

International Ayurvedic Medical Journal, (ISSN: 2320 5091) (July, 2017) 5(7)

ETIOPATHOGENESIS AND MANAGEMENT OF AMAVATA- A CONCEPTUAL STUDY

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ABSTRACT

Vitiated *vata dosha* in association with ama circulates in the whole body and then localized in the different locations of *kapha dosha* with predilection of joints causing pain, swelling as well as stiffness of the joints. Pain, swelling and stiffness of the joint form the cardinal manifestation of the illness. It is categorized into three types based on the relative dominance of the *dosha* as *vatanuga*, *pittanuga* and *kaphanuga amavata*. Due to similarity of symptoms the *amavata* should clinically differentiated from *sandhigata* and *Vatarakta*. Balanced approach that clears the *ama* and pacifies the *vatadosha* is effective in the management of *amavata*. In general, simultaneous administration of *antahparimarjana chikitsa* (internal medication) as well as *bahiparimarjana chikitsa* (external medication) is conveniently adapted in the management of *amavata*. Administration of *langhana*, *deepana*, *virechana*, *snehapana and basti form antahparimarjana chikitsa*. Along with this internal medication, the patient should be treated with external medications like *ruksha sveda*, *upanaha*.

Keywords: Ama, amavata, vatarakta, sandhigatavata, rukshasveda

INTRODUCTION

Indulgence in specific etiological factors, cause simultaneous vitiation of *vata dosha* as well as *kapha dosha* which in turn initially afflicting the sacral region; later gradually stiffens the whole body manifesting as *amavata*. *Ama* is invariably involved in all stages of the pathogenesis hence the name *amavata*. Vitiated *vata dosha* in association with *ama* circulates in the whole body and then localized in the different locations of *kapha dosha* with

predilection of joints causing pain swelling as well as stiffness of the joints¹. Thus involving the *madhyama roga marga*, this illness poses difficulties in the curative approach. Clearing the *ama* and pacification of *vata dosha* is the sheet anchor of treating *amavata*. *Langhana* (restricted food), *Shodhana* (purification proceedures), *shamana* (palliative measures) *brimhana* (nourishing measures) and *rasayana* (Rejuvenating treatment) form the complete

treatment of amavata².

Etiology:

In general, erroneous dietary and behavioral factors are reasonable for the causation of *amavata*. In precise

- 1) Consumption of combinations of foods that is derogatory to the body elements,
- 2) Indulgence of any incriminatory physical activities like swimming and sexual intercourse during the state of indigestion,
- 3) State of impaired digestion,
- 4) Excessive consumption of greasy foods followed by heavy exercise, and
- 5) Persistent inactivity, all these factors are said to cause amavata. Health is achieved by food and the disease is also conceived by food. Discordant or antagonist combination of food components that is incriminatory for the body elements are termed as viruddha ahara and is the important causative factor of amavata. In the state of health, the dosha and dhatu naturally possess opposite properties³. Even then they exist in the body without any derogatory interaction. This phenomenon is known as svabhava satmya (auto immunity) of the body elements. This svabhava satmya is disturbed in the amavata (svabhava satmya viparyaya) by the intake of viruddha ahara leading to derogatory interaction between the body elements. This derogatory interaction between the body elements is termed as ama 4 and is a major pathological entity in amavata

The etiological factors lead to the vitiation of *vata dosha* as well as formation of *ama*. Thus generated *ama* turns more virulent in combination with the vitiated *vata dosha*. Also the vitiated *vatadosha* mobilizes the *ama* into the vessels and then circulates it into the whole

body with the predilection of locations of *kapha dosha*. The locations of *kapha dosha* afflicted by the *ama* includes *amashaya* (stomach), ura (chest), *shira* (head), *kantha* (neck) and *sandhi* (joints). In these locations of *kapha dosha* the *ama* is further incriminated by the local *vata*, *pitta* and *kapha dosha* which turns *ama* into multicolored slimy more virulent form. This severely virulent ama causes *abhishyndana* of *srotas* and eventually generalized debility as well as heaviness of the chest. The vitiated *vata dosha* and *ama* initially affecting the sacral joints gradually affects all the joints in the body causing its swelling pain and stiffness⁵.

Koshtagata ama and shareeragata ama are the two phases of ama seen in patients of amavata. The symptoms centered on the trunk like tastelessness and abdominal discomforts are suggestive of koshta gata ama. Contrary to this the constitutional symptoms like bodyache, febrile illness, fatigue and the symptoms related to the joints are pathognomonic of sharira gata ama.

Types: The vitiated *vata dosha* spreads out the *ama* ubiquitously distributing into the whole body through the vessels and then localizes in the joints. This is the unique pathology of *amavata* with invariable involvement of vata dosha. Even then the *amavata* is categorized into three types based on the relative dominance of the dosha as *vatanuga*, *pittanuga* and *kaphanuga* amavata⁶. Based on the severity again the amavata is categorized into two *samanya* amavata and pravriddha amavata⁷. In a less practiced different school of thought amavata is said classified into four as *Vis-*

tambhi amavata; Gulmakrit (Gulmi)amavata, Snehee amavata and pakwa amavata⁸.

Clinical presentation: As cited earlier generation of *ama* as well as vitiation of *vata dosha* are the exclusive pathological entities in *amavata*. Accordingly the clinical presentations of the *amavata* are centered on these two factors. More to add, *samanya amavata* and *praviriddha amavata* are the two different stages of *amavata*.

In the *samanya amavata* stage the symptoms like tastelessness in the mouth (*aruchi*), Excessive thirst (*trishna*), Indigestion (*apaka*), Heaviness of the body (*gaurava*) and Febrile illness (*jvara*) are pathognomonic of ama dosha. In contrast to this; body ache (*angamarda*), lumbar pain (*trikasandhishula*), stiffness of the joints (*stabdhata*), swelling around the joints (*shunata anganam*) are indicative of vitiated *vata dosha* ⁹.

More severe symptoms develop during the chronic pravriddha stage of *amavata*. The patients will suffer from severe pain in the joints of hands, feet, head, ankles, sacrum, legs and thighs. Pain is so severe that it mimics the pain of venomous scorpion sting. The affected painful joints are also swollen. This pain and swelling of the joints are due to the spread of the *dosha* in to these joints¹⁰.

Distinct symptoms help to differentiate the different types of *amavata*. The presence of severe continuous pain as if the affected joint is being nailed or burst by an arrow is indicative of *vaatanuga amavata*. *Pittanuga amavata* is characterized by Burning sensation in the joints or whole body as well as Redness of the affected joint. In contrast to this the symptoms like abnormal stiffness or immobility of the

affected joints, Subjective symptom of heaviness in the affected joints and Pruritus in the affected joints are confirmatory of *kaphanuga amavata*. Presence of mixed symptoms of *vatanuga*, *pittaanuga and kaphanuga amavata* is indicative of *tridoshaja amavata*.

Several manifestations of *amavata* in the chronic stage are considered as complications of *amavata*. Note that at times these are also considered as symptoms of *pravriddha amavata*. The patients will suffer from severe pain in the joints of hands, feet, head, ankles, sacrum, legs and thighs. Pain is so severe that it mimics the pain of venomous scorpion sting. The affected painful joints are also swollen. This pain and swelling of the joints are due to the spread of the dosha in to these joints.

The complication of the amavata include Impairment of gastric fire (agnidaurbalya), tastelessness (aruchi), Abnormal taste in the mouth (vairasya), excessive thirst (trit), excessive salivation (praseka), abdominal rigidity (kukshi katinata), abdominal pain (kukshi shula), gurgling sound in the abdomen (antrakujana), flatulence (anaha), vomiting (chardi), grahani dosha characterized by presence of ama and unformed stools (grahani dosha), subjective symptom of heaviness of the body (gaurava) and Lack of enthusiasm (utsaha hani). These complications are caused due to presence of ama. in addition to this the complication due to vitiated vata dosha include excessive urination (bahumutrata), burning sensation (daha), sleeplessness (nidraviparyaya), dizziness (bhrama), transient loss of consciousness (murcha), tightness of the chest (hridgraha), constipation (vibandha), stiffness of the joints (jadya), flexion deformities (angasankocha),

leg paralysis (*khanjatva*), and different other severe illness like *vatavyadhi*. Among these complications of amavata the unique eight symptoms are referred as asta *upadrava* of *amavata*. The list includes stiffness (jadya), gurgling sound in the abdomen (*antrakujana*), flatulence (*anaha*), excessive thirst (trit), vomiting (*chardi*), excessive urination (*bahumutrata*), severe abdominal pain (*shula*), sleeplessness and (*shayananasha*).

Prognosis: Ama and the Vata dosha are the invariable components of pathology of amavata and the treatment of these is quite opposite. Hence in general the amavata is considered as chronic lingering disease and is difficult to cure. Even then it is said that Amavata presenting with dominance of any one dosha is curable. Amavata presenting with dominance of any two dosha is controllable with medication. Contrary to this Amavata presenting with dominance of all three dosha, presence of swelling of whole body and the pravridhha amavata stage is considered as difficult to cure.

Chikitsa (Treatment): Ama and vata are the two major components in the pathogenesis of amavata. The ama is best treated by ununctuous measures. Contrary to this the vata dosha gets alleviated by unctuous treatment. Thus the treatment of these two major components is contradictory posing difficulty in planning the treatment. Hence a balanced approach that clears the ama and pacifies the vata dosha is effective in the management of amavata. In general, simultaneous administration of antahparimarjana cikitsa (internal me-

dication) as well as bahiparimarjana cikitsa (external medication) is conveniently adapted in the management of amavata. Administration of langhana (restricted food), deepana (augmenting the digestive ability), virechana (laxation), snehapana (internal oleation) and basti (Therapeutic enemata), antahparimarjana cikitsa (internal medication). Along with this internal medication, the patient should be treated with external medications like ruksha sveda (un-unctuous sudation), and upanaha(un-unctuous poultice). Full account of the treatment is discussed below.

Internal medication: Clearance of the ama, elimination of the excessively vitiated dosha, alleviation of morbidity of dosha and dhatu are best achieved by internal medication. This internal medication includes the ama pachana, shodhana, shaman, brimhana and rasayana cikitsa.

Ama pachana: Langhana chikitsa as well as oral administration of medications that improve the appetite and digestion form the ama pachana chikitsa. This also forms the pretreatment for the shodhana cikitsa as nirama stage as well as optimal functioning of gastrointestinal tract is essential for elimination of dosha.

Langhana chikitsa (restricted food): Langhana cikitsa is planned at the beginning to accomplish the ama pachana. Among the 10 forms of langhana, anashana and laghvashana are accepted as langhana cikitsa in the present context. These two procedures are opted in accordance with the physical strength of the patient as well as amount of ama. Excessive ama in a physically strong patient is

best treated by anashana. Contrary to this moderate accumulation of ama in a physically weak patient should be treated by laghvashana form of langhana cikitsa. By adapting the general principle of langhana cikitsa, from the context of jvara cikitsa, langhana is best continued for a maximum of seven days. In about seven days the appearance of symptoms indicative of proper langhana is expected. Appearance of appetite, clear evacuation of bowel and bladder and partial remission of symptoms of amavata are indicative of proper effect. Note that prolonged period of langhana may lead to debility as well as further vitiation of the vata dosha and hence should be avoided.

Deepana (Augmenting the digestive ability): Following the langhana cikitsa, the functioning of the agni is further supported by dipana cikitsa. This is best performed by the oral medication of herbs possessing tikta rasa and katu rasa. Panchakoloa phanta may be orally administered in a dose of 96 ml for about another seven days. Also drugs possessing tikta rasa like guduchi (Tinospora cordifolia) may be administered for the same purpose. Again light diet is continued during this period.

Pachana (Facilitating digestion): The treatment of dipana is followed by pachana cikitsa to ensure the achievement of nirama stage. Clearance of koshta gata ama is essential to proceed with the next steps of shodhana procedure. Also, this will facilitate the remission of the symptoms of the illness. The oral administration of deferent kashaya preparation that brings about the pachana of ama is the procedure of pachana cikitsa. With an intention of achieving pachana of ama one may

prescribe formulations like dashamula rasnadi kashaya, maharasnadi kashaya, rasna saptaka kashaya, rasna panchaka kashaya.

Shodhana (purification procedures): Koshtagata ama as well as shariragata ama is two states of ama present in the amavata roga. Initially the koshta gata ama stage is rendered into nirama stage and then the sharira gata ama is cleared by shodhana cikitsa. Langhana dipana and pachana clear the koshta gata ama stage. This is followed by snehana, virechana and basti, and this form the elimination of sharira gata ama.

Yatha krama shodhana (methodical elimination): Amavata is an illness affecting the madhyama roga marga. Morbid dosha can be eliminated from the abhyantara roga marga. Hence it is required to mobilize dosha from the madhyama roga marga into the abhyantara roga marga ie from the shakha into the koshta. Once the dosha is mobilized into the koshta it can be eliminated from the body by the different shodhana procedures. Virechana and basti are the shodhana procedures indicated in amavata. Thus the method of yatha krama shodhana comprising sequential administration of deepana, pachana, snehapana, virechana and samsarjana karma is to be planned in amavata.

Shodhananga snehapana (Internal oleation for elimination of dosha): Once the ama is cleared, and the patient has adequate appetite; the patient should be treated with ghee medicated with herbs that enhance the digestive power. Guduchi ghirta may be prescribed for this purpose. Since sharira gata ama is still present shortest course of snehapana for two to three days should be carried out.

Ruksha sveda (un-unctuous sudation): Snehapana is followed by svedana of the whole body as part of preparation for the shodhana. In general snigdha sveda is indicated in such situations. But in amavata, morbidity of ama may worsen by the abhyanga, and hence is contraindicated. Accordingly the ruksha sveda is performed by adapting the method of bashpa sveda using dashamula. Or pottala sveda like Karpasa bija pottala sveda and, valuka sveda may be prescribed for this purpose.

Sneha virechana (unctuous therapeutic purgation): Following the langhana, deepana, snehana, and svedana, the patient should be treated with virechana karma. Also the ghee processed with virechana drugs like trivrit (Operculina turpethum) is preferred as sneha virechana. Alternatively one can prescribe Eranda taila in a dose of 40 ml for carrying out the virechana karma. Addition of small amount of kshara to the virechana ghrita is ideal to get the better results. Note that, as the samprapti of the disease is with predominant vitiation of vata dosha, hence unctuous therapeutic purgation is indicated. Moderate shodhana is preferred, lest there may be aggravation of vata dosha.

Nitya virechana (regular laxation): If the patient is physically weak and the accumulation of the dosha is heavy, then alternative to the yatha krama shodhana; one can plan regular laxation. For this purpose one can prescribe the Eranda taila in a dose of 12 to 18 ml every day in empty stomach during the morning. This may be continued for about 7 to 15 days depending upon the requirement.

Basti (Therapeutic enemata): Shodhana as well as shamana effect may be achieved by

the niruha basti. If the patient is unfit for virechana karma, shodhana is then planned by basti cikitsa. Or else, the accumulation of dosha that are failed to get evacuated by the virechana karma is cleared by basti cikitsa. By following virechana karma if constipation develops with hard stools, then the shodhana by the basti is preferred. Kshara basti by adapting the course of *yoga basti* is ideal. Saindhavadi taila, prasarani taila, dashamuladi taila may be used in the formulation of niruha basti (decoction enema) as well as anuvasana basti. Yoga basti consisting of 3 sittings of niruha basti is ideal in amavata. Anuvasana basti (oil enema) alone is indicated to clear the constipation or as shamana medication.

Punah shodhana (repeated purification): Chronic lingering nature is characteristic of amavata. Partial remission is usually observed in many patients following shodhana and shamana cikitsa. Illness tends to exacerbate due to exposure to any etiological factors or adverse seasonal variations. Hence it may be required to repeat the shodhana procedures.

Shamana chikitsa (Palliative measures): Shodhana is followed by shamana cikitsa. If the patient is unfit for shodhana, or else if the accumulation of dosha is minimum then shamana may be prescribed following langhana dipana and pachana cikitsa. Shamana cikitsa may be accomplished by oral administration of different formulations in different forms like kashaya, asava, vati rasayana etc. Eranda is the best drug in the treatment of amavata. In this regard it is said that, the illness amavata is like an elephant king and eranda is like the lion that kills the elephant. Snehapana in the form of shamana is specifically indicated fol-

lowing *ama pachana*. This is capable of alleviating the *vatadosha*.

Shamananga snehapana (Palliative internal oleation): Internal oleation is planned to alleviate the vitiated vata dosha. This is best planned after the effective clearance of ama by the earlier treatments of langhana, deepana, pachana and shodhana. This may be continued for long period until the subsidence of symptoms of amavata. For snehapana one can prescribe the brihat saindhavadi taila or guduchi ghrita.

Brimhana chikitsa (nourishing measures): Amavata is a chronic debilitating illness. Depletion of dhatu is the usual complication that occurs in the long run. Depletion of rasa, rakta dhatu may lead to pandu roga. Medication with formulations belonging to the category of loha and mandoora is effective in this regard. Emaciation reflects the depletion of mamsa and medo dhatu. This is effectively managed by proper nutritious foods. Vitiated vata dosha tend to cause asthi kshaya. Medications like lakshadi guggulu, mrigashringa bhasma are effective in this regard.

Rasayana chikitsa (rejuvenating treatment): Chronic lingering illness that runs a long course is best treated by vyadhihara rasayana. The rasayana that are indicated in amavata includes guduchi rasayana, pippali rasayana, bhallataka rasayana and eranda rasayana

Bahirparimarjana chikitsa (external medication): Along with the internal medication, application of external treatment in the form of ruksha sveda is very effective. This may be done by adapting ruksha pottala sveda, valuka sveda or upanaha sveda methods.

Ruksha sveda (non unctuous sudation): The

illness is characterized by ama as well as vata dosha; hence non unctuous sudation is indicated in amavata. For this purpose one can go for the pinda sveda or upanaha sveda. Valuka sveda is the best form pinda sveda. Pinda sveda can also be performed with karpasasthi yoga. Upanaha sveda with doshaghna lepa, atasi upanaha etc are effective. Svastika bandha may be used for the upanaha purpose as the upanaha is done on joints.

Ruksha valuka sveda (Un-unctuous sand pack sudation): Oleation is contraindicated in the ama as well as morbidity of kapha dosha. Amavata is characterized by affliction of sandhi and is the location of kapha dosha. Ama is invariably involved in the pathogenesis. Svedana is effective in both vata dosha as well as ama. Again application of sveda around the joint is best done by the method of sankara sveda. Hence un-unctuous form of sveda like valuka sveda is justified. Pain and swelling of the joints is relieved by the procedure. This is best continued for about 7 days. This is repeated several times depending upon the requirement with a gap of seven days between each course.

Ruksha pottala sveda (Un-unctuous pack sudation): Localized form of sveda may be given by the method of pottala sveda. Again the application of the oil prior to the pottala sveda is contraindicated. The formulation of karapasthi bija may be used for this purpose

Ruksha upanaha sveda (un-unctuous poultice): Application of upanaha sveda around the affected joints is effective in relieving swelling, pain and stiffness. Atasi upanaha, doshaghna lepa, salvana upanaha may be effectively prescribed. The upanaha may be car-

ried out for about seven days, and may be repeated after the gap of about seven days.

Ruksha parisheka sveda (Un-unctuous bathing sudation): Multiple joints pain affecting almost whole body is best treated by parisheka sveda, dashamula kvata or eranda kvatha may be used for the parisheka. Again, the parisheka sveda is planned without prior abhyanga. Even the pitta dominant type of amavata may be treated by this procedure.

Pathya (preferred diet and activity): The food and drink that possess bitter or pungent taste and that enhance the appetite and digestion is good in patients suffering from amavata. The grains that are preferred include yava koradusha shali and kulattha. Vegetables like vartaku vastuka punarnava patola gokshura varuna karavella varshabhu garlic and drumstick are advisable. Patient is allowed to consume fruits like badara and other bitter tasting ones. Buttermilk and warm water is ideal drink. Cow's urine may be used as after drink. Horse gram dal, chanaka soup, kalaya soup or meat soup of dry land animals is good for improving the health. Old alcoholic beverages are advisable. Apathya / diet and activity to be avoided: greasy foods that are heavy for digestion should be avoided. Black gram and upodika should not be consumed. Fish and meat of wet land animals are best avoided. Consumption of milk, curd and jaggery are not advisable. Always unclean water should be avoided. Combination of foods that are incriminaty for the body elements, consumption of healthy and unhealthy foods to gather and incompatible foods should not be taken. Exposure to the easterly wind, suppression of naturally manifesting urges and keeping awake at night are not good for patients of amavata.

DISCUSSION

Vataratka and sandhigata vata clinically presents with identical symptoms and hence need to be differentiated. Before that it should be noted that, all the joint and vascular diseases are included in the syndrome of vataratka in the greater triad of Ayurveda treatises. The description of amavata is limited to the citation of its name. This is even justified in the back ground of conventional medicine descriptions of collagen diseases. The different collagen diseases like rheumatoid arthritis and SLE has clinical presentation joints as arthritis and vascular pathology like vasculitis and Raynaud's phenomena. This combination of arthritis and peripheral vascular pathology mimics the presentation of the *vatarakta*. Based on the same understanding in the southern part of India the rheumatoid arthritis is described as vatarakta, more to add in the astanga hridaya the vatarakta is categorized into two based on association or non association of ama dosha. The ideology is further advanced in the later text books. On the other hand in the lesser triad of Ayurveda treatises the amavata is segregated from the vatarakta and described as separate disease with unique etiology specific pathology, exclusive symptoms and distinctive treatment. The rheumatoid arthritis being a unique disease among the collagen diseases that mostly present with arthritis with minimal incidence of vascular pathology. This rheumatoid arthritis matches with the description of amavata. Needless to say the people who want to diagnose the rheumatoid arthritis on the basis of greater triad of

Ayurveda treatises will diagnose the vatarakta. Then, the physicians practicing mostly based on description of lesser triad of Ayurveda treatises will diagnose the amavata. Leaving behind this description it is required to differentiate the amavata from the vata rakta. This is best done by considering the course of the illness, state of ama as well as involvement of rakta dhatu.

Progressive involvement of the body part with pain, swelling, pricking sensation, which worsens during night, morning hours, cloudy days and application of oil is characteristic of *samavata*. This *samavata* state is characteristic of *amavata*. Again these *samavata* symptoms are missing in *vatarakta*, *sandhi gatavata* and *kroshtuka shirsha*.

Discoloration of the dermis, skin eruptions and similar other symptoms are typical of morbid *rakta dhatu*. These symptoms are necessary for the diagnosis of *vatarakta*. Absence of symptoms pathognomonic of *rakta dhatu* is distinctive in both *amavata* as well as *sandhigata vata*. The involvement of *rakta dhatu* in *kroshtuka shirsha* is restricted to red coloration around the knee joint in *kroshtuka shirsha*.

CONCLUSION

Thus by the consideration of course of the disease, spread of the illness, association or non association of *ama*, symptoms pathognomonic of *rakta dhatu* all are effects in the differential diagnosis of *amavata*.

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Source of Support: Nil Conflict Of Interest: None Declared

How to cite this URL: Waheeda Banu& G Shrinivasa Acharya: Etiopathogenesis And Management Of Amavata-A Conceptual Study. International Ayurvedic Medical Journal {online} 2017 {cited July, 2017} Available from: http://www.iamj.in/posts/images/upload/2466_2475.pdf