Original Research Paper

Volume - 16 | Issue - 08 | August - 2026 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Ayurveda

BHASMA AJIRNA IN AYURVEDIC PHARMACEUTICS: A COMPREHENSIVE REVIEW OF CAUSES, CLINICAL FEATURES AND UPAKRAMA

Dr. Sharada Chikurte — Professor & HOD, Department of Rasashastra and Bhaishajya Kalpana, PDEA'S College of Ayurved and Research Centre, Nigdi, Pune

Dr. Shubham A. Gaikwad* — PG Scholar, Department of Rasashastra and Bhaishajya Kalpana, PDEA'S College of Ayurved and Research Centre, Nigdi, Pune*Corresponding Author

ABSTRACT Bhasma preparations constitute a distinctive and highly specialized branch of Ayurvedic pharmaceutics. These herbo-mineral formulations are processed through elaborate pharmaceutical procedures to enhance therapeutic efficacy and bio-assimilability. Classical Ayurvedic texts emphasize that properly prepared and judiciously administered Bhasmas act as potent therapeutic agents. However, improper digestion or assimilation of Bhasma may result in a pathological condition known as Bhasma Ajirna. This condition is described in Rasashastra literature under the broader context of Rasajirna and is attributed to factors such as impaired digestive fire (Agnimandya), excessive dosage, inappropriate Anupana, faulty pharmaceutical processing, and non-compliance with dietary regulations. The present review critically analyzes classical references pertaining to Bhasma Ajirna, its etiological factors, probable pathogenesis, clinical manifestations, and therapeutic principles, with special emphasis on the Samanya Upakrama described in Rasarnava and other Rasashastra treatises. Understanding these classical concepts is essential for ensuring the safe, rational, and evidence-informed administration of Bhasma preparations in contemporary Ayurvedic practice.

KEYWORDS : Bhasma Ajirna, Rasajirna, Rasashastra, Bhasma, Agnimandya, Upakrama, Ayurvedic Pharmaceutics.

INTRODUCTION

Rasashastra represents one of the most advanced pharmaceutical disciplines within Ayurveda, dealing with the processing and therapeutic utilization of metals, minerals, gemstones, and allied substances.[1]

Among the numerous dosage forms described in Rasashastra, Bhasma preparations occupy a position of particular significance owing to their therapeutic potency, lower dosage requirements, prolonged shelf life, and broad clinical applicability.[2]

The classical pharmaceutics of Bhasma involves a series of procedures including Shodhana (purification), Bhavana (triturating with herbal media), Marana (incineration), and Amritikarana, which collectively transform raw substances into therapeutically acceptable forms.[3]

Ancient scholars repeatedly emphasized that the therapeutic success of Bhasma therapy depends not only upon pharmaceutical excellence but also upon appropriate dosage, proper Anupana, suitable diet, and adequate digestive capacity of the patient.[4]

The concept of Ajirna occupies a central place in Ayurvedic pathology. While generally referring to indigestion, Ajirna may also denote defective digestion, assimilation, or metabolism of medicinal substances. Classical Rasashastra literature recognizes a specific condition resulting from improper digestion of mineral and metallic preparations, termed Rasajirna or Bhasma Ajirna.[5]

Although modern literature extensively discusses the preparation and therapeutic applications of Bhasma, the classical concept of Bhasma Ajirna has received comparatively little scholarly attention. A systematic review of this concept is therefore necessary for promoting safe administration and preventing adverse outcomes associated with irrational use of herbo-mineral formulations.

MATERIALS AND METHODS

The present study is a narrative literary review conducted through an extensive examination of classical Ayurvedic and contemporary scientific literature.

Sources of Data

Classical Ayurvedic texts reviewed included Rasarnava, Rasaratna Samuccaya, Rasendra Chudamani, Rasendra Sara Sangraha, Ayurveda Prakasha, Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya. Contemporary literature was collected from PubMed, Google Scholar, the AYUSH Research Portal, the DHARA Database, and indexed Ayurvedic journals.

Method of Analysis

Collected literature was systematically categorized under conceptual understanding, etiological factors, pathogenesis, clinical manifestations, management principles, preventive strategies, and contemporary relevance.

CONCEPT OF BHASMA

The term Bhasma literally denotes "that which has been reduced to ash through controlled processing." In Ayurvedic pharmaceutics, however, Bhasma signifies highly processed metallic or mineral formulations prepared through standardized pharmaceutical procedures.[6]

Classical texts describe numerous desirable attributes of properly prepared Bhasma, including Rekhapurnata, Varitaratva, Nishchandratva, Apunarbhava, and Niruttha. These characteristics indicate complete transformation of the raw material into a therapeutically acceptable form.[7] The ultimate objective of Bhasma preparation is to render otherwise non-assimilable substances biologically acceptable and therapeutically useful. Failure to achieve these standards may predispose to undesirable effects, including Bhasma Ajirna.

CONCEPTUAL UNDERSTANDING OF BHASMA AJIRNA

The term Bhasma Ajirna is composed of two words: Bhasma and Ajirna. Ajirna broadly refers to incomplete digestion or metabolic transformation resulting from impaired Agni. In the context of Rasashastra, Bhasma Ajirna may be defined as a pathological state resulting from impaired digestion, assimilation, or metabolic transformation of Bhasma preparations due to defects in Agni, inappropriate administration, or pharmaceutical inadequacies. This concept reflects the Ayurvedic understanding that medicinal substances must undergo appropriate Agni-mediated processing before producing therapeutic effects.[8]

ETIOLOGICAL FACTORS (NIDANA)

1. Agnimandya: A diminished digestive fire is considered the most important predisposing factor. Patients with impaired digestion may fail to metabolize even properly prepared Bhasma formulations.[9]

2. Excessive Dosage: Administration beyond the recommended therapeutic dose may overwhelm digestive and metabolic mechanisms, resulting in accumulation of improperly processed medicinal material.[10]

3. Improper Anupana: The therapeutic vehicle plays a crucial role in directing and facilitating drug assimilation. Unsuitable Anupana may impair digestion and distribution of Bhasma.[11]

4. Faulty Pharmaceutical Processing: Inadequate Shodhana,

incomplete Marana, improper Bhavana, or failure to satisfy Bhasma Pariksha criteria may increase the likelihood of adverse effects.[7]

5. Viruddha Ahara: Consumption of incompatible food articles during therapy may interfere with normal digestion and contribute to the development of Ajirna.[12]

6. Non-compliance with Pathya: Ignoring prescribed dietary and behavioral restrictions may aggravate digestive impairment and precipitate Rasajirna.

7. Improper Timing of Administration: Administration without considering digestive status, meal timing, and patient-specific factors may negatively affect assimilation.

SAMPRAPTI (PROBABLE PATHOGENESIS)

The pathogenesis of Bhasma Ajirna may be conceptualized as follows: Nidana Sevana → Agnimandya → incomplete digestion of Bhasma → formation of Ama-like metabolites → Srotorodha → Dosha Prakopa → clinical manifestations of Rasajirna.

The central event in this process is impairment of Agni. As digestion becomes defective, the administered Bhasma remains incompletely transformed and behaves similarly to Ama, leading to systemic disturbances.[13]

CLINICAL FEATURES

Although manifestations vary according to the type of Bhasma involved and patient constitution, common clinical features include Aruchi (loss of appetite), Agnimandya, Arochaka, Udaragaurava, Adhmana, Chardi, Hrillasa, Trishna, Vibandha, Angamarda, Daurbalya, disturbance of Mala, and generalized discomfort. In severe cases, symptoms may extend beyond the gastrointestinal system depending upon the nature of the preparation consumed.[14]

RASAJIRNA AND SAMANYA UPAKRAMA

Among the classical Rasashastra treatises, Rasarnava provides one of the earliest and most specific descriptions of the general management (Samanya Upakrama) of Rasajirna, a condition that encompasses the improper digestion or assimilation of mercurial and herbo-mineral preparations, including Bhasma.[15] The management primarily aims to restore digestive and metabolic functions, eliminate improperly assimilated medicinal substances, and re-establish physiological homeostasis.

कांजिकं सर्जिकाक्षारं कारवल्लीरसप्लुतम्।

गोमूत्रसैन्धवयुतं तस्य संक्रामणं पिबेत्।

(Rasarnava, Patala 18, Verse 141)

If Rasa medicine produces Rasajirna, the patient should be administered a formulation prepared with Kanji (fermented sour gruel), Sarjikakshara (alkaline salt), fresh juice of Karavalli (bitter gourd), Gomutra (cow's urine), and Saindhava Lavana (rock salt).

मोक्षकस्य रसं देवि राजकोषातकीरसम्।

सिन्धुकं कृष्णगोमूत्रं कारवल्लीरसप्लुतम्।

सौवर्चलसमोपेतं रसजीर्णी पिबेन्नरः।

(Rasarnava, Patala 18, Verse 142)

As another therapeutic option, a formulation prepared from the juice of Mokshaka (Indrayana/Citrullus colocynthis), Koshataki, Krishna Gomutra (cow's urine), Karavalli (bitter gourd) juice, and Sauvarchala Lavana should be administered to patients suffering from Rasajirna.

Therapeutic Interpretation

The formulations described in Rasarnava indicate that the management of Bhasma Ajirna is primarily based on correcting impaired digestion rather than merely counteracting the medicinal substance itself. The ingredients selected possess Deepana (enhancement of digestive fire), Pachana (digestion of Ama), Ksharana (alkaline action), Lekhana (scraping), and Srotoshodhana (channel-cleansing) properties, which collectively facilitate the digestion and elimination of improperly assimilated herbo-mineral preparations.

Kanji, being acidic and fermented, stimulates Jatharagni and promotes digestion. Sarjikakshara acts as an alkaline digestive agent that helps dissolve accumulated pathological material. Karavalli (Momordica charantia) exhibits Deepana and Pachana properties and is traditionally indicated in disorders associated with impaired metabolism. Gomutra, regarded as a potent Yogavahi and Kaphavatahara agent, enhances digestion, improves bioavailability, and assists in the elimination of morbid substances. Saindhava and Sauvarchala Lavana further augment digestive activity, alleviate abdominal distension, and facilitate normal gastrointestinal motility. The second formulation additionally incorporates Mokshaka (Indrayana) and Koshataki, drugs known for their cleansing and eliminative actions, thereby helping to expel improperly digested medicinal residues.

General Principles of Samanya Upakrama

Based on the above verses, the general therapeutic approach for Bhasma Ajirna (Rasajirna) may be summarized as follows:

- Deepana: Restoration and stimulation of impaired digestive fire (Agni).
- Pachana: Digestion of Ama and incompletely metabolized medicinal substances.
- Srotoshodhana: Cleansing of obstructed bodily channels to restore normal physiological function.
- Kaphavata Shamana: Correction of Doshic imbalance resulting from impaired digestion.
- Facilitation of Elimination: Promotion of the expulsion of improperly assimilated herbo-mineral preparations through appropriate cleansing measures.
- Normalization of Drug Assimilation: Re-establishment of normal digestion and metabolism to permit safe continuation of Rasoushadhi therapy.

Thus, the management of Bhasma Ajirna described in Rasarnava reflects a rational therapeutic strategy centred on restoration of Agni, digestion of Ama, clearance of obstructed channels, and elimination of residual medicinal material, rather than the administration of a specific antidote. These classical principles remain clinically relevant for the rational and safe administration of Ayurvedic herbo-mineral formulations.

PREVENTIVE MEASURES

Prevention remains the cornerstone of management. Important preventive measures include:

- Administration only after assessment of Agni.
- Strict adherence to recommended dosage.
- Selection of appropriate Anupana.
- Proper pharmaceutical standardization.
- Observance of Pathya-Apathya.
- Avoidance of self-medication.
- Periodic clinical monitoring during prolonged therapy.
- Use of authenticated and quality-assured Bhasma preparations.

DISCUSSION

The concept of Bhasma Ajirna highlights the sophisticated understanding of individualized pharmacotherapy in Ayurveda. Rather than attributing therapeutic outcomes solely to the medicinal substance, classical scholars emphasized the interaction between drug, digestive capacity, diet, lifestyle, and patient constitution. From a contemporary perspective, Bhasma Ajirna may be viewed as a state of impaired bio-assimilation of herbo-mineral formulations. The classical emphasis on Agni assessment closely parallels modern concepts concerning gastrointestinal absorption, metabolism, and patient-specific pharmacokinetic variability.

The preventive guidelines described in Rasashastra underscore principles of rational prescribing, pharmaceutical quality assurance, and individualized medicine. These concepts remain highly relevant in contemporary Ayurvedic practice and can contribute substantially to improving safety standards in the administration of herbo-mineral preparations.

CONCLUSION

Bhasma Ajirna represents an important yet relatively underexplored concept in Ayurvedic pharmaceutics. Classical literature identifies Agnimandya, excessive dosage, inappropriate Anupana, faulty pharmaceutical processing, and dietary indiscretions as major causative factors. The condition manifests primarily through digestive disturbances and is managed through measures aimed at restoring

Agni, digesting Ama, and facilitating proper assimilation of medicinal substances. The preventive and therapeutic principles described in Rasashastra reflect a comprehensive and individualized approach to drug administration. Further interdisciplinary research is required to correlate these classical observations with modern pharmacological and toxicological perspectives.

REFERENCES

[1] Mishra SN, editor. Rasarnava. Varanasi: Chaukhambha Sanskrit Series Office; Reprint ed. Prathamopadesa, Chapter 1, verses 7–12.
[2] Shastri AD, editor. Rasa Ratna Samuccaya. Varanasi: Chaukhambha Amarabharati Prakashan; Reprint ed. Chapter 10 (Bhasma Kalpana), verses 1–6.
[3] Mishra GS, editor. Ayurveda Prakasha of Madhava. Arthavidyotini Commentary. Varanasi: Chaukhambha Bharati Academy; Reprint ed. Chapter 2 (Abhraka Prakarana), verses 96–146.
[4] Chakrapani Datta, commentator. Charaka Samhita. Vimana Sthana. Ayurveda Dipika. Varanasi: Chaukhambha Orientalia; Reprint ed. Chapter 8 (Rogabhishagjitiya Vimana), verses 89–91.
[5] Dalhana, commentator. Sushruta Samhita. Uttara Tantra. Varanasi: Chaukhambha Sanskrit Sansthan; Reprint ed. Chapter 39 (Ajirna Adhyaya), verses 5–10.
[6] Sharma S, editor. Rasatarangini of Sadananda Sharma. 11th ed. New Delhi: Motilal Banarsidass; Taranga 2.
[7] Shastri AD, editor. Rasa Ratna Samuccaya. Varanasi: Chaukhambha Amarabharati Prakashan; Reprint ed. Chapter 10 (Bhasma Pariksha), verses 88–93.
[8] Chakrapani Datta, commentator. Charaka Samhita. Chikitsa Sthana. Ayurveda Dipika. Varanasi: Chaukhambha Orientalia; Reprint ed. Chapter 15 (Grahani Chikitsa), verses 3–5.
[9] Arunadatta, commentator. Ashtanga Hridaya of Vagbhata. Sarvangasundara Commentary. Varanasi: Chaukhambha Surbharati Prakashan; Reprint ed. Sutra Sthana, Chapter 8 (Matrasitiya Adhyaya), verses 18–20.
[10] Acharya JT, editor. Charaka Samhita of Agnivesha. Varanasi: Chaukhambha Surbharati Prakashan; Reprint 2020. Sutra Sthana, Chapter 11.
[11] Singh N, Dubey SD. Role of Anupana in Ayurvedic therapeutics. AYU. 2010;31(4):378–381.
[12] Lad V. Textbook of Ayurveda. Albuquerque: Ayurvedic Press; 2002.
[13] Gupta AK. Concept of Agni in Ayurveda. AYU. 2011;32(2):165–171.
[14] Patgiri BJ, Prajapati PK. Safety aspects of Ayurvedic herbo-mineral formulations. Anc Sci Life. 2015;34(4):188–193.
[15] Tripathi I, editor. Rasarnava. Varanasi: Chaukhambha Sanskrit Series Office; 2011. Patala 18, verses 141–142.