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Literature Review of Ama in Ayurveda: A Review

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ABSTRACT

Ayurveda is an ancient system of medicine aiming for the maintenance of healthy condition of healthy individual firstly and eradicating diseases of ill person. Ayurveda system of medicine have its own basic principle like dosha, dushya, *Agni*, *Ama* in its text like *Charaka Samhita*, *Sushruta Samhita*, *Asthanga Sangraha* etc. *Ama* is one among them mentioned in ayurveda. *Ama* is also taken as toxin or undigested food particle which is produced due to the hypo-function of *Agni* or disbalance of *Agni* which is also considered as unripe /unmetabolized food particle. *Ama* is that condition which lead to different pathological condition like *grahani*, *Amavata* etc. *Ama* is condition which is produced due to agnimandya, since agnimandya is the cause of all diseases so *Ama* is also considered as root cause of various diseases. The concept of *Ama* is unique principle for understanding pathophysiology of diseases. *Ama* has great important in understanding *nidana* and *chikista* of diseases. There are different kalpa and medication mentioned as per avasta i.e., Sama avastha and *Nirama Avastha*. The *Vaidya* who identifies *avastha* of *Ama* and treat the diseases as per *avastha* of *Ama* becomes Successful to treat the diseases.

Keywords: *Ama*, *Agnimandhya*, *Agni*, *Dosha*, *Dushya*

INTRODUCTION

Ayurveda literature has explained about different concept related to diseases pathogenesis and there is *Ama* explained as toxin or antigen which can trigger disease pathogenesis.¹ The term *Ama* generally means unripe, uncooked or undigested food particle which is produced due to the Imbalance of *kayaagni*. *Ama* is toxic substance of gastro enteric origin. Disbalance of *Agni* and malformation of *Agni* produce condition like *Ama*. The concept of *Ama* is equivalent to contemporary concept of free radical theory.² According to the ayurvedic literature the main reason of origin of disease is *Ama* dosha, *Ama* is originating from vitiation of *Agni* (hypo functioning of *Agni*) so it is necessary to know about the *Ama* in details.³

Concept of Agni: Pertaining to well-being, Proper functioning of digestion is of prime importance. In Ayurveda, the one responsible for digestion is termed as *Agni*, digestive fire. On the basis of level of digestion, gross or cellular, *Agni* has further been classified as; *Jatharagni*, *Dhatwagni* and *Bhutagni*.

Among these the fire located in *Mahasrotas* or *Jatharagni* is considered prime as the product of *jatharagni* digestion is what *dhatwagni* act upon. As the product of action of *jatharagni* is what nourishes the whole body, if *jatharagni* doesnot fuction properly, then it may vitiate the dhatus and in turn, the whole body. The inconsistency in nature of *jatharagni* has also been classified as; *visamagni*, *mandagni* and *tikshnagni*. These all affect the product of *jatharagni* and thus the whole body. In the condition of *mandagni*, the product of *jatharagni* ends up semidigested which when transported to dhatus and acted upon by *dhatwagni* may give rise to free radicals or toxic metabolites which vitiate the physical constitution. These toxic metabolites are known as "*Ama*".⁴

MATERIALS AND METHODS

This literature review is based on the various ancient text book of ayurveda, journal, article, observation and various internet sources.

RESULTS AND DISCUSSIONS

Nirukriti of Ama: The word *Ama* is Composed from "AA" + "MA" where "AA"

means near or towards and Ma means poison, which mean those which act like toxic or poisonous substances.⁵ Food particle which undergoes Amlapaka (acidic) and apurana paka i.e, incomplete digestion is known as *Ama*. Those food particles which lead to avarodha (obstruction) in srotas is *Ama*. According to Vagbhata, due to hypo functioning of ushma i.e, *Agni* of body, Food which is partially digested or improperly digested yields immature rasa in amasaya later which undergoes fermentation leading to the that state of rasa which is known as *Ama*.⁶ *Agni* which undergoes paka is stated as rasaagni and fuel for normal functioning of body is stated as Aahara-rasasara and improperly formed rasa by feeble rasaagni is *Ama*.⁷ An avipaka (which does not goes complete digestion) food particle which is very viscous, foul smelling and causes sarva garta sadana (weakness of body) is known as *Ama*.⁸ The intermingling of excessively vitiated dosha are causes of *Ama* production, Like visa from kodrava.⁹

Due to various Nidana (etiology which causes *Agni* mandhya), *Agni* is not able to digest even small amount of the food so that undigested food after getting fermented turns into poisonous substances known as *Ama* or *Ama* visha.¹⁰

The first tissue of body i.e, rasa dhatu which was not formed properly due to weakness of digestive fire and accumulating in stomach in abnormal state is called as *Ama*.¹¹

From the above definition given from various acharya it is known that *Ama* is condition of premature stage of paka before attaining final paka formed at any level of *Agni* i.e, *Jatharagni*, *Bhutagni* and *Dhatwagni*.

Nidana of *Ama*: In context of Ayurveda, Causes (Nidana) of *Ama* formation can be explained in following ways:

Aaharaj Nidana: Agnimandhya is considered as main reason of *Ama*. Ajirna bhojana (having food during indigestion), upavasa/Abhojana (fasting), Atibhojana (excessive intake of food), Vishambhojana (irregular eating pattern), Asatmya bhojana (Habit of intake of unsuitable food items), Guru Aahara sevana (intake of heavy food), Ati sheetaand rukshya ahara bhojana, Sandusta bhojana (contaminated food intake), viruddha bhojana (incompatible bhojana), these are the dietary factors which leads to Amaj condition.¹²

Viharaj Condition: Improper lifestyle like vegadharana (suppression of natural urges) and diwaswapna after food (day sleep after food) and ratri jagarana (late night awakening) leads to the Aamaj condition.

Manashika Nidana: As like dietary and lifestyle causes of *Ama*, mental condition also plays vital role in production of amaj codition. Mental condition like Chinta(anxiety), Bhaya (fear), Krodh(anger) etc causes Aamaj Condition.

Likewise other factors are improper administration of vaman, virechana and snehana also causes *Ama* formation.

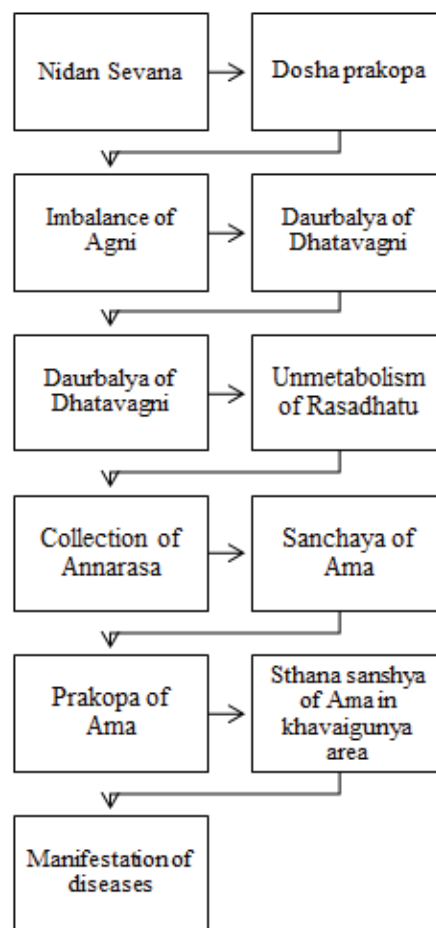


Chart 1: Ama formation and Disease manifestation¹⁶

Swarupa of *Ama* (Properties of *Ama*): According to different Ayurvedic classics *Ama* has properties like Dravam (liquid), Guru Ghana (thick and heavy), Snigdha (viscous), Pichhila(slimy), Tantumat(sticky), Aneka varna (various colour), Durgandha,¹³ Avipakam(incomplete digestion), Asamyuktam (nonhomogenous)¹⁴, Ashukaritwo (fast acting in nature), Vishasamlingawatyo ((resemblance poison)

Pathogenesis of *Ama* (Formation of *Ama*) Food particle which is not completely and properly digested in Amashaya (stomach) has proceed following four stages as:

Apakva Aahara rasa: Food which is not properly digested give rise to Ajjernaadi diseases.

***Ama/Ama* rasa:** Apakva Ahara rasa formed in amashaya undergoes fermentation after certain time and give rise to condition known as *Ama*.

***Ama* dosha:** *Ama* latter become pathogenic with interaction or combination with vitiated dosha known as *Ama* dosha.

***Ama* visha:** Later on, *Ama* dosha become more and more toxic and resembles like the properties of Visha known as Amavisha.

So, Dosha which are affected or imbalanced by *Ama* is known as *Samadosha* and it again vitiate dushya which is known as

sama dhushya and this dushya leads to diseases known as sama vyadhi.¹⁵ *Sama* dosha or dhushya passed through one srotas to another srotas and it leads to various diseases at different place where it is obstructed. *Ama* can also become as the Nidnaarthaka factor and causes khavaigunya in any srotas and it make place for the sthana samashrya of vitiated dosha and dosha dhushya samruccha occurs causing the diseases.

Clinical features /symptoms due to *Ama*:¹⁷ Srotoavarodha (blockage of srotas), Bala Bhramsa (loss of strength), Sarira Gaurava (heaviness of body), Alasya (laziness), Apakti (impaired digestion), Aruchi(anorexia), Nistheevana (excessive salivation), Klama (lethargy) Mala sanga (lack of regular movement of Natural urges) and Dourbalya(Weakness).

Features of sama dosha: Dosha which are affected or imbalanced by *Ama* is known as Samadosha and it again vitiate dushya which is known as sama dhushya and this dushya leads to diseases known as sama vyadhi.

Srotorodha (obstruction of channel), balabhramsa (Loss of strength), Gaurava (heaviness in body), anila mudata (obstruction of movement of vata), alasya (laziness), apakti (indigestion), nisthiva (excessive salivation), malasanga, aruchi (anorexia) and klama (tiredness) are sign and symptoms of *Ama* dosha. Nirama dosha has symptoms opposite to sama dosha.

Table 1: Symptoms of Aama according to dosha can be tabulated below¹⁸

Dosa	Saama lakshana	Nirama Lakshana
Vata	Vibandha (constipation) Agnimandya(Dyspesia) Tandra (drowsiness) Antrakoojana Kati -parshwa vedana (pain in pelvic region) Shotha(swelling) Toda (Pricking pain)	Vishada (Clearness) Ruksha (Dryness) Niribandha (non-constipated) Alpavedana(mild pain)
Pitta	Durgandha (foul smell) Harita or shavyaya varna Amla, Guru (heavy) almaidagara	Copper colour mayurpiccha or yellow colour Astira (unstable)
Kapha	Turbid (Avila) Tantula (thread like) Sandra Kantolepa (sticks in kantha) Udgara (eruption) Slimy	Clear fluid Non slimy Mixed with water White in colour Sweet in taste

Table 2: Sama dhatu lakshana¹⁹

Dhatu	Saama symptoms
Rasa	Aruchi(anorexia), Mukhsvairasya, srotovarodha(Obstruction of channels), klaibya(impotency), pality(yellowing of hair), khalitya(loss of hair), tandra(Drowsiness), hrullasa(Nausea), Gourava(Heavy), angamarda (bodyache), jwara(fever)
Rakta	Kusta(Leprosy), visarpa(Herpes), raktapitta(Hemorrhage), mukhapaka(Stomatitis), Raktapradar(menorrhagia), pleehavridhi(Spleenomegaly), neelika(cyanosis), kamala(jaundice), vyanga(melasma), kota(urticaria), pipilu(port wine mark), tila(black moles)
Mamsa	Adhimamasa(impacted wisdom teeth), arbudha(Tumor), galashundika(uvulitis), alaji(phlyctenular conjunctivitis), gandamala, upajihwaka (ranula)
Meda	Atidheerga(excessive tall), atiloma(excessive hairy), aloma (Absence of hair), atikrishna(blackish), atisthula(Obesity), atikrusha(Catexia), atihasha(Excessive short), kesha jata, mutra dosha (urinary defect), shosha of mukha(Dryness of mouth)
Asthi	Adyasthi(bone growth), adhidanta(extra tooth), Dantabheda(splitting pain in tooth), Dantashula(toothache), astibheda(splitting pain in bone), astishula(ostealagia), Nakha dosha(Nail disorder)
Majja	Bhrama(griddiness), murcha(syncope), Tamaprabesh (feeling as entering in dark)
Sukra	Kaliby(Impotency), Aharshana, Grabha srava/ pata(Abortion)

Table 3: Diseases due to Aama ²⁰

Antra Roga marga	Madhyam roga marga	Bahya Roga marga
Amaajerna	Amavata	Medoroga
Vishtabdhajerna	Hridaroga	Prameha
Vidagdha ajerna	Pakshyagata	Madhumeha
Visuchika	Ardita	Urushambha
Alasaka		Shopha
Vilambhika		Diseases related to vasti and kidney
Chradi Grahani		

Treatment of *Ama*: According to vagbhata if *Ama* is alpa then langhana is done, if *Ama* is madhyam then laghana -pachana drugs is use and if *Ama* is excessive then sodhana kriya should done. Sodhana Chikista should be done according to bala of rogi.

After going through various article, books and journal, it is found that *Ama* is main root of causes of diseases. This review article explores, explains about how the *Ama* is associated with diseases and all gathered information and details about the *Ama*.

Ama is undigested food particle which is normally caused by the daubarlayata(weakness) of *Agni*/Poor digestion. *Agni*

generally governs digestion, absorption and assimilation of ingested food particle, when *Agni* is poor/disbalance and weakness of *Agni* leads gastrointestinal tract creates a thick and slimy substances which lines wall of bowels and impedes absorption and assimilation of nutrients ie. Malabsorption. Proper digestion of food leads to ojus whereas improper digestion leads to *Ama*.^{21,22} Hypo-functioning of *Agni* (Agnimandya) condition leads to *apaka* ahara rasa which undergoes the fermentation and leads to *Ama*. The improperly digested food particle which is due to the hypo-functioning of the digestive fire ie. *Agni* produces improperly processed ahara rasa known as *Ama*. This *Ama* owing to its bahu pichila guna ie. Sticky nature sticks to cell and channel of body causes srotas avarodha or block. when the srotas or channel of body is blocked by the *Ama* it causes fail to transport essential materials needed for the formation of tissue and nutrients. Due to block caused by the *Ama*, the cellular metabolites and excreta of body are not expelled properly and get accumulated in the body. The accumulated waste product undergoes the decay and causes toxic effects in the body. Due to blockage, deficit nutrition and improper cleansing of body the tissue and channels get damaged. Due to tissue damage and srotas avarodha many diseases are caused.²³ *Ama* may be nutritionally unimportant, but is immunologically powerful in evoking strong immune response, as it is vijayteya or a foreign substance to the body. This results in the formation of antibodies by defense cells of the body. The *Ama* and antibodies then interact with each other to form an immune complex, which is deadly combination. It gets deposited in the tissue. For example, when it deposits into the sleshmika sleshma and synovial tissue surrounding the joints, it causes inflammatory reaction -the WBC think that some foreigner is entered and mount a massive attack and destroy the normal tissue, leading to acute pain and swelling etc. In this way *Ama* is responsible for the various diseases.²⁴

CONCLUSION

Aama means uncooked, unripe, immature, undigested and incompletely digested which is caused by agnimandhya and which causes various diseases like grahani, chardi, ajirna etc. Physician will be able to treat the diseases according to the *Ama* avastha and condition if he or she has knowledge of Aama so it is necessary to know about *Ama*.

REFERENCES

1. Yadav PV. Medical Perspective on Ama as per Ayurveda and Modern Consideration: A Review. Journal of Drug Delivery and Therapeutics. 2020 Feb 15;10(1-s):205-7.
2. Kumar M, Kumar P. Concept of “ama dosha” WSR to free radicals. Journal of Applied Pharmaceutical Research. 2016 Dec 9;4(4):01-4.
3. Chavan AB, Jadhav DK. A Concept of Ama in Ayurvedic System of Medicine-An Overview. International Journal of Ayurveda and Pharma Research. 2017 Feb 7.
4. Mishra G, Ashvini K, Swati S. Concept of Agni and its Importance in Ayurveda: A Review. Journal of Ayurveda and Integrated Medical Sciences. 2017 Jun 30;2(03):184-8.
5. Babu D. The Principle and practice of Kaya chikista. reprint ed. 2019. Varanasi: Chaukhambha Orientalia. 2001; Vol. 1:134-136.
6. Bulusu DS (editor). Astanga Hridaya, sutrasthana chapter 13 verse 25, Varanasi: Chaukhambha orientalia. 2008:176.
7. Mishra BS, editor. Vidoyotini commentary on Bhavaprakasha Samhita of Bhava Mishra, mdhyam khanda chapter 1 verse 59. reprint. New delhi: Chaukhambha sanskrit Bhavan; 2020.
8. Tripathi DB, editor. Madhav nidana evam Madhukosha Vidhotinitika of Madhav Mishra, Nidana sthana, Aamvatadhyaya, Chapter 25 verse 5. Varanasi: Chaukhambha Prakashana; 2010:510.
9. Tripathi DP, editor. Asthanga sangraha, Sutrasthana, chapter 21, verse 37. New Delhi: Chakhambha publishing house; 1992:404.
10. Tripathi R, editor. Charak samhita, Chikitsa Sthana: Grahani, chapter 15, verse 44. Reprint. Varanasi: chaukhambha publication; 2017:367.
11. Vidyanath DR, editor. Illustrated astanga hrdaya. New delhi: Chaukhambha sanskrit pratisthan; 2013.
12. Tripathi R, editor. Charak samhita, Chikitsa Sthana: Grahani, chapter 15, verse 42-43. reprint. Varanasi: chaukhambha publication; 2017:367.
13. Vaghbhatta. Astanga sangraha, Sutrasthana, chapter 13 and verse 27 edited by A. Dutta. Varanasi: Chaukhmbha publication.
14. Tripathi DB. Madhavnidana evam madhukosha vidhotinitika, chapter 25 verse 3 edited by V. rakshit. Varanasi: Chaukhambha publication; 2010:510.
15. Kaushik P. A conceptual study of Ama described in Ayurveda. International Ayurvedic Medical journal; 2021:2789.
16. Chaudari DB. Critical evaluation of Ama. IAM. 2015;3:618.
17. Vidyanath DR. Illustrated Astanga hrdaya, Sutrasthana, chapter 13, verse 23-24. 2nd edition. Delhi: Chaukhambha publishing house. 2013:217.
18. Vidhyanath D. Astanga Sangraha Sutrasthana, chapter 13, verse 23-24, 2022 reprint edition 2022. New delhi: Chaukhambha publishing house. 2013:217.
19. Babu D. The Principle and practice of Kaya chikista. reprint edition 2019. Varanasi: Chaukhambha Orientalia, 2001;1:134-136.

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20. Babu DS. The principle and practice of kayachikista. Varanasi: Chaukhambha orientalia. 2001;1:137.
 21. Babu DS. The principle and practice of kayachikista. Varanasi: Chaukhambha orientalia. 2001;1:138-140.
 22. Kaushik P. A conceptual study of Ama described in Ayurveda. International Ayurvedic Medical journal. 2021;2789.
 23. Chaudari DB. Critical evaluation of Ama. IAM. 2015;3:618.
 24. Babu DS. The principle and practice of kayachikista. Varanasi: Chaukhambha orientalia. 2001;1:128.

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