



Review Article

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TREATMENT MODALITIES IN TREATING AMA CONDITIONS WITH SPECIAL REFERENCE TO AUTOIMMUNE DISEASES: A REVIEW

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ABSTRACT

The main fundamental concept of Ayurveda is to preserve the health of a healthy person and cure the disease of an unhealthy person, i.e., prevention and cure. Acharya Charaka has enumerated various rasayana at the very beginning of chikitsa sthana, which explains the role of prevention that comes prior to cure in Ayurveda. In autoimmunity and their diseases, where the cause is unknown, a person's immune system reacts to self-proteins causing various inflammations, fevers, etc., destroying body tissues and changes in organ functioning, leading to more significant morbidities over time. While treating these conditions, the primary objective of a physician should be relieving the patient's symptoms and correcting the imbalance created in his immune system without further compromising it. Here comes Ayurveda, the ancient holistic science of life, where acharyas have provided various formulations, purificatory mechanisms, and rejuvenator elixirs in treating such exasperating diseases with the concept called "Ama" by correcting the agni the Élan vital of life. The imperfectly digested anna rasa due to impaired agni is known as ama. The present article lists all possible treatments for treating sama conditions with special reference to autoimmune diseases.

Keywords: Ama, Autoimmune Disorders, Shodana, Shamana, Amahara Chikitsa, Rasayana

INTRODUCTION

We all know the definition of health given by WHO; Health is a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity¹. But when it comes to Ayurveda, Acharya Sushruta has defined health in a unique way, where it goes like

Samadosha samagnischa samadhatu malakriyah |
prasannathmendriyamanaha swastha ithyabhidheeyathe
||{su.su.15/48}

A person whose bodily humours (tridoshas) are in a state of equilibrium, a normal state of agni and in whom the dhatus and malas function in their normal state and quantity with a pleasant mind, sense organs and intellect is said to be a swastha (healthy person)².

Ama is derived from "amyate ishat pachyate/ a-ama +karmane," indicating "which has undergone slight paka".

Ushmanoalpabalathvena dhatumadhyamapachitham |
Dushtamamasayagatham rasamamam prachakshate |
(A.H.SU.13/25)³

Ama is also one of the synonyms of disease according to Acharya Charaka⁴, and ama can be called "Self-Protein". Self-Proteins (self-antigen) refer to all proteins (misfolded or altered protein folding) produced endogenously by DNA-level transcription and translation within an organism of interest⁵. When the body erroneously identifies self-proteins as non-self, the subsequent immune response against endogenous proteins may lead to the

development of an autoimmune disorder. Ama produced by our body resembles foreign metabolites, due to its intermediate stage of paka (incompletely digested annarasa ~misfolded protein), as a result of mandagni (vitiating digestive fire). It enters circulation, occludes tridoshas, dhatus, and malas, and disrupts indriyas and manas, producing a condition called sama associated with many premonitory symptoms, finally resulting in a disease. This disease condition is generally perceived as autoimmunity, and Ayurveda believes that in an autoimmune condition, ama plays a significant role in acting as a toxin, and it is treated accordingly by correcting the root cause of ama rather than symptomatic management.

Autoimmune diseases are generally diagnosed by specific inflammatory markers like CRP (C-reactive protein), ESR (Erythrocyte sedimentation rate), PV (Plasma viscosity), in general, and some specific autoimmune markers like ANA, Anti CCP antibody, RA factor (RA specific); Anti-centromere, Scl-70 (scleroderma); Anti-ds DNA, Histones, U1RNP, Sm (SLE); Jo - 1 (Polymyositis); Ro/SSA and La/SSB (Sjogren's syndrome); antiphospholipid antibodies (antiphospholipid syndrome); HLA-B27 (spondyloarthropathies)⁶, etc. They are treated by using immune suppressants (immune modulators), corticosteroids like - prednisolone, dexamethasone, TNF inhibitors like - infliximab, etanercept, golimumab, certolizumab, adalimumab, rituximab; JAK pathway inhibitors like - tofacitinib, baricitinib, upadacitinib, abatacept; DMARDs like - hydroxychloroquine, leflunomide, etc., by induction of autoimmunity, cytokine blockade mechanism and causing symptomatic relief⁷.

In Ayurveda, this is dealt with differently where the disease condition is staged into sāma and nirāma phases, by means of lakshanas like sroto avarodha (obstruction of channels), bala

bramsa (loss of strength), gourava (heaviness in the body), anila mudhata (obstruction of the movement of vata), alasya (laziness), apakthi (indigestion), nisthiva (excess expectoration), malasanga (accumulation of wastes inside the body), aruchi (anorexia), klama (tiredness) etc⁸ are the signs and symptoms of sama dosha and relief of these symptoms are considered as nirama dosha lakshanas⁹. Hence the treatment differs appropriately.

Sama- sa+āma= sāma – anything along with āma is known as sāma¹⁰.

Amena tena sampruktaa dosha dushyascha dushitah | sama
ithyupadishyanthe ye cha rogasthadudbhavah ||
{AH.Su.13/27}

When doshas and dushyas are mixed with ama, they are called sāma dosha (or) sāma dushya, which causes the production of diseases.

Sarvadehapravisruthan samaan doshaan na nirharet | linan
dhatushvanutklishtan phaladamadrasaniva || aasrayasya hi
nasaya te syurturnirharatvatah |
{AH.Su.13/28}

Agni, an essential factor of life, gets vitiated by various nidanas (causative factors) like anasana (no intake of food), adhyasana (intake of more quantity of food), viruddhahara sevana (intake of incompatible foods), vega dharana (suppressing natural urges) etc¹¹, and result in the formation of ama.

In sāma condition, sodhana (purificatory measures) and samana karmas (palliative measures) are not advised as agnimandya (vitiating digestive fire) will be present. Hence the person cannot digest and assimilate the medications or even regular diet¹². Any type of vyayama (exercise) done in this stage can aggravate the condition and causes further difficulties. This stage is considered acute and resolves on its own without any treatment by following langhana (fasting), ama pachana and agni deepana karmas, and easily digestible foods. By this sama stage is converted into nirama. But some conditions like Amavata, Vataraktha, and sama last for over a year due to unchecked nidana like viruddha ahara sevana etc. Hence, nidana parivarjana (avoiding the causative factors) is paramount in treating sama conditions.

Wherein nirama condition, ama is converted to pakwa rasa which is known by symptoms like nirvibandha (relieved constipation), alpavedana (mild pain), vipareetha guna shanti (reduced severity of symptoms), pakwam, ruchi-pakti-bala pradham (increased hunger, strength), agandham¹³ etc. Hence, the nirama condition is favourable for administering shamana, sodhana karmas and rasayana karma.

In Ayurveda, these ama conditions are treated systematically by correcting mandagni, starting with nidana parivarjana (prevents further formation of ama), samprapti vighatana (halts the pathogenesis of disease), ama pachana, samsamana (produce symptomatic relief from mild and moderately aggravated doshas), sroto suddhi by samsodhana (eliminates the aggravated doshas from the nearest possible routes) and finally restore the imbalance created in immune system with rasayana.

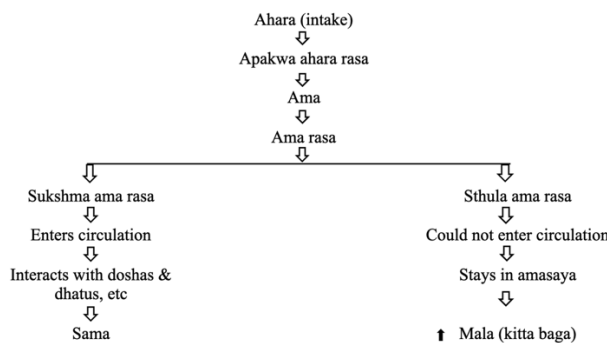
All types of possible treatment modalities in treating ama conditions

Acharya Vagbhata has classified ama dosa chikitsa (treatment) into 3 phases of apatarpana, based upon the severity of the condition¹⁴,

Langhana – mild – does not disturb the daily activities – managed by simple fasting.

Langhana pachana – moderate – troubles daily activities – managed by pachana oushadhis and fasting regimen.

Dosavasechana – severe – increased severity of symptoms – managed by high dosage sodhana karmas and shamana oushadhis.



The consumed ahara (food) undergoes incomplete digestion due to mandagni and converts into ama, later called ama rasa. Some quantity of the amarasa attains dravatva (liquidity) after staying for a certain period in amasaya and is absorbed into circulation due to its sukshma rupa and gets associated with doshas, interacts with dhatwagni associated with dhatus, etc. This phase can be called sthana samsraya, and the ama rasa is called sukshma amarasa¹⁵. The remanent ama rasa that could not enter the circulation and stays in amasaya is called as sthula amarasa.

Sukshma ama rasa

As the ama rasa enters the channels of circulation, reaches dhatus, by sthanasamsraya interacts with dhatawagni and causes sroto vaigunya. The amarasa, which is at the sakha level, should be treated initially by langhana, deepana, pachana and swedana karma. Suppose ama gets pachana and doshotklesha is present. In that case, these vitiating doshas are brought to koshta and eliminated by sodhana after following proper deepana, pachana with sneha pana to remove leena doshas (deep-rooted dosha). Irrespective of the stage of ama, langhana is the primary line of management in ama dosha vyadhis (diseases caused due to ama).

There are 10 types of langhanas, of which 4 are sodhana karmas beneficial in the doshotklesha condition (chronic stage). They are 1. vamana, 2. virechana, 3. asthapanavasthi, and 4. sirovirechana.

The remaining 6 types of langhana are pipasa, upavasa, vyayama, pachana, maruta and atapa sevana.

Pipasa: In conditions like sadrava janitha (caused by more fluids intake) agni mandhya and dravadhikya ama vyadhis like Amlapitta, Amatisara (diarrhoea), Sotha (inflammation), etc. by reducing the amount of fluid intake, it causes rukshata by reducing dravamsha (liquidity) in sthula and sukshma amarasa, hence ignites the agni to digest ama and convert apakwa anna rasa to pakwa. Thus, it helps in easy elimination through sodhana karma.

Upavasa: In acute ama condition, upavasa (fasting) is highly recommended and effective as it prevents further build-up of ama and facilitates ama pachana. Laghu ahara, like manda, peya (gruel/ medicated gruel) etc., can be given till agni attains normalcy. It is beneficial in diseases like Jwara, Amavata,

Kamala, Sotha, Udara Roga, Ajirna, Alasaka, Adhmana, Atopa, Atisara, etc.

Vyayama:

Laghavam karmasamardhyam deepthoagnimedasah ksayah |
vibhakthighanagratvam vyayamadupajayate |
{AH.Su.2/10}¹⁶.

In acute sama roga condition, vyayama is contraindicated. But, in chronic cases of mild and moderate conditions, it is highly beneficial. By chalatwa of body organs, the suksma ama starts circulating, by its usna guna, ama vilayana and sroto sodhana will occur. It is effective for sama conditions of hridaya, sandhi, snayu, asthi, etc.

Pachana-Deepana: Though deepana comes before pachana in general, pachana plays an essential role in ama condition than deepana comes later. Thus, pachana acts as curative and deepana acts as preventive. Pachana dravyas with gunas like tiksna and usna, which are opposite to ama gunas, relives srotovibandha and deepana drugs improve agni and stop further ama production, causing samprapti vighatana.

Role of Sodhana karmas

In doshotklesa, the condition of sub-acute and chronic stages of ama dosha sodhana is done using all 4 types of samsodhana karmas.

Vamana: In sama kapha dosha (dushita kapha with ama), vamana (therapeutic emesis) is considered best. That is, doshotklesa at amasaya, should be the criteria for vamana (sthula amarasa). Eg: Pandu, Kitibha, Grahani, Kushta, Swasa, Kasa, Chardi, Sotha, etc

Virechana: Doshotklesa at sthulantara is well eliminated by virechana karma (therapeutic purgation), considering between among all others in amaroga, where suksma amarasa is also brought to koshta from sakha by sneha and sweda karmas. By virechana karma, samanavata and pachaka pitta attain normalcy. Hence agni is rekindled.

Eg: Amavata, Jwara, Tamaka Swasa, Kamala, Udara roga etc

Asthapana vasthi: In suksma amarasa, by different combinations of drugs, vasthi makes the accumulated ama dosha present in sakhas move to koshta and eliminated through vasthi karma like vaitarana vasthi in Amavata.

Eg: Amavata, Atisara, Rajayaksha, Sotha, etc.

Sirovirechana (nasal drops): It helps eliminate doshas from urdva jatru gata sarira.

E.g., In amaja siro roga conditions like Suryavarta, Dusta Pratisyaya, Siroguarava, etc.

Sthula amarasa: Due to mandagni kitta бага (mala) will be more than sara бага. Sthula amarasa, which is also a form of mala stays in amasaya causes utklesa/chardi and if it stays in adho amasaya causes atisara. It is easier to eliminate this amarasa through the nearest possible exit routes by sodhana karma, i.e., vamana and virechana.

Swedana karma: The usna guna of swedana karma (sudation) causes pachana of sthula amarasa that got stuck to the walls of intestines and promotes vata vilayana (downward movement of vata), relieves vibandhata of the anal sphincter. It also acts as

poorva karma for sodhana in sthula and suksma amarasa conditions.

Asthapana vasthi (medicated enema): It is also known as niruha vasthi/kasaya vasthi. In mala sanga at sthulantara/brhadantra, asthapana vasthi is better than virechana without adding additional drug load to vitiated agni through the oral route. With proper purva karma like snehana and swedana, vasthi, based on its virya, acts on the whole body by spreading through srotas, causing agni vardhana by eliminating vitiated doshas through the anal route and thereby causing deha laghutwa.

Phala varti: Initially in acute condition, phalavartis (anal suppositories) are the best option to eliminate amarasa in adho amasaya, which relieves kosta stabdatha, propels downward movement of vata (anulomana), thereby restores samana vata function and helps in ignition of agni.

After the sama condition perishes, if doshotklesa is seen, sodhana karmas like vamana and virechana can be administered.

ROLE OF RASAYANA THERAPY

Rasayana indicates drugs, diet and regimens which promote longevity by preventing ageing and diseases. The rasayana dravyas possess a rich source of trace elements that act as antioxidants and protect cells from oxidative stress caused by oxygen-free radicles generated during immune activation. Thus, rasayana therapy helps control disease incidence (prevention) and disease advancement (cure) and elevates immunity by increasing the cellular level absorption of nutrients.

Table 1: Certain drugs that aid in ama pachana and agni deepana that act at various levels

Agni Deepana	Ama Pachana
Chitraka	Karanja
Sunti	Syonaka
Pippali	Haritaki
Amalaka	Aragwada
Jeeraka	Nagakesara
Goksura	Vidanga
Shaliparni	Musta
Amlavetasa	Cincha ksara
Bilwa	Dhanyaka
Agnimantha	Hingu
Ajamoda	Kutaja

Some of the drugs act as both deepana and pachana. They are, Citraka, Pippali, Marica, Sunthi, Ajamoda, Triphala, Jivaka, Rsabhaka, Yastimadhu, Lasuna, Saindhava Lavana, Chandana, Agar, Guduchi, Bilwa, Saliparni, Goksura, Mudgaparni, Vidarikanda, Kapikachu, Guggulu, Bhallataka, Udumbara, madhu etc.

Compound preparations

Churnas: Hingwastaka churna, Bhaskara lavana curna, Trikatu churna, Vyshwanara curna, Eladi churna, Arka lavana, Sudarshana churna.

Vatis: Lasunadi vati, Bilwadi gutika, Shaddharana gulika, Vyoshadi gutika, Sanjivani vati, Chandraprabha vati, Shanka vati, Chitrakadi vati, Ajamoda vati, Arogyavardhini vati.

Arka: Ajamoda arka, Punarnava arka.

Asava-Aristas: Abhayarista, Jirakadyarista, Kutajarista, Kanakasava, Kumaryasava, Pippalyadasava, Dasamularista, Aswagandharista.

Ghritas and Tailas: Kalyanaka ghrita, Indukanta ghrita, Pacha Tikta Guggulu ghrita (GTG), Sukumara ghrita, Shatpala ghrita, Eranda taila, Sukumara Eranda taila, Nimbamritadi Eranda taila.

Guggulu: Simhanada Guggulu, Yogaraja Guggulu, Kachanara Guggulu, Maha Yoga Raja Guggulu, Kaishora Guggulu, Lakshadi Guggulu, Navaka Guggulu, Vatari Guggulu.

Rasausadhis: Agnikumara ras, Lagusutasekar ras, Rasamanikya ras, Nityananda ras, Agnitundi vati, Amavatri ras, Kasturi bhairava ras, Ananda bhairavi ras, Arsokuthara ras, Mrityunjaya ras, Vasanta Kusumakara ras.

Kwathas: Sadanga paniya, Panchakola kwatha, Amrutottara kasayam, Gandharva Hastadi kwatha, Maha tiktaka kasayam, Maha Rasnadi khada, Pathyadi kada, Patoladi kada, Indukantha kasayam, Rasna Erandadi kasayam, Rasna saptaka kasaya, Rasna pachaka kasayam, Bhunimbadi kada, etc.

After treatment based upon the relief of symptoms explained by the patients, where ama condition is ruled out from root level, these diseases should be further managed by rasayanas like Amalaki, Triphala, Guduchi, Pippali Vardhamana rasayana, Ashwagandha, Shilajit rasayana, Swarna bhasma, Rajata bhasma and some preparations mentioned above like Ashwsagandharista, Vasantha kusumakara ras, Yogendra ras, Brhat Vata chintamani, Rasaraja ras, Swarna vasantha malati ras, Laghu malini vasantha ras etc., to prevent recurrence of the disease.

DISCUSSION

In the present era, with varied lifestyles and food habits that predominantly include viruddha ahara associated with sedentary desk jobs, work shifts during nights, software professions etc., agni mandhya and ama are the dominant factors in causing various types of diseases, especially autoimmune diseases like IBS, Rheumatoid arthritis, etc. It is not an overstatement to say that 80% of diseases are caused due to ama and mandagni, especially lifestyle disorders like hypothyroidism, Type-2 Diabetes mellitus, obesity, PCOD, etc., that have no effective treatment to cure. This ama spreads to joints and causes Amavata (Rheumatoid arthritis); in the skin causes psoriasis, eczema, scleroderma, and SLE; in the gastrointestinal tract causes Grahani (IBS - Crohn's disease, Ulcerative colitis); in nervous system multiple sclerosis; Hashimoto's thyroiditis; gynaecological diseases like dysmenorrhea, amenorrhea, metrorrhagia, heavy clots during bleeding, etc., and endocrinal disorders like PCOD, hypothyroidism, Type-2 DM, etc.

In the current generation of gyms and health clubs, there is an increased culture of taking protein shakes or energy foods just before exercising, which is contraindicated according to Ayurveda, as it causes the derangement of Agni in a perfectly healthy individual. In the long run, they may lead to autoimmunity. After covid-19 pandemic, the world revolved around immunity and immune boosters, which became a business tagline for various food products or supplements. Influencers on different social media platforms, in the name of health, are promoting different types of dietary regimens like intake of raw/uncooked vegetables, salads and juices, sprouts, dry-fruits intake etc., on an empty stomach in kapha kala without the knowledge of agni bala (digestive power), koshta (nature of bowel movement) that leads to formation of ama and resulting in

autoimmune diseases, totally serving the opposite purpose. Heavy sugars, all-purpose flour (maida), cheese etc., have become common in our daily diet, further worsening the condition and causing complications associated with autoimmune diseases.

The term agni merely does not mean fire; it comprehends various factors which participate in and regulate the course of digestion and metabolism or any transformations of tissue of an organism. Different types of agni to varying levels at doshas, dhatus and malas play their specific role by converting ahara rasa into uttarottara dhatus by dividing sara and kitta бага and finally results in ojas, the essence of all dhatus. In treating sama conditions, identifying the stage of ama plays a key role and simplifies further treatment, and langhana is the first line of treatment. All explained treatments are predominantly agni deepakas and ama pachakas, which are preventive and curative, respectively. This explains the importance of Agni and Ama in treating a disease.

The above-mentioned ama pachaka, agni deepaka oushadis, langhana karmas like pipasa, upavasa, vyayama, etc, digest the ama (self-proteins) circulating in the blood along with samana oushadis (compound preparations) by increasing the vitiated agni and eliminates the toxins by samsodhana karmas like vama, virechana, vasthi and nasya, thereby reduces the inflammation in the body which results in normalcy of blood parameters and inflammatory markers. This relieves symptoms and disease conditions, which rasayana therapy further maintains to prevent a recurrence.

Specific research works that explain the role of samana, sodhana and rasayana karma in treating autoimmune diseases are listed below:

- A case study on Amavata (rheumatoid arthritis) by Dr Ashish Premkumar, Dr Sadhana Misar (Wajpeyi), with samana oushadies – Simhanada Guggulu, Maha Rasnadi kwatha.¹⁷
- Amavata, a case study by Mittal Mamta, Gupta Rakesh-Tab. Yograj Guggulu and tab Rumalaya, Maha Rasnadi kwath, Aarogyavardhini vati, Kaishore Guggulu with Amrita satva.¹⁸
- Efficacy of Seetarama vati (A Sri Lankan traditional drug) and Vatari Guggulu in the management of Amavata (rheumatoid arthritis)- An open labelled randomized comparative clinical trial by M G Sandeepanik K Maragalawaththa, Mandip Goyal.¹⁹
- Management of Amavata (rheumatoid arthritis) with diet and virechana karma by Sanjay Kumar Gupta, Anup B Thakar, Tukaram S Dudhamal, Aditya Nema.²⁰
- Clinical evaluation of Vardhamana Pippali rasayana in the management of Amavata (Rheumatoid Arthritis) by Anamika Soni, Kalapi Patel, S N Gupta.²¹
- Management of Amavata with 'Amrita ghrita': A clinical study by P S Lekurwale, Kamlesh Pandey, P Yadaiah.²²
- Intervention of Amavata (Rheumatoid arthritis) through multimodal Ayurveda approach: A Case Study by Dr Amrita Bhattarai, Dr Govind Kumawot, Dr Gopesh Mangal.²³
- Management of gambhir Vatarakta with shaman chikitsa: A Case Study by Vd. Priya Ashokrao, Dr Ashok Kumar Sinha and Dr Shrawan Kumar Sahu.²⁴
- Ayurvedic Management of Vatarakta (gout) - A Case Report by Dnyaneshwar Kantaram Jadhav.²⁵
- Management of Vatarakta with Mustadi yapan basti: A Case Study by Devyani Sanghani.²⁶

The above research proves that Ayurveda has a better chance of treating Autoimmune diseases effectively.

CONCLUSION

In treating autoimmune diseases, eliminating causative factors and breaking pathogenesis plays a crucial role in ceasing the progression of the disease condition. To achieve this, one should follow a wholesome dietary regimen and lifestyle according to one's digestive capacity and respective seasonal cleansing procedures associated with certain dietary principles and regulations supported by rejuvenation therapy. In Ayurveda, these ama conditions are handled by numerous refined and divergent modes of therapeutics that annihilate the ailment from its root level, as explained above, thereby standardizing the deranged immune system. Therefore, all types of possible treatment modalities in treating ama conditions with special reference to autoimmune diseases can be justified in this manner.

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