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Review Article

Critical Analytical Review of Charkokta Jwarahara Mahakashay: Classical Foundations and Contemporary Pharmacological Correlation

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Abstract

Jwara (fever) occupies a central position in Ayurvedic nosology due to its systemic impact on metabolic, physiological, and psychological equilibrium. In the *Charak Samhita, Acharya Charaka* classified medicinal substances into fifty *Mahakashayas* based on similarity of pharmacodynamic action, among which *the jwarahara Mahakashaya* is described as the thirty-ninth group, comprising ten drugs: *Sariva, Sharkara, Patha, Manjistha, Draksha, Peelu, Parushaka, Abhaya, Amalaki*, and *Vibhitaki*. This review critically evaluates identity, phytochemical composition, and modern pharmacological evidence to establish the scientific rationale for this grouping. The integrated analysis reveals that *Jwarahara Mahakashaya* represents a rational, stage-specific, and synergetic therapeutic cluster designed to address *Ama pachana, Strotoshodhana, Pittashamana,* and immunomodulation in *Jwara*. The classical concepts correlate meaningfully with contemporary biomedical understanding of fever as an inflammatory and immune-mediated process.

Keywords: *Jwara, Jwarahara Mahakashaya, Rasapanchaka*, Immunomodulation

Introduction

Ayurveda, the ancient medical science of India, is founded on the principle of maintaining harmony among the doshas, Dhatus, Mala, and agni to sustain health.[1] Diseases arise when this equilibrium is disturbed, and among all pathological entities described in classical literature[2], *Jwara* is accorded paramount importance. It is often referred to as the "king of diseases" because of its profound capacity to disrupt systemic homeostasis.[3] Unlike the modern biomedical definition that confines fever to the elevation of body temperature, Ayurveda conceptualizes *Jwara* as a complex pathological process affecting *Deha* (body), *Indriya* (sense organ), and *Mana* (mind).[4]

According to classical understanding, *Jwara* originates when vitiated *Doshas*, predominantly *Pitta*, combine with *Ama* formed due to *Mandagni*.[5] This combination occurs in the *Amashaya* and leads to obstruction of the *Rasavaha* and *Swedavaha Strotas*.[6-8] As a consequence, *Agni* is displaced from its normal physiological location, resulting in systemic heat manifestation characterized by *Santapa, Aruchi, Trishna, Angamarda*, and Generalized malaise.[9,10] The blockage of sweat channels further prevents proper heat dissipation, intensifying the febrile state. Therefore, *Jwara* is not merely hyperthermia but a systemic inflammatory-metabolic disorder requiring multidimensional therapeutic intervention.[11]

Acharya Charaka systematically classified drugs into fifty *Mahakashaya*[12] based on similarity in action. Among these, *Jwarahara Mahakashaya*[13] comprises ten specific drugs grouped for their antipyretic potential. The rationale behind selecting these particular drugs suggests a sophisticated understanding of stage-specific disease management. The present review aims to explore the classical foundations and modern correlations to elucidate the probable integrated mechanism of this *Mahakashaya* in the management of *Jwara*.

Material and Methodology

The present work is a comprehensive literary and analytical review conducted in accordance with classical

Ayurvedic research methodology. Primary references were drawn from the *Brihattrayi*, including the *Charaka Samhita, Sushruta Samhita,* and *Ashtanga Hridaya*, along with authoritative *Nighantus* such as *Dhanvantari Nighantu, Madanpala Nighantu, Kaideva Nighantu, Bhavprakasha Nighantu*, and *Raj Nighantu*. The methodological framework involved systemic evaluation of each of the ten drugs under defined parameters, including classical categorization, *Rasapanchaka*, *Dosha Karma*, botanical classification, phytochemical composition, pharmacological activities, and therapeutic indications.

In addition to classical sources, contemporary scientific literature was reviewed through published research articles focusing on phytochemistry, pharmacological, antimicrobial studies, antipyretic models, and immunomodulatory investigations. A comparative and critical analytical approach was adopted to correlate Ayurvedic pharmacodynamic principles with experimentally validated biomedical evidence. The discussion was structured to integrate classical interpretations with modern findings to derive a coherent understanding of the therapeutic design of *Jwarahara mahakashaya*.

Conceptual Understanding of *Jwara* and Therapeutic Requirements

In Ayurvedic nosology, *Jwara* is broadly classified into *sama* and *nirama* types.[14] *Sama Jwara* is characterized by the presence of *Ama, Mandagni*, heaviness, coated tongue, and low-grade fever.[15] *Nirama Jwara* typically manifests after the digestion of Ama, presenting with clearer symptoms and a relatively higher temperature.[16] This staging implies that treatment must be dynamic and stage-specific rather than uniform.

From a therapeutic standpoint, drugs used in *Jwara* must fulfill multiple roles. They should possess *Deepana* and *Pachana* properties to digest *Ama*,[17,18] *Strotoshodhana* action to clear obstructed channels, *Pittashamana* properties to reduce excessive heat, and *Rasayana* effect to restore vitality and immunity.[19] The intelligent grouping of ten drugs in *Jwarahara mahakashaya* reflects fulfillment of these multidimensional requirements.

Pharmacodynamic Analysis of *Jwarahara Mahakashaya*

An in-depth evaluation of *Rasapanchaka* reveals that the majority of drugs in this group possess *Madhura rasa* and *Madhura vipaka*, both of which are known for *Vatapittashamana* properties and *Dhatu* nourishment.[20,21] *Sheeta Virya* drugs such as *Draksha, Amalaki, Sariva, Parushaka*, and *Sharkara* exhibit cooling properties that pacify aggravated *Pitta* and are particularly beneficial in *Nirama* or acute febrile conditions. These drugs help reduce hyperthermia, soothe inflamed tissues, and prevent excessive catabolism.

Contrarily, *Ushna Virya* drugs, including *Abhaya, Vibhitaki, Manjishtha, Patha,* and *Peelu*, demonstrate *Deepana-Pachana* action, promoting *Ama* digestion and alleviating *Kapha*-induced *Strotorodha*. In *Sama Jwara*, where *Ama* predominates, these drugs facilitate metabolic correction by restoring *Agni* and clearing microchannel obstruction. *Katu Rasa* and *Katu Vipaka*, present in certain drugs, contribute to *Lekhana* and *Shoshana Karma*, aiding in the removal of metabolic toxins.[22-23]

The coexistence of *Sheeta* and *Ushna Virya* drugs in a single *Mahakashaya* illustrates an advanced understanding of disease staging and individualized therapeutic approach.

Table 1: Showing *Rasa, Guna, Virya, Vipaka*, and *Dosha Karma* of the *Dravyas* of *Jwarahara Mahakashay*[24-33]

Dravya	***Rasa***	***Guna***	***Virya***	***Vipaka***	***Dosha Karma***
Draksha	*Madhura, Kashaya*	*Guru, Sara, Snigdha*	*Sheeta*	*Madhura*	*Vatapittahara*
Abhaya	*Kashay, Madhura, Amla, Katu, Tikta*	*Laghu, Ruksha*	*Ushna*	*Madhura*	*Vatanulomana*
Amalaka	*Madhura, Amla, Katu, Tikta, Kashaya*	*Laghu, Ruksha*	*Sheeta*	*Madhura*	*Tridoshahara*
Vibhitak	*Katu, Kashaya Tikta,*	*Laghu, Ruksha*	*Ushna*	*Katu*	*Kaphapittahara*
Sariva	*Madhura, Tikta*	*Guru, Snigdha*	*Sheeta*	*Madhura*	*Kaphavatasha maka*
Manjishtha	*Madhura, Tikta, Kashaya*	*Guru, Snigdha*	*Ushna*	*Madhura*	*Kaphashamaka*
Patha	*Katu, Tikta*	*Guru, Teekshna*	*Ushna*	*Katu*	*Kapha Pitta Shamaka and Vata Kaphahara*
Parushaka	*Amla, Madhura (Pakva), Kashaya (Apakva)*	*Guru, Ruksha*	*Sheeta*	*Katu*	*Vata Shamaka, Vatapittashamaka (Pakva)*
Peelu	*Madhura, Amla, Katu, Tikta, Kashaya*	*Snigdha, Lagu, Teekshna, Kinchit Ruksha*	*Ushna*	*Katu*	*Kaphavata Shamaka*
Sharkara	*Madhura*	*Susheeta, Swabhavata Hitkara*	*Sheeta*	*Madhura*	*Vatapittahara*

Table 2: Showing Pharmacological actions of *Jwarahara Mahakashaya* drugs[34-43]

Dravya	**Latin name**	**Family**	**Part used**	**Pharmacological actions**
Draksha	*Vitis vinifera*	Vitaceae	Fruit	Antioxidant, antibacterial, anti-histaminic[34]
Abhaya	*Terminalia chebula*	Comrebtaceae	Fruit, seed	Cardiac tonic, aphrodisiac, diuretic, anti-phlegmatic, antipyretic[35]
Amalaka	*Emblica officinalis*	Euphorbiaceae	Fruit pulp, fruit rind	Anti-microbial, immunomodulatory, anti-inflammatory, antioxidant, anti-tussive[36]
Vibhitak	*Terminal bellerica*	Combretaceae	Fruit rind, seed, kernel	Antioxidant, antimicrobial, antidiarrheal, anticancer, antihypertensive, hepatoprotective, antipyretic[37]
Sariva	*Hemidesmus indicus*	Asclepidaceae	Root	Antimicrobial, anti-carcinogenic, cytotoxic potential[38]
Manjishtha	*Rubia cordifolia*	Rubiaceae	Root, stem	Hypoglycemic activity, anticancer, effectiveness in wound healing, antiproliferative activity, hepatoprotective[39]
Patha	*Cissampelos pareira*	Menispermaceae	Root, stem	Anti-microbial, antifertility, diuretic[40]
Parushaka	*Grewia asiatica*	Tiliaceae	Fruit, leaf, root	Anti-rheumatic, carminative, digestive, astringent, cooling, diuretic, antimicrobial, anthelmintic, antiviral, antipyretic, anti-inflammatory, antifertility, hypoglycemic[41]
Peelu	*Salvadora persica*	Salvadoraceae	Fruit, seed, leaf, root bark	Anti-microbial, anti-cancerous[42]
Sharkara	*Saccharum officinarum*	Poaceae	Stem	Anti-cough, anti-asthma, anti-oxidant, cholesterol-lowering, diuretic, anti-inflammatory, antithrombotic, hypocholesterolemia[43]

Table 3: Represents the Chemical composition of *Jwarahara Mahakashay* drugs

Dravya	**Chemical composition**
Draksha[44]	Flavonoids, quercetin, rutin, kaempferol, luteolin, phenolic acid, beta sitosterol
Abhaya[45]	Chebulinic acid, corilagin, chebulin, and antioxidants like pyrogallol, ferulic, vanillic, phloroglucinol, palmitic acid, and oleic acid
Amalaka[46]	Tannins, alkaloids, phenolic acids, amino acids, carbohydrates, vitamin c, 3-ethyl gallic acid
Vibhitak[47]	Tannins, ellagic acid, ethyl gallate, galloyl glucose, chebulagic acid, phyllembin, beta sitosterol, mannitol, glucose, fructose, rhamnose
Sariva[48]	Hyperoside, rutin desinine, hexatriacontance, beta sitosterol, hemidesminine, hemidesmin 1, hemidesmin 2
Manjishtha[49]	Yellow gencoside, mangistin, garancin, algerin, zenthgin, salt contents, and a rich amount of starch
Patha[50]	Hayatin, hayatinin, menismine, cissamine, pareine, cycleanine, babeerine, quercitol
Parushaka[51]	Bamyrin, betulin, lupeol, glycosides like pelargonidin, delphinine, cyanidin
Peelu[52]	Gamma monoclinic sulphur, salvadourea,manisic acid, sitosterol, benzyl isothiocyanate, myristic, lauric, palmitic acid
Sharkara[53]	Sterols, policosanols, phenolic acid, flavonoids, glycosides

Discussion

The present analytical discussion integrates the methodological framework and classical pharmacodynamic interpretation with modern scientific evidence. The classical categorization of these ten drugs under *Jwarahara Mahakashaya* reflects a thoughtful and strategic grouping based on similarity in therapeutic action rather than superficial attributes. Synonym analysis across major *Nighantus* reveals that many alternative names describe morphological features, habitats, or pharmacological functions, providing deeper insight into their intended use. For instance, *Abhaya* is often referred to as *Pathya*, denoting its wholesome, channel-clearing properties, while *Manjishtha's* synonyms indicate its blood-purifying and *Strotoshodhaka* properties. Such terminological nuances highlight the functional basis of drug selection.

Rasapanchaka evaluation demonstrates a predominance of *Madhura Rasa* and *Madhura Vipaka*, signifying tissue nourishment and *Pitta* pacification. The balanced inclusion of *Sheeta* and *Ushna Virya* drugs suggests therapeutic adaptability in different stages of *Jwara*. In the *Ama*-dominant states, *Ushna Virya* drugs digest metabolic toxins, alleviate *Kapha* obstruction, and restore *Agni*. As the disease progresses into the *Nirama* stage and *Pitta* dominance, *Sheeta Virya* drugs mitigate inflammatory heat and preserve *Dhatu* integrity.[49] This dynamic stage-wise approach reflects an advanced understanding of disease progression.

Botanical and phytochemical evaluation further substantiates the classical rationale. *Draksha* (*Vitis vinifera*) contains flavonoids and resveratrol, which have antioxidant and antimicrobial properties. *Amalaki* (*Phyllanthus emblica*) is rich in ascorbic acid and polyphenols and exhibits immunomodulatory and anti-inflammatory effects. *Vibhitaki* (*Terminalia bellerica*) has shown antipyretic activity in experimental fever models. *Manjishtha* (*Rubia cordifolia*) exhibits antiviral and antibacterial actions due to anthraquinone derivatives. *Peelu* (*Salvadora persica*) contains benzyl isothiocyanate, which exhibits antiviral activity. These pharmacological findings indicate that the *Mahakashaya* does not merely suppress temperature but addresses infectious etiologies, inflammatory mediators, oxidative stress, and immune dysregulation.

From a mechanistic perspective, *Jwarahara Mahakashaya* appears to function through *Ama Pachana, Strotoshodhana, Pittashamana, Vatanulomana*, and *Rasayana* effects. Modern biomedical interpretation suggests possible modulation of prostaglandin pathways involved in hypothalamic temperature regulation, along with inhibition of microbial proliferation and reduced inflammatory cytokine production. The antioxidant properties protect tissues from oxidative damage during febrile states, while immunomodulatory actions enhance host defense mechanisms. Thus, the classical grouping aligns closely with contemporary understanding of fever as a systemic inflammatory and immune-mediated response.

Conclusion

Jwarahara Mahakashaya, as described in the *Charak Samhita*, represents a rational and therapeutically strategic grouping of ten drugs designed for comprehensive management of *Jwara*. The balanced presence of *Ushna* and *Sheeta Virya* substances ensures stage-specific intervention in both *Sama* and *Nirama* conditions, while the predominance of *Madhura Vipaka* supports metabolic stability and tissue nourishment. Classical *Rasapanchaka* principles correlate meaningfully with modern evidence demonstrating antipyretic, antimicrobial, anti-inflammatory, antioxidant, and immunomodulatory activities. Thus, *Jwarahara Mahakashaya* reflects a holistic, pathogenesis-oriented approach to fever management and holds significant potential for evidence-based integration into contemporary practice.

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