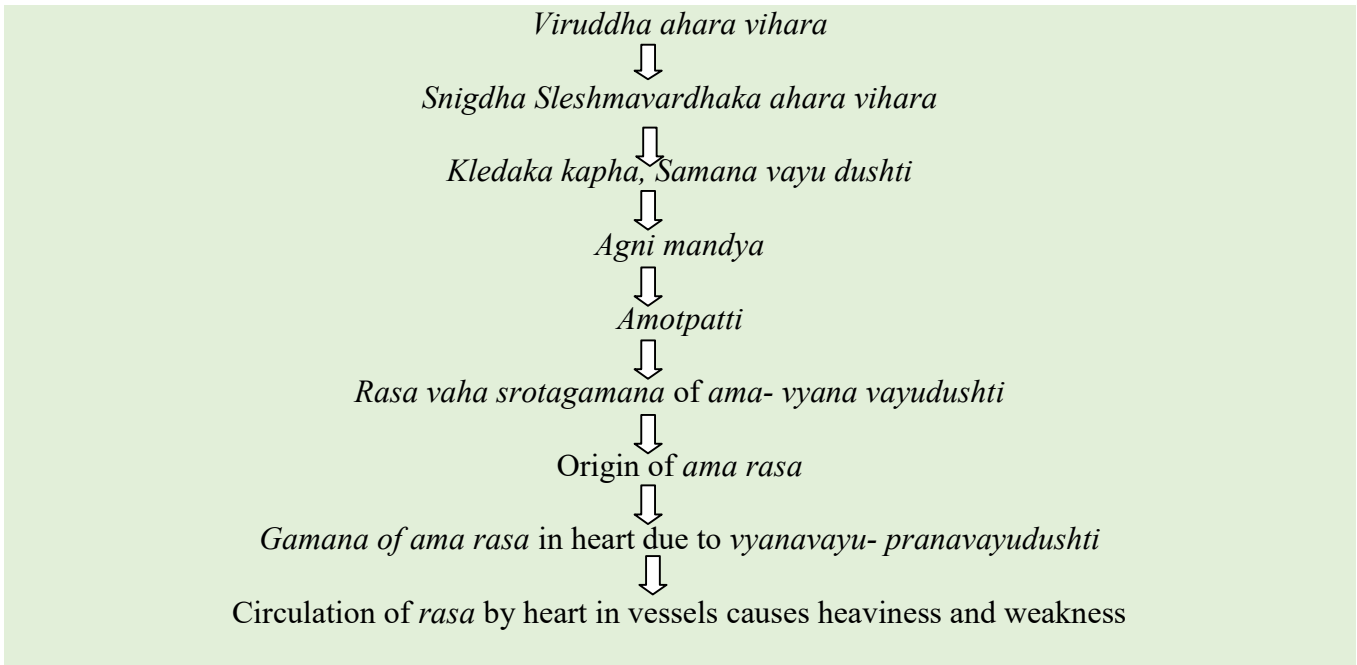
Presence of *ama* and vitiation of *vayu-dosha* are major factors involved in the formation of *amavata*. During the process of circulation through the body, if it becomes stagnant particularly at the site of *kapha-sthana*, it vitiates the *vayu* and ultimately gives rise to a clinical picture- *Amavata*.

Samprapti factors in Amavata-

Udbhavasthana- Amashaya
 Sanchara- Rasa vahasrota

Adhishthana- Asthisandhi
 Marga- Madhyamrogamarga
 Agni- JatharagniDhat-
 wagni(Rasagni)
 Dosha- Vata- Samanavayu,
 Vyanavayu, Apanavayu
 Pitta- Pachak pitta
 Kapha- Kledaka kapha, Sleshaka kapha
 • Mainly vata-kaphavyadhi
 Dushya- Rasa
 Srota- Rasa vaha and annavaha
 Srotadushti- Sanga
 Pratyatmalinga- Vrishchikdamsha-
 vatapeeda - Asthisandhi
 Swabhava- Chirakari

Schematic diagram of Pathogenesis of Amavata according to MadhavaNidana⁷



Appearance of *angamarda*, *alasya*, *aruchi* during circulation in whole body –*amavargi sleshmadushti*

Srota avarodha of blood vessels – *sleshmadushti*
Amasanchaya leads to *amotpatti*- appearance of *jwara*, *shoola*, etc

Rasapanchaka of Nirgundi and Suranjana⁸

<i>Nirgundi (Vitex negundo) (Verbenaceae)</i>	<i>Suranjan (Colchicum luteum) (Liliaceae)</i>
Rasa- Katu, Tikta Guna- Laghu, Ruksha Virya- Ushna Vipaka- Katu Karma- Vata-Kaphahara Indications- Sula, Sotha, Amavata, Krimi, Aruchi, Visa roga, etc.	Rasa-Tikta, Katu Guna- Laghu, Ruksha Virya- Ushna Vipaka- Madhura Karma-Vata-Kaphahara, Raktashodhaka Indications- Amavata, Vatarakta, Gridhrasiect.

In *Bhaishajyaratnavali*, the formulations consist the drug *Nirgundi* have been indicated mainly for the treatment of *Amavata*.

Reference	Preparation	Indication
1. Bh.R. 8/303	Shree baidyanathvati with takra	Amavata
2. Bh.R. 8/324	MahaAbharavati	JirnaAmavata
3. Bh.R. 9/213	Agnimukhalokam	Amavata
4. Bh.R. 10/221	Vishvodeepakabhara	Amavata
5. Bh.R. 27/162	Mahapinnda tail	Amavata
6. Bh.R. 29/23	Rasonadikwatha	Amavata
7. Bh.R. 65/114,121	Kanaka tail	Amavata
8. Bh.R. Parisishtha 2/23	Shasama- shalandra rasa	Amavata
9. Bh.R. Parisishtha 2/28	Kanaka tail	Amavata

There are some references of *suranjana* indicated in *amavata* both external and internal application^{9, 10}. Also there is description of use of *suranjana* in *amavata* in *Unani* system of medicines e.g. *Habbanikarit* (tab)- Internal application 1-2 tab in *amavata*, *Majun Suranjan*- Internal application in *amavata* etc.

Researches already done on the anti-inflammatory, analgesic and anti-arthritis activity of Nirgundi and Suranjana^{11, 12}

Extract of *Vitex negundo* seeds (EVNS) using Freund's complete adjuvant induced arthritis in rat model. Histopathological studies showed a marked decrease of synovial inflammatory infiltration and synovial lining hyperplasia in the joints of EVNS treated rats. Results demonstrated that *V.negundo* seeds possessed potential therapeutic effect on adjuvant induced arthritis in rats by decreasing the levels of TNF- α , IL- and IL-6 and increasing that of IL-10 in serum as well as down-regulating the levels of COX-2

and 5-LOX, and therefore may be an effective cure for human rheumatoid arthritis.

Majoon suranjana (MS) in doses of 450,900 & 1800 mg/kg body weight was evaluated using turpentine oil induced paw oedema model and the anti-arthritis efficacy was evaluated using the formaldehyde and complete Freund's adjuvant (CFA) induced arthritis models. MS produced a dose dependent protective effect in all the experimental models. The anti-arthritis activity was due to the interplay between its anti-inflammatory and disease modifying activities, thus supporting its use in traditional medicine for the treatment of RA.

DISCUSSION

Probable action of *Rasapanchaka* of *Nirgundi* and *Suranjana* on the *samprativighantana* of *Amavata*:-

Ama is *guru, snigdha, pichhila* (properties similar to *kapha*) whereas *vata* is *laghu, ruksha* and

vishada i.e. opposite to the qualities of *ama*. Both *ama* and *vata* have opposite qualities except for the fact that both are *sheeta*. Hence, drugs which are *ushna* will be able to pacify both *ama* and *vata*. On the other hand in *amavata*, *agnimandya* occurs, both *nirgundi* and *suranjana* being *katu*, *tikta* and *ushna* endowed the effect of *agnideepana* and *amapachana* which is very necessary in this disease as *ama* in *amavata* makes it difficult to treat.

The *chikitsasiddhanta* of *amavata* according to *Chakarpani*¹³ states *langhana*, *tikta*, *deepana*, *katu* etc. all these properties are present in our chosen drugs while their *laghuguna* is in accordance to the *langhana* in this disease.

Both the drugs have *vedanasthapana* and *sothahara* property and *amavata* is a disease which is clinically marked by severe pain i.e *Vrishchik-damshavatapeeda* (pain is compared to scorpion sting) and inflammation of the joints. Both the drugs not only reverse the pathology of the disease as said above but also relieve the patient symptomatically.

CONCLUSION

Ama (result of impaired *Agni*) and vitiated *vata-dosha* is the main culprit involved in the *samprapti* of *amavata*.

Nirgundi and *suranjana* both drug's *rasa-panchaka* has got potent action over the *sampraptivighatana* of *amavata*. Their chief karma is *vata-kaphahara* and *rasapanchakais* in accordance of the *chikitsasiddhanta* of *amavata* as told by *Chakarpani*. The *katu rasa* is *deepaniya rasa* and *tikta rasa* is both *deepana* and *pachana rasa*¹⁴. Hence, one can conclude that drugs not only efficiently act upon the *sampraptivighatana* of *amavata* but also provide symptomatic relief from the severe pain and inflammation.

SCOPE FOR FURTHER STUDY

Considering the properties and the successful previous animal trials of *Nirgundi* and *Suranjan*, it will be wise to carry out further clinical trial on patients of *Amavata* and/or Rheumatoid arthritis.

REFERENCES

1. Ayurvedacharaya SriSudarshana Shastri, Madhavanidanam, Vidyotani hindi tika, Chaukhambha publications, reprint 2006, part –I, Amavata, p.no. 508-509.
2. Astangahrdaya of Vagbhata with the commentaries: Sarvangasundara of Arundatta&Ayurvedarasayana of Hemadri by Dr Anna MoreswarKunte, Edition 2011, Chaukhambasurbharatiprakashan, Varanasi, A.H.Su 13/25, p.no. 216.
3. SharngadharSamhita of AcharyaSharngdhar, Jiwanprada Hindi Commentary by Dr. Smt. ShailajaSrivastava, Edition- ChaukhambaOrientalia, Varanasi, Sh.S.Purvakhanda 6/3, p.no. 51.
4. Astangahrdaya of Vagbhata with the commentaries: Sarvangasundara of Arundatta&Ayurvedarasayana of Hemadri by Dr Anna MoreswarKunte, Edition 2011, Chaukhambasurbharatiprakashan, Varanasi, A.H.Su.
5. Astangahrdaya of Vagbhata with the commentaries: Sarvangasundara of Arundatta&Ayurvedarasayana of Hemadri by Dr Anna MoreswarKunte, Edition 2011, Chaukhambasurbharatiprakashan, Varanasi, A.H.Su 13/25, 27 p.no. 216-217
6. Agniveshacharya, CharakaSamhita, Elaborated by Charaka and Drudhabala with Ayurveda Dipika Commentary by Chakrapanidatta, Edited by YadavajiTrikamajiAcharya, Reprint Edition-2013, ChaukhambaSurbhar-

tiPrakashana, Varanasi, Sutrastana1/ 59 p.no 56-57.

7. MadhavanidanamRoga-Viniscaya of Sri Madhavakara with the Sanskrit commentary Madhukosha's by Viajayaraksita and Srikanthadatta edited with Vimala, Madhukara Hindi commentary and notes by Dr. BrahmanandaTripathi (vol.I), Edition-2007, Chaukhambasurbhartiprakashan Varanasi, 25/1-5, p.no.571.
8. Sastry.J.L.N, DravyagunaVijnana, Vol-1, Edition- 2012, ChaukhambaOrientalia, , p.no.415-416, 1004.
9. Prof. P.V.Sharma, Dravyaguna- Vijnana, Vol II, ChaukhambaBharati Academy, reprint- 2005, Chapter 9, Jwaraghnadivarga, p.no- 810.
10. Vaidya Banwarilal Mishra, Dravyaguna-Hastamalak, Publication scheme, reprint 2006, p.no.499.
11. Antiarthritic activity of majoon suranjan (a polyherbal unani formulation) in rat by S Singh, V Nair, YK Gupta- The Journal of-medical research,2011-ncbi.nlm.nih.gov.
12. Therapeutic effects of standardised Vitex negundo seeds extract on complete Freund's adjuvant induced arthritis in rats by Zheng CJ, et al. Phytomedicine 2014.
13. Chakradatta of Sri CakrapaniDatta with Padarthabodhinihindi commentary by VaidyaRavidattaSastri, Edition 2012, Chaukhambasurbharatiprakashan, Varanasi, Amavata 25/1-2, p.no.116.
14. Agniveshacharya, CharakaSamhita, Elaborated by Charaka and Drudhabala with Ayurveda Dipika Commentary by Chakrapanidatta, Edited by YadavajiTrikamajiAcharya, Reprint Edition-2013, Chaukhamba Surbharti Prakashana, Varanasi, Sutras-tana26/ 42(3,4,5) p.no 144-145.

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