ETIOPATHOGENESIS OF AMA FORMATION AND ROLE OF SHAMANA THERAPY IN THE MANAGEMENT: A REVIEW

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ABSTRACT

The term Ama refers to raw, unripe, unprocessed or improperly digested condition of food substances probably due to the hypofunctioning of the Agni i.e. Mandagni. Mandagni is the root cause of all diseases and is a causative factor for the production of Ama. Any factor which disturbs the directly or indirectly is the cause for the production of Ama. The dietetic indiscretions and emotional stress may impair the effective functioning of the neurohormonal mechanism are the main causative factor for developing Ama inside the body. Vagbhatta classified Ama dosa chikitsa into three varieties based on its severity. Langhana, Langhana and Pachana and Dosavasechana (Shodhana therapy) in mild, moderate and severe conditions according to its severity respectively. Among them shamana therapy is most appropriate in mild, moderate and chronic sama conditions and is still best in prevention of Ama formation. Hence this is an attempt to explain the etiopathogenesis of Ama formation and role of Shamana therapy in Ama condition.

KEYWORDS: Ama, Mandagni, Etiopathogenesis, Shamana therapy.
INTRODUCTION

Ama is a substance which is not attained finality either in anabolic or catabolic processes, so any substance which is remained stable without any paka or remained as residual or bye product without attaining any finality in the metabolism can be called as Ama such as pyruvic acid, lactic acid, ketones etc. diseases like Madhumeha, Vatarakta, Amavata, Udara roga and several other diseases are due to hypofunctioning of agni. Basing on the concept of Ama, we can treat all the diseases with principle of Ama, sama roga chikitsa which are due to ama involvement. Ayurdic principle of shamana therapy can give an answer to deal such ailments by implementing the principle of langhana, dipana, pachana karmas without any side effects where other medical system fails in such cases.

AMA NIRUKTI

The term Ama is derived from the root Ama with the suffix ninj which means the substance which undergoes digestion and associated changes is Ama.[1]

Amyate ishat paschyate ama + karmana which indicates that “Which undergone slight paka”.

DEFINITION OF AMA

1. The Adya Ahara Dhatu is known as Ama, which is undigested and formed due to hypofunctioning of Agni, in Amasa ya.[2]
2. If Jatharagni fails to perform normal functions leads to accumulation of undigested food material inside Amasaya. Which is the initial rasa Dhatu is called Ama.[3]
3. Disturb functions of Agni leads to formation of under processed anna rasa and which is immature is called Ama.[4]
4. Mala sanchaya i.e. the accumulation of mala in the body is known as Ama.[5]

PROPERTIES OF AMA[6]

Ama is having quality of liquid, heavy(high molecular weight) attain different colours, Etiological factors for almost all diseases, slimy, viscid, thready, sticky yields foul smell etc. The above properties can be classified in the following ways -

A. Properties which can be felt by touch:
   a. Dravatva (Liquidity)
   b. Pichchilatva (Sticky)
   c. Snighdhtatva (Smooth)
B. Properties which can be perceived by eyes
   a. Tantumatva (thready)
   b. Asamyuktata (incompactness)
   c. Anekavarnayuktata (different colours such as lohita, shukla, Krishna, etc.)
   d. Pichchilata (pastiness)

C. Properties which can be perceived by smell
   a. Durgandha (foul smell)

D. Properties which can be known by questioning
   a. Guruta (heaviness)
   b. Avipakvata (indigestion)

**NIDANA OF AMA FORMATION**[7,8]

Ama is the pathogen resulting due to disturbance of Agni, any factor which disturbs the Agni directly or indirectly is the cause for Ama formation. Out of three pathological condition of Agni, except tikshnagni remaining two i.e. Mandagni and vishamagni are the prime cause of Ama but ultimate Mandagni condition.

All factors basically can be classified into two types

**Direct causes**
These are the causes having direct influence on Agni to diminish its functions.

1. (a) dietetic indiscretions

   (b) dietetic incompatibilities
   18 types of dietetic incompatibilities which is said by Acharya charaka

2. Adverse effect of Shodhana karma therapies specially vanama, virechana and vasti including sneha and sweda.
3. Vega samdharana (suppression of natural urges)
4. Virudhha chesta (Incompatible regimen)
5. Avyayama (Inactivity)
6. Manasika vikara i.e. kama krodha etc.
7. Not following ashta ahara vidhi visheshayatana
8. Kapha Pitta vardhaka ahara vihara

**Indirect causes**
1. Any disorders leading to Agni mandyata at varies level of Agni
2. Any disorders leading to emaciation.
3. All Kapha ja vikaras
4. All Pitta ja vikaras
5. All the causes which triggers the Doshas first there by leading to Agni mandyata and amotpatti.

**FORMATION OF AMA ACCORDING TO SATKRIYAKALA**

a. Chaya- means “swadhmnneva vridhhi” accumulation at its own place. Accumulation of Ama at place mancan be considered as chayavastha of Sama condition. Eg. causing anaha, adhmana on accumulation of Ama in pakwasaya, koshthabaddhata while Ama at annavaha srotasa.

b. Prakopa- means where Doshas ready to move from accumulated place, the movement of Ama in association with Vata Dosha. In this stage of prokopa, Ama becomes ready to move because of suktata. On suktata it attains the properties of madya (alcoholic spirit) which are similar to visha called Amavisha.

c. Prasara – in this stage Ama factors spreads all over body.

Karoti sa rujam sotham yatradosa prapadyate\(^9\)
This Ama moves from one place to other wherever it causes pain. Angamrda is the lakshana Ama/ Amavisha when spreads all over body.

Sthanasamshraya - in this stage Ama settles at one place where ever kha vaigunya or tissue depletion exist. At that particular site gives rise to much painful condition.
Sadeshorujyate atyardham vyavrdha yiva vrischika\textsuperscript{10}

Ama cause scorpion bite type pain where ever it settles. If Ama at pakwasya it causes udarshual or abdominal colic. Where ever Ama settles there it causes srotoavarodha there by triggering of Vata to cause pain.

Vyakatavastha- in this stage all the pratyatma lakshana of Ama can be exhibited. The clinical features of Ama conditions are\textsuperscript{11}
1. Sroto avarodham (obstruction of sweda, mutra, srotasa etc.)
2. Bala bhramsha (general weakness)
3. Gaurava (heaviness of the body)
4. Anila mudhata (obstruction of Vata movement)
5. Alasya (Laziness)
6. Ajirna (indigestion)
7. Nistheeva (increased oral secretion)
8. Malasanga (constiation)
9. Aruchi (anorexia)
10. Klama (debility)

Diseases Due To Ama

<table>
<thead>
<tr>
<th>Koshthagata roga</th>
<th>Shakhagata roga</th>
<th>Marma asthi sandhigata Roga</th>
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<tbody>
<tr>
<td>Amajeerna</td>
<td>Medoroga</td>
<td>Amavata</td>
</tr>
<tr>
<td>Vishtabdhajeerna</td>
<td>Madhumeha</td>
<td>Hridroga</td>
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<td>Alasaka</td>
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<td>Chhardi</td>
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Management of Ama

Ama dosha chikitsa is critical one it varies from simple to complex as the Ama condition are varied according to dushya involvement. Acharya charaka says that “No drug should be administered in acute Ama condition because of Mandagni’.\textsuperscript{12}

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Type</th>
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<tr>
<td>Langhana</td>
<td>Mild Ama</td>
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<tr>
<td>Langhana &amp; Pachana</td>
<td>Moderate Ama</td>
</tr>
<tr>
<td>Doshavasechana(Shodhana therapy)</td>
<td>Excessive Ama</td>
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Acharya vagbhatta classified ama Dosha chikitsa into three varities basing on its severity.\textsuperscript{13}
ROLE OF SHAMANA THERAPY

Langhana karma

Langhana karma is the best treatment in Ama conditions, when it spreads all over body without having utklesha, Langhana acts in ways

a. Primarily it stops to put further load of Agni in which Agni is already in manda condition and secondarily it breaks the chain of production of Ama by keeping off all the exogenous heterus.

b. Langhana allows the Agni to do pachana karma according to its strength slowly. By not putting additional load on it, hence leading to self resolvement of Ama.

In sukhshma Ama rasa condition like Jwara and Amavata Langhana is prescribed even upto 8 days to allow the existing Agni to do pachana karma on its own strength and helping autolysis of Ama during the course of Ama.[14] The Langhana varieties includes 4 varieties of shodhana karma, pipasa, maruta, atapa sevana, pachana, vyayama and upawasa.[15]

Pipasa

Pipasa restricting the fluids according to situations whenever we are applying Langhana karma. It should not be up to that level which is harmful to the body, hence it must be applied according to the condition. Pipasa is more useful in cases of sadravajanita Agnimandya conditions and Sama conditions. In increased sadravapitta condition it is not able to digest the material due to its increased componenten of drvatwa.[16] In such conditions by restricting the fluid intake. The dravtwa in the body will come down. At the same time Dravatwa in the Amara also decreases so that self resolve of Ama takes place. Hence pipasa is best Langhana karma in conditions like Amlapitta, Amatisara and Shotha.

Upavasa

Upavasa is known as anasana also i.e. abstinence from oral intake in strict sense, but taking Drava ahara, alpa ahara with Laghu gunas is also considered, which is highly effective in acute Ama conditions. In acute Sama condition.

1. anasana Langhana is best except vital fluids in need.
2. after 24 hrs. Dravasana Langhana are to be given or sritashita jala or medicated decoctions of pachana dravyas (eg. shadangapaniya).
3. after 48 hrs. alapasana is to be allowed allowing alpa ahara with Laghu gunas like bread and milk etc.
This is more applicable in Sama rogas like jwara, Amavata, kamala, swasa, shotha, udara, Ajirna alasaka, atopa, atisra etc. Laghu ahara to be given until Agni attains normalcy. Upavasas is the best Langhana karma in prevention of Ama production and the best in Ama Pachana applicable in all trividha roga margas Ama conditions specifically in abhayantram. Shakhagat rogas and moderately effective in madhyam rogamargas.\[18\]

**Vyayama**

Its clinical efficacy in ama condition is highly appreciable in day to day practice. Vyayama is observed as best in mild and moderate conditions of chronic Amavata only. In acute Sama rogas Vyayama is contraindicated. It is highly effective in milld condition of madhyama roga margas conditions and less effective in cases of abhyantara and sakashrirta rogas. The sukshama Ama either by way of sweating or by carrying away of blood. Increasing ushman in the body helps in Ama vilyana and cleans the sroto vibandha which is prime factor in the treatment of Ama.\[19\]

**Dipana and Pachana**

Usually Dipana Pachana terms are in sequence but in Sama condition role of Pachana is first and foremost where as Dipana is the later. The term Pachana itself is based on that which digests Ama.\[20\] Pachana dravyas are in abundant of Agni, vayu guna which are key to get Ama Pachana. Pachan dravyas act in both conditions of sthula Ama rasa as well as sukshma Ama rasa and in all Sama conditions of all roga uniformely.

Sama Pachana dravyas posses tishna, ushna gunas. It easily opsonizes the Ama gunas by which srotovibandhakaritwa is removed. Ama is the main factor in sroto avarodha and in Dosha Prakopa. Which is dissolved by Pachana dravyas. Whereas Ama is predominant of prithvi and apa gunas, Pachana is of agneya. Dipana dravyas are the drugs which initiates and improves the Agni at various levels of other body.\[21\] so its prevents the production of Ama at the given level which is an important factor in breaking down the pathogenesis.

**CONCLUSION**

Mandagni is the root cause of all diseases and is a causative factor for the production of Ama. Any factor which disturbs the directly or indirectly is the cause for the production of Ama. Samshodhana are useful only in Doshotlesha condition where as shaman karma is useful from initial state of Ama formation to causing Doshotlesha condition. Hence shaman karma is most appropriate in mild, moderate and chronic Sama conditions and still best in
prevention of amotpatti. Upavasa is the best effective in 1st phase of acute and subacute Sama conditions of abhyantara, Sakashritra Sama rogas and mild effective in madhyama roga margashrita condition. Vyayama is highly effective in sub acute and chronic sama conditions. Whereas pachana dravyas are effective in all the sama conditions. Role of dipana is prophylactic. Which is key factor in breaking down the chain process of Ama production and also helps in ama pachana.

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