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CHAMPAKADI AGADA IN *KITA VISHA*: A CRITICAL REVIEW OF CLASSICAL PHARMACODYNAMICS, PROBABLE MODE OF ACTION AND RESEARCH PRIORITIES

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ABSTRACT

Champakadi Agada is a polyherbal Ayurvedic formulation described by *Vagbhata* for *Kita Visha*, a classical category encompassing toxic manifestations produced by insects and related arthropods. The formulation contains *Haridra*, *Daruharidra*, *Patanga*, *Manjistha*, *Tagara* and *Nagakesara*, administered with honey and ghee. This critical narrative review examines its textual basis, *rasa-panchaka*, *dosha-dushya* involvement, *samprapti-vighatana*, ingredient pharmacology, safety and research requirements. The classical symptom complex suggests predominant involvement of *vata* and *pitta*, with *kapha* contributing to itching and oedema and *rasa*, *rakta*, *twak* and *mamsa* as important affected tissues. Bitter, pungent and astringent attributes, together with *vishaghna*, *shothahara*, *kandughna*, *vedanasthapana*, *raktaprasadana* and *vranaropana* actions, provide a coherent Ayurvedic rationale. Modern studies report anti-inflammatory, antioxidant, antimicrobial or analgesic effects for individual ingredients, but direct venom-neutralizing and clinical evidence for the complete formulation is absent. *Champakadi Agada* should therefore be investigated as a standardized adjunct for uncomplicated local reactions, not as a substitute for epinephrine, antivenom or emergency care. Future work should establish botanical identity, analytical markers, dosage form, dermal and systemic safety, venom-specific assays and controlled clinical outcomes.

KEYWORDS: *Champakadi Agada*; *Kita Visha*; *Agadatantra*; *samprapti-vighatana*; insect bite; Ayurvedic toxicology.

INTRODUCTION

Agadatantra, one of the eight classical branches of Ayurveda, addresses recognition and management of poisons of plant, animal and artificial origin. Within this discipline, the term *Agada* denotes a formulation intended to counter or reduce toxic manifestations. *Champakadi Agada* is described in the *Keeta-Loota-Visha-Pratishedha* context of the *Uttara Sthana* of *Ashtanga Hridaya*. The formulation combines *Haridra-dvaya*, *Patanga*, *Manjistha*, *Nata* and *Kesara* with honey and ghee.[1]

The classical category *Kita* is broader than the modern zoological class Insecta. It includes numerous small crawling, flying, biting, stinging or contact-producing creatures that were described according to habitat, morphology, poisonous nature and the clinical pattern produced after exposure. *Sushruta Samhita* presents an extensive account of *Kita*, their *dosha*-dominant manifestations and principles of management.[2] Consequently, the term *Kita Visha* should be interpreted as a clinical-toxicological category rather than as a direct synonym for every contemporary insect bite.

Local pain, pricking, burning, itching, erythema, discoloration, swelling, eruption and discharge are repeatedly emphasized in the classical descriptions. Severe cases may progress to fever, vomiting, faintness, breathlessness, altered sensorium or other systemic features. This range contains several modern mechanisms: direct tissue trauma, venom-mediated inflammation, immediate allergy, delayed hypersensitivity, secondary infection and organ-specific envenomation. Because these mechanisms require different treatment, a traditional formulation cannot be assigned one universal action for every bite or sting.

The source manuscript proposed that the combined *vishaghna*, *raktaprasadana*, *shothahara*, *vedanasthapana*, *kandughna* and *vranaropana* actions of the ingredients explain the usefulness of *Champakadi Agada*. The present review develops that argument in a systematic manner. It separates classical pharmacodynamic reasoning from modern experimental evidence and from formula-level clinical proof, thereby avoiding unsupported claims while retaining the therapeutic logic of Ayurveda.

AIM AND OBJECTIVES

The aim of this review was to explain the probable mode of action of *Champakadi Agada* in *Kita Visha* through classical Ayurvedic pharmacodynamics and contemporary biomedical evidence.

1. To describe the textual reference, composition and method of preparation of *Champakadi Agada*.
2. To explain the classical concept, *dosha*-dominant manifestations and *samprapti-ghataka* of *Kita Visha*.
3. To analyse the *rasa*, *guna*, *virya*, *vipaka* and relevant *karma* of every ingredient.
4. To correlate the collective Ayurvedic actions with pain, burning, itching, swelling, discoloration and wound-related manifestations.
5. To review ingredient-level phytochemistry and pharmacological evidence without presenting it as proof for the complete formulation.
6. To define safety boundaries, standardization requirements and a sequence for future experimental and clinical research.

MATERIALS AND METHODS

Review design

A critical narrative review was undertaken. The composition and indication of *Champakadi Agada* were checked in a commonly used edition of *Ashtanga Hridaya*. The broader *Kita Visha* description was reviewed in *Sushruta Samhita*. Ingredient attributes and classical actions were cross-checked in standard *Dravyaguna* literature.[3] *Bhavaprakasha Nighantu* served as the second classical pharmacodynamic source.[4]

Modern literature search and appraisal

PubMed, PubMed Central, journal websites and citation chaining were searched up to July 2026. Search terms included “Champakadi Agada,” “Kita Visha,” the accepted botanical names and common synonyms of all six drugs, “insect bite,” “sting,” “venom,” “anti-inflammatory,” “antioxidant,” “analgesic,” “antimicrobial,” “urticaria,” “anaphylaxis,” “dermal safety” and “herbal standardization.” Evidence was grouped as: (1) classical textual rationale; (2) ingredient-level phytochemical or experimental evidence; (3) complete-formulation evidence; and (4) current clinical guidance relevant to bites, stings and anaphylaxis.

Studies using a different plant species, different plant part, isolated compound or unrelated

disease model were treated as indirect evidence. They were used to generate testable hypotheses but not to infer clinical efficacy. Owing to heterogeneity in extracts, doses and outcomes, no meta-analysis was attempted.

CLASSICAL CONCEPT OF *KITA VISHA*

Textual scope and origin

Classical authors recognized that poisonous manifestations may arise from many small creatures occupying soil, vegetation, dwellings or the air. *Sushruta* enumerates numerous varieties and groups them according to the predominant *dosha* expressed after exposure. Such descriptions are clinically useful because the same visible bite mark may be followed by very different patterns of pain, heat, swelling, discharge or systemic disturbance. The classification is therefore phenomenological: it guides assessment through the response of the patient, not only through the name of the creature.

Dosha-dominant manifestations

Vata-dominant poisoning is characterized by severe pricking or shifting pain, tremor, stiffness, dark discoloration and functional disturbance. *Pitta*-dominant poisoning shows burning, redness or yellow-red discoloration, tenderness, rapid spread and inflammatory features. *Kapha*-dominant poisoning tends toward itching, heaviness, cool or pale swelling, salivation, nausea and slower progression. *Sannipata* presentations combine features of all three and are classically regarded as severe. These patterns describe dominance rather than absolute separation; mixed local reactions are common.

Table 1: *Dosha*-dominant interpretation of *Kita Visha* manifestations.

Predominant pattern	Classical clinical features	Closest contemporary symptom domain	Immediate implication
Vata	Pricking or intense pain, tremor, stiffness, dryness, dark discoloration and variable spread.	Mechanical injury, neurogenic pain, vasospasm or neurotoxic features.	Assess pain severity, neurovascular status and progressive neurologic symptoms.
Pitta	Burning, redness, heat, tenderness, yellow-red colour change, rapid spread and fever.	Acute inflammation, venom-mediated tissue injury or cellulitis-like appearance.	Differentiate sterile inflammation from infection and rapidly progressive necrosis.
Kapha	Itching, heaviness, cool or pale oedema, mild pain, nausea, salivation and sluggish progression.	Large local allergic reaction, oedema or delayed hypersensitivity.	Observe progression and screen for systemic allergy despite apparently

			mild pain.
Sannipata	Mixed pain, burning, itching, marked swelling, discharge and constitutional disturbance.	Severe local reaction, systemic allergy or significant envenomation.	Urgent medical evaluation; traditional treatment must not delay emergency care.

Samprapti-ghataka

The initiating event is the entry or contact of toxic material through a bite, sting, scratch, secretion or contaminated surface. The first visible expression occurs in *twak* and superficial *mamsa*, while pain, burning, colour change and swelling indicate participation of *vata*, *pitta*, *kapha*, *rasa* and *rakta*. Increased permeability and exudation can be conceptually related to *atipravritti*, whereas local obstruction and tense oedema resemble *sanga*. Progressive spread, fever, breathlessness or faintness suggest that the process is no longer confined to the local *bahya rogamarga*.

Table 2: Working *samprapti-ghataka* and therapeutic targets.

Component	Interpretation in *Kita Visha*	Therapeutic requirement
Nidana	Bite, sting, scratch, contact secretion, retained foreign material or contaminated wound.	Removal from exposure, cleansing, identification and appropriate first aid.
Dosha	*Vata-pitta* predominance; *kapha* contributes to itching, heaviness and oedema.	*Vata-pitta shamana* without increasing obstruction or heat.
Dushya	*Rasa*, *rakta*, *twak* and superficial *mamsa*.	*Raktaprasadana*, *twak-prasadana*, tissue protection and wound support.
Srotas	*Rasavaha* and *raktavaha*; *pranavaha* involvement when respiratory symptoms occur.	Control spread and recognize systemic involvement immediately.
Srotodushti	*Atipravritti* as exudation/spread; *sanga* as tense swelling and impaired local movement.	*Shothahara*, appropriate drainage or wound care, and maintenance of circulation.
Adhisthana	Initially the bite site; potentially generalized when allergy or organ toxicity develops.	Local symptom control only after emergency features have been excluded.

Therapeutic objectives

On this basis, an appropriate formulation should address more than the abstract label of poison. It should reduce pain and pricking (*vedanasthapana* and *vata-shamana*), burning and colour change (*dahaprashamana* and *raktaprasadana*), itching (*kandughna*), swelling (*shothahara*), local contamination or slough (*vranashodhana*) and tissue repair (*vranaropana*). *Vishaghna* is therefore interpreted here as the collective classical antitoxic

intent of the formulation, not as proof that it chemically neutralizes every venom.

CONTEMPORARY CLINICAL CONTEXT

Local and systemic reactions

Most uncomplicated Hymenoptera stings produce transient pain, erythema and swelling. Large local reactions may expand for hours and cross a joint, while systemic allergic reactions may involve skin, gastrointestinal, respiratory and cardiovascular systems.[5] Patients with previous systemic sting reactions require specialist evaluation; venom immunotherapy is an established preventive treatment for selected patients.[6]

Anaphylaxis requires immediate intramuscular epinephrine, airway and circulatory support and emergency transfer.[7] Antibiotics are not routinely indicated for a bite or sting unless bacterial infection is diagnosed or strongly suspected.[8] These boundaries are central to any responsible evaluation of *Champakadi Agada*: a study of local symptom relief must exclude time-critical allergy, systemic envenomation, progressive necrosis and severe infection.

Table 3: Clinical triage before adjunctive use of a traditional formulation.

Clinical presentation	Typical findings	Required action
Uncomplicated local reaction	Localized pain, pruritus, erythema or swelling with stable general condition.	Standard first aid, symptomatic care and observation; adjunctive research may be considered.
Large or progressive local reaction	Swelling expands over hours, crosses a joint or causes marked functional limitation.	Medical assessment to distinguish allergy, tissue injury, infection and compartment risk.
Anaphylaxis	Breathing difficulty, wheeze, throat symptoms, hypotension, collapse or multi-system involvement.	Immediate intramuscular epinephrine and emergency care; no delay for oral or topical Agada.
Systemic envenomation	Neurotoxicity, coagulopathy, haemolysis, rhabdomyolysis, kidney injury, shock or extensive necrosis.	Toxicology-led emergency care, monitoring and specific treatment or antivenom when indicated.
Secondary bacterial infection	Delayed increasing warmth and pain, purulence, lymphangitis, fever or systemic illness.	Clinical diagnosis and antimicrobial treatment according to local guidance.

CHAMPAKADI AGADA

Textual composition

The textual formulation contains two drugs represented by *Haridra-dvaya*—commonly

interpreted as *Haridra* and *Daruharidra*—along with *Patanga*, *Manjistha*, *Nata* or *Tagara*, and *Kesara* or *Nagakesara*. The powdered drugs are combined with *Madhu* (honey) and *Ghrita* (ghee). Botanical identity is especially important for *Patanga*, *Tagara* and *Kesara*, for which regional synonyms and substitute materials can produce clinically and chemically different preparations.

Method of preparation

For a research-grade preparation, each raw drug should be authenticated before pulverization. Foreign matter is removed, the materials are dried under controlled conditions, powdered separately, passed through a specified sieve and blended in equal proportions unless the selected classical edition states otherwise. Honey and ghee should be added in a defined ratio at the time of use or incorporated through a validated manufacturing process. The original source does not justify inventing a modern dose, preservative system or topical concentration; these must be established through pharmaceutical and safety studies.

The intended route must also be stated. An oral preparation raises questions of dose, absorption, hepatic metabolism and herb-drug interaction. A topical preparation requires evaluation of homogeneity, spreadability, contact time, microbial quality, irritation, sensitization and use on intact versus damaged skin. Evidence from one route cannot be automatically transferred to the other.

Table 4: Ingredient identity, part used and quality requirements.

Ingredient	Working botanical identity	Part used	Principal quality requirement
Haridra	*Curcuma longa* L.	Rhizome	Macroscopy/microscopy, curcuminoid profile, starch adulteration and microbial load.
Daruharidra	*Berberis aristata* DC.	Stem or root	Species authentication, declared part, berberine-related marker and sustainable sourcing.
Patanga	*Biancaea sappan* (L.) Tod.; published frequently as *Caesalpinia sappan*	Heartwood	Correct heartwood, brazilin/brazilein fingerprint and control of oxidation-related colour change.
Manjistha	*Rubia cordifolia* L.	Root	Root identity, anthraquinone profile, pesticide/residue control and exclusion of substitutes.
Nata/Tagara	*Valeriana jatamansi* Jones; often reported as *V. wallichii*	Rhizome/root	Declared synonym, volatile profile, moisture control and conservation-aware sourcing.

Kesara/Naga kesara	*Mesua ferrea* L.	Stamens/flowers	Plant-part authentication, pollen/foreign matter and phenolic or biflavonoid fingerprint.
Madhu	*Apis* spp. processed nectar	Vehicle	Pharmaceutical grade, declared floral source, adulteration testing, water activity and spores.
Ghrita	Clarified milk fat of declared source	Vehicle	Identity, oxidative rancidity, microbial limits, storage stability and milk-allergy declaration.

RASA-PANCHAKA AND CLASSICAL ACTIONS

The formulation combines *tikta*, *katu* and *kashaya rasa* with a smaller *madhura* component. *Tikta* and *kashaya* support drying of excessive discharge, reduction of *kapha*-related heaviness and a classical action on *rakta* and *twak*. *Katu* and predominantly *ushna virya* drugs help counter stagnation, pain and cold-heavy features. *Patanga*, with a cooling profile, and the blood-directed actions of *Manjistha* and *Daruharidra* moderate the risk of treating every presentation only with heating drugs.

Table 5: Working rasa-panchaka and actions relevant to Kita Visha.

Drug	***Rasa***	***Guna***	***Virya / Vipaka***	**Relevant classical actions**
Haridra	*Katu, tikta*	*Laghu, ruksha*	*Ushna / katu*	*Vishaghna, kandughna, shothahara, varnya, twak-doshahara.*
Daruharidra	*Tikta, kashaya*	*Laghu, ruksha*	*Ushna / katu*	*Raktashodhaka, vranashodhana, shothahara, varnya, pachana.*
Patanga	*Kashaya, tikta, madhura*	*Laghu, ruksha*	*Sheeta / katu*	*Dahaprashamana, raktasangrahana, vranaropana, pittashamana.*
Manjistha	*Madhura, tikta, kashaya*	*Guru, ruksha*	*Ushna / katu*	*Vishaghna, raktaprasadana, shothahara, kushthaghna, vranaropana.*
Tagara	*Tikta, katu, kashaya*	*Laghu, snigdha*	*Ushna / katu*	*Vishaghna, vedanasthapana, shulaghna, vranaropana, vata-kapha shamana.*
Nagakesara	*Kashaya, tikta*	*Laghu, ruksha*	*Ushna / katu*	*Vishaghna, kandughna, raktastambhana, pachana, balya.*

AYURVEDIC PHARMACODYNAMIC INTERPRETATION

Action on *Vata* and pain

Pain, pricking, tremor and variable spread indicate *vata* participation. *Tagara* contributes *vedanasthapana* and *shulaghna* actions, while its *snigdha guna* partly balances the drying quality of the bitter and astringent drugs. The *ushna virya* of *Haridra*, *Daruharidra*, *Manjistha*, *Tagara* and *Nagakesara* is interpreted as reducing cold, stagnant and obstructive components of *vata-kapha*. Honey and ghee provide adhesion and unctuousness, potentially prolonging contact and reducing excessive dryness.

Action on *Pitta, Rakta* and burning

Burning, erythema, tenderness and colour change indicate a close relationship between *pitta* and *rakta*. *Patanga* provides an important *sheeta*, *kashaya* and *dahaprashamana* component. *Manjistha* and *Daruharidra* are traditionally directed toward *rakta-dushti*, skin manifestations and inflammatory swelling. *Nagakesara* and *Patanga* add astringent and blood-stabilizing actions where oozing or superficial bleeding is present. Collectively, these actions are intended to improve colour, reduce heat and support local tissue integrity.

Action on *Kapha*, itching and oedema

Itching, heaviness, pallor and persistent oedema represent a *kapha*-dominant component. The *tikta*, *katu*, *kashaya*, *laghu* and *ruksha* attributes distributed across the formula oppose excessive moisture, stickiness and heaviness. *Haridra* and *Nagakesara* contribute *kandughna* action; *Haridra*, *Daruharidra* and *Manjistha* contribute *shothahara* action. The formulation is therefore conceptually suited to mixed itching and swelling, although marked or rapidly progressive oedema must first be evaluated for allergy or serious tissue injury.

Action on *Twak, Mamsa* and *Vrana*

The bite site involves *twak* and superficial *mamsa*. *Vranashodhana* actions attributed to *Daruharidra* and the *vranaropana* actions of *Patanga*, *Manjistha* and *Tagara* provide the classical basis for supporting a clean, healing local lesion. This should not be interpreted as permission to apply a non-sterile paste over a deep puncture, necrotic tissue or an infected wound. A standardized topical product would require microbial limits, dermal safety testing and clear instructions regarding skin integrity.

Role of *Madhu* and *Ghrita*

Madhu functions as a binding and spreading vehicle and is classically associated with

yogavahi, cleansing and wound-related uses. Its high osmolarity, acidity and peroxide-related activity may contribute to antimicrobial effects, but these properties vary widely with floral source and processing. *Ghrita* supplies a lipid phase that may extract or retain hydrophobic constituents, reduce friction and moderate the drying effect of powdered drugs. The two vehicles therefore create a mixed hydrophilic-lipophilic delivery system, but this remains a pharmaceutical hypothesis until release, penetration and stability are measured.

Table 6: Symptom-oriented *samprapti-vighatana* proposed for *Champakadi Agada.*

Manifestation	Ayurvedic interpretation	Principal contributing drugs/actions
Pain and pricking	*Vata* aggravation, local obstruction and tissue irritation.	*Tagara—vedanasthapana, shulaghna*; warming drugs reduce cold-obstructive features.
Burning and erythema	*Pitta-rakta* aggravation and local inflammatory heat.	*Patanga—sheeta, dahaprashamana*; *Manjistha* and *Daruharidra—raktaprasadana*.
Itching	*Kapha-pitta* involvement in *twak* and *rakta*.	*Haridra* and *Nagakesara—kandughna*; bitter and astringent profile.
Swelling and heaviness	*Kapha*, altered *rasa* movement and local *sanga*.	*Haridra*, *Daruharidra* and *Manjistha—shothahara*; *laghu-ruksha* actions.
Discoloration or oozing	*Rakta-dushti*, *pitta* and superficial tissue injury.	*Manjistha*, *Daruharidra* and *Patanga*—blood-directed actions; *Nagakesara—raktastambhana*.
Superficial wound	Involvement of *twak* and *mamsa* with risk of contamination.	*Vranashodhana* and *vranaropana* actions; only a microbiologically safe preparation is appropriate.

FORMULA-LEVEL EVIDENCE

A recent narrative article compiled antitoxic and anti-inflammatory information concerning the six constituent herbs.[9] Its evidence is predominantly ingredient-level and preclinical. It supports selection of candidate mechanisms and assays but cannot demonstrate that the complete formula is clinically effective. A case report used *Champakadi Agada* as one element of a multi-component Ayurvedic regimen for urticaria.[10] The diagnosis was not a defined bite or sting, there was no comparator, and concurrent treatment prevents attribution of the outcome to this formulation.

No controlled human trial of a standardized *Champakadi Agada* for an identified insect or arthropod exposure was located. No complete-formula study was found that measured inhibition of phospholipase A2, hyaluronidase, protease, haemolysis, coagulation disturbance, mast-cell activation or other named venom pathways. The current formula-level

certainty is therefore very low. The absence of direct evidence does not invalidate the classical rationale; it defines the next research steps.

INGREDIENT-WISE PHARMACOLOGICAL BASIS

Haridra

Haridra (*Curcuma longa*) contributes curcuminoids, including curcumin, and a volatile-oil fraction. Experimental literature describes effects on nuclear factor-kappa B, cyclooxygenase/lipoxygenase-related pathways, cytokine signalling and oxidative stress. Reviews also emphasize that absorption and biological activity depend strongly on extraction and formulation.[11] Clinical meta-analysis of curcumin-containing supplements has reported changes in selected inflammatory and oxidative markers, but those oral studies neither establish a topical effect at a bite site nor demonstrate venom neutralization.[12] In the formula, these findings support investigation of anti-inflammatory and antioxidant endpoints corresponding to *shothahara* and *twak-rakta*-directed actions.

Daruharidra

Daruharidra (*Berberis aristata*) contains isoquinoline alkaloids, principally berberine-related compounds. Pharmacological reviews describe antimicrobial, anti-inflammatory, metabolic and hepatoprotective activities across varied experimental systems.[13] The genus *Berberis* shows considerable botanical and chemical diversity, making species and plant-part authentication essential.[14] Berberine can influence drug transport and metabolism; repeated administration has inhibited selected cytochrome P450 activities in humans.[15] Thus, *Daruharidra* contributes a plausible *raktashodhaka-shothahara* component but also creates an oral interaction question that cannot be ignored.

Patanga

Patanga is commonly correlated with the heartwood of *Biancaea sappan*, widely published under the synonym *Caesalpinia sappan*. Brazilin, brazilein and related homoisoflavonoids are prominent constituents, and oxidation alters both colour and chemical profile. Ethanolic heartwood extract has reduced inflammatory responses in human chondrocyte and macrophage models.[16] A standardized brazilin-rich extract has shown antioxidant, antibacterial and anti-inflammatory activity in vitro.[17] These observations support testing of *dahaprashamana*, colour-related and inflammatory outcomes, but the extract solvent and concentration differ from a honey-ghee powdered formulation.

Manjistha

Manjistha (*Rubia cordifolia*) root contains anthraquinones, naphthohydroquinones and other polyphenolic constituents. A comprehensive review summarizes anti-inflammatory, antioxidant and antimicrobial findings while emphasizing variability in extracts and limited clinical translation.[18] Spectrum-effect work has related chromatographic fractions to analgesic and anti-inflammatory responses in experimental models.[19] This evidence is compatible with its classical *raktaprasadana*, *shothahara* and *vishaghna* role and also provides candidate analytical markers. It does not establish an effective dose for insect envenomation.

Tagara

Tagara is commonly represented by *Valeriana jatamansi* and has frequently been studied under the synonym *V. wallichii*. Volatile and valerenic-type constituents may influence central nervous system and smooth-muscle pathways. Experimental work has demonstrated antispasmodic and blood-pressure-lowering effects involving potassium channel activation.[20] Aqueous extract has also shown antioxidant or tissue-protective activity in a radiation model.[21] These studies are indirect but support investigation of pain-related and oxidative endpoints corresponding to *vedanasthapana*. Sedation, hypotension and additive effects with central nervous system depressants require attention during oral safety evaluation.

Nagakesara

Nagakesara (*Mesua ferrea*) flowers or stamens contain phenolic and biflavonoid constituents. Isolated floral biflavonoids have shown anti-virulence activity in a bacterial model.[22] Anti-inflammatory and antiarthritic activity has also been reported for seed extracts.[23] The latter evidence is only remotely supportive because the studied seed differs from the flower/stamen specified in the formulation. The classical *kandughna*, *raktastambhana* and *balya* role should therefore be tested using the correct plant part and an authenticated complete formulation.

Honey and *ghee*

Honey possesses osmotic, acidic and peroxide-related antimicrobial properties, but its activity varies with botanical origin, water content and processing.[24] Medical-grade honey has been studied in selected dermatological and wound contexts; raw household honey is not equivalent to a sterile pharmaceutical product.[25] A Cochrane review found that effects differ

substantially by wound type and comparator, reinforcing the need to avoid broad wound-healing claims.[26] Ghee may serve as a lipid vehicle for hydrophobic constituents, yet the release and dermal penetration of the mixed formulation have not been measured. Honey must not be given orally to infants younger than one year, and ghee introduces milk-allergy and oxidation concerns.

INTEGRATED PROBABLE MODE OF ACTION

The probable mode of action can be understood at four connected levels. First, the *rasa-panchaka* profile addresses a mixed *vata-pitta-kapha* presentation rather than one isolated *dosha*. Second, blood- and skin-directed actions target *rasa*, *rakta*, *twak* and superficial *mamsa*. Third, phytochemicals from the six drugs provide plausible anti-inflammatory, antioxidant, sensory-modulating or antimicrobial effects. Fourth, honey and ghee determine extraction, adhesion, release and contact with the tissue.

A cautious biomedical hypothesis is that a standardized, non-irritant preparation may reduce selected components of the local response—pain, pruritus, erythema and oedema—through modulation of inflammatory mediators, oxidative injury and local sensory signalling. This hypothesis is narrower than direct antivenom action. It does not imply that the formulation binds venom, prevents anaphylaxis, reverses neurotoxicity or treats bacterial infection.

Table 7: Integrated mechanistic hypothesis and level of evidence.

Level	Proposed action	Current support	What remains to be demonstrated
Classical pharmacodynamics	Mixed *dosha* balancing; *vishaghna*, *shothahara*, *kandughna*, *vedanasthapana* and *raktaprasadana* actions.	Coherent textual and ingredient rationale.	Prospective symptom definitions and reproducible formulation.
Local inflammatory response	Possible reduction in mediator-driven pain, erythema, pruritus and oedema.	Indirect ingredient-level experimental evidence.	Complete-formula assays at achievable, non-cytotoxic concentrations.
Oxidative tissue injury	Polyphenolic constituents may reduce measurable oxidative stress.	Multiple extract and isolated-constituent studies.	Venom-specific cellular injury model with positive controls.
Microbial domain	Some drugs and honey may inhibit selected organisms in vitro.	Ingredient-level antimicrobial evidence.	Standardized product testing and clinically confirmed infection outcomes.
Venom neutralization	No defensible claim can presently be made.	No direct complete-formula evidence	Defined venom enzyme, haemolysis, coagulation and in-vivo

		identified.	rescue assays.
Clinical benefit	Possible adjunctive relief in uncomplicated localized reactions.	Not established.	Registered controlled trial with objective outcomes and rescue therapy.

CLINICAL RELEVANCE AND SAFETY

Potential adjunctive scope

If pharmaceutical quality and dermal safety are established, the most appropriate initial clinical population would be patients with uncomplicated, localized bite or sting reactions after standard assessment and first aid. Outcomes should include validated pain and pruritus scores, measured swelling area or circumference, time to functional recovery, rescue medication, patient-reported comfort and adverse skin reactions. The formulation should be evaluated as an adjunct to standard care, not against the absence of necessary care.

Contraindications and precautions

A non-validated preparation should not be placed in the eye, on mucosa, into a deep puncture, over extensive broken skin or on necrotic or contaminated tissue. Botanical ingredients, honey, milk proteins and contaminants may cause hypersensitivity. Oral use requires particular caution in pregnancy, lactation, infancy, liver or kidney disease and polypharmacy. Potential sedation from *Tagara* and metabolic interaction from berberine-containing *Daruharidra* should be included in pharmacovigilance.

Emergency warning

Breathing difficulty, voice change, throat tightness, generalized urticaria with systemic symptoms, hypotension, collapse, rapidly progressive swelling, severe necrosis or evidence of organ toxicity requires immediate emergency care. Epinephrine remains first-line treatment for anaphylaxis.[7] Antivenom, wound care, tetanus prophylaxis, antibiotics, analgesia or surgical management should be provided according to the diagnosed condition. *Champakadi Agada* has no established role as a replacement for these measures.

STANDARDIZATION AND RESEARCH PRIORITIES

Pharmaceutical standardization

A locked master formula is required before biological testing. The dossier should specify the edition and verse, botanical identity, plant part, geographical source, harvest conditions, drying, particle size, proportion of each powder, honey-to-ghee ratio, final moisture or water

activity, route, container and shelf life. A multi-marker chromatographic profile is preferable to reliance on a single constituent because six botanicals and two vehicles contribute to the product.

Experimental sequence

Table 8: Recommended research sequence for *Champakadi Agada.*

Stage	Essential methods	Minimum acceptable output
Textual and botanical resolution	Cite source and verse; authenticate all six drugs; declare synonyms, plant parts and voucher specimens.	Reproducible master formula and raw-drug dossier.
Analytical development	Pharmacognosy, physicochemical tests, contaminant limits, multi-marker HPTLC/HPLC and stability.	Batch specification with justified marker ranges and shelf life.
Dosage-form development	Define oral or topical route, honey-ghee ratio, homogeneity, release, spreadability and packaging.	Stable preparation delivering measurable markers consistently.
Safety	Dermal irritation/sensitization, microbial challenge, cytotoxicity, oral toxicology and interaction screening.	Safe route and concentration for the intended population.
Mechanistic assays	Inflammatory mediators, mast-cell/histamine, oxidative injury, nociception and named venom enzymes.	Replicated concentration-response with vehicle, positive and toxicity controls.
Pilot clinical trial	Prospective registration, randomized adjunctive design, concealed allocation and validated outcomes.	Feasibility, effect estimate and adverse-event profile without premature efficacy claims.

Clinical reporting should follow the CONSORT extension for herbal interventions, including complete product description, qualitative and quantitative testing, dose, comparator rationale and adherence assessment.[27] Raw materials and finished products should be evaluated using internationally accepted quality-control approaches for herbal materials, contaminants and residues.[28]

DISCUSSION

The expanded analysis shows that *Champakadi Agada* is not a random collection of herbs. Its composition addresses the principal classical features of *Kita Visha*: pain and pricking through *vata*-directed and *vedanasthapana* actions; burning and colour change through *pitta-rakta*-directed drugs; itching and swelling through bitter, pungent, astringent, *kandughna* and *shothahara* actions; and superficial tissue injury through *vranashodhana-vranaropana* actions. Honey and ghee complete the dosage form by providing complementary aqueous and

lipid-phase delivery properties.

The ingredient literature also gives the formulation a credible research basis. Curcuminoids, berberine-related alkaloids, brazilin-type homoisoflavonoids, *Rubia* polyphenols, valerian constituents and *Mesua* phenolics affect biological pathways relevant to inflammation, oxidation, microbial growth or pain. Nevertheless, the evidence is fragmented across different species, plant parts, solvents, concentrations and disease models. These differences prevent direct translation to the classical eight-component preparation.

A second limitation is the broad use of the word "antitoxic." In Ayurveda, *vishaghna* can represent a therapeutic strategy directed toward the manifestations of poison. In modern toxicology, venom neutralization is a specific experimental claim requiring defined venom, concentration, enzyme or cellular endpoint and appropriate controls. Keeping these meanings distinct improves the scientific defensibility of the article without diminishing its classical foundation.

The most realistic first application is therefore a standardized adjunct for uncomplicated local reactions. Even this limited indication requires dermal safety, batch consistency and objective clinical measurement. Anaphylaxis and systemic envenomation remain outside the scope of an unproven traditional product. This clinical boundary should be stated clearly in every protocol and publication.

LIMITATIONS

This was a critical narrative review rather than a systematic review, and regional texts, dissertations or non-indexed reports may have been missed. Classical terms cannot always be mapped to a modern species or mechanism. Most biomedical evidence concerns isolated ingredients or extracts rather than the complete formula. Several Ayurvedic attributes vary among *Nighantu* traditions. These limitations reduce mechanistic and clinical certainty but also identify the information that future studies must report explicitly.

CONCLUSION

Champakadi Agada has a coherent and clinically interpretable Ayurvedic rationale in *Kita Visha*. The combined *rasa-panchaka* and classical actions address *vata*-related pain, *pitta-rakta*-related burning and discoloration, *kapha*-related itching and oedema, and local involvement of *twak* and *mamsa*. Ingredient research provides plausible anti-inflammatory,

antioxidant, analgesic and antimicrobial mechanisms. However, no direct evidence establishes venom neutralization or clinical benefit of the complete formulation. Progress requires a locked formula, authenticated materials, multi-marker quality control, defined dosage form, route-specific safety testing, venom-relevant assays and registered adjunctive clinical trials. Emergency treatment must never be delayed.

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CONFLICT OF INTEREST

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REFERENCES

1. Tripathi B, editor. *Ashtanga Hridayam*. Uttara Sthana, Keetalootadivishapratishedha Adhyaya 37/71–72. Reprint ed. Varanasi: Chaukhambha Surabharati Prakashan, 2012; 1174.
2. Acharya YT, editor. *Sushruta Samhita* with Nibandhasangraha commentary. Kalpa Sthana, Kita Kalpa, Chapter 8. Varanasi: Chaukhambha Orientalia, 2021.
3. Sharma PV. *Dravyaguna Vijnana.* Vol. 2. Varanasi: Chaukhambha Bharati Academy, 2015.
4. Chunekar KC, Pandey GS, editors. *Bhavaprakasha Nighantu.* Varanasi: Chaukhambha Bharati Academy, 2015.
5. Przybilla B, Rueff F. Insect stings: clinical features and management. *Dtsch Arztebl Int.,* 2012; 109(13): 238–248. doi:10.3238/arztebl.2012.0238.
6. Golden DBK, Demain J, Freeman T, Graft D, Tankersley M, Tracy J, et al. Stinging insect hypersensitivity: a practice parameter update 2016. *Ann Allergy Asthma Immunol,* 2017; 118(1): 28–54. doi:10.1016/j.anai.2016.10.031.
7. Cardona V, Ansotegui IJ, Ebisawa M, El-Gamal Y, Fernandez Rivas M, Fineman S, et al. World Allergy Organization anaphylaxis guidance 2020. *World Allergy Organ J.,* 2020; 13(10): 100472. doi:10.1016/j.waojou.2020.100472.
8. National Institute for Health and Care Excellence. *Insect Bites and Stings: Antimicrobial Prescribing.* NICE guideline NG182. London: NICE, 2020.
9. Dudhe PA, Chalakh S. Antitoxic effect of herbal drugs mentioned in Ashtang Hridaya in the context of insect bites. *Int J Adv Med.,* 2025; 12(5): 519–523. doi:10.18203/2349-3933.ijam20252543.

10. Acharjee D, Thorat D. Effect of Champakadi Agad in Shitapitta with special reference to urticaria: a case study. *Int J Ayurvedic Med.*, 2023; 14(4): 1115–1120. doi:10.47552/ijam.v14i4.3967.
11. Hewlings SJ, Kalman DS. Curcumin: a review of its effects on human health. *Foods*, 2017; 6(10): 92. doi:10.3390/foods6100092.
12. Tabrizi R, Vakili S, Akbari M, Mirhosseini N, Lankarani KB, Rahimi M, et al. The effects of curcumin-containing supplements on biomarkers of inflammation and oxidative stress: a systematic review and meta-analysis of randomized controlled trials. *Phytother Res.*, 2019; 33(2): 253–262. doi:10.1002/ptr.6226.
13. Potdar D, Hirwani RR, Dhulap S. Phyto-chemical and pharmacological applications of *Berberis aristata*. *Fitoterapia*, 2012; 83(5): 817–830. doi:10.1016/j.fitote.2012.04.012.
14. Srivastava S, Srivastava M, Misra A, Pandey G, Rawat AKS. A review on biological and chemical diversity in *Berberis* (Berberidaceae). *EXCLI J.*, 2015; 14: 247–267. doi:10.17179/excli2014-399.
15. Guo Y, Chen Y, Tan ZR, Klaassen CD, Zhou HH. Repeated administration of berberine inhibits cytochromes P450 in humans. *Eur J Clin Pharmacol*, 2012; 68(2): 213–217. doi:10.1007/s00228-011-1108-2.
16. Wu SQ, Otero M, Unger FM, Goldring MB, Phrutivorapongkul A, Chiari C, et al. Anti-inflammatory activity of an ethanolic *Caesalpinia sappan* extract in human chondrocytes and macrophages. *J Ethnopharmacol*, 2011; 138(2): 364–372. doi:10.1016/j.jep.2011.09.011.
17. Nirmal NP, Panichayupakaranant P. Antioxidant, antibacterial, and anti-inflammatory activities of standardized brazilin-rich *Caesalpinia sappan* extract. *Pharm Biol.*, 2015; 53(9): 1339–1343. doi:10.3109/13880209.2014.982295.
18. Wen M, Chen Q, Chen W, Yang J, Zhou X, Zhang C, et al. A comprehensive review of *Rubia cordifolia* L.: traditional uses, phytochemistry, pharmacological activities, and clinical applications. *Front Pharmacol*, 2022; 13: 965390. doi:10.3389/fphar.2022.965390.
19. Shen CH, Liu CT, Song XJ, Zeng WY, Lu XY, Zheng ZL, et al. Evaluation of analgesic and anti-inflammatory activities of *Rubia cordifolia* L. by spectrum-effect relationships. *J Chromatogr B Analyt Technol Biomed Life Sci.*, 2018; 1090: 73–80. doi:10.1016/j.jchromb.2018.05.021.

20. Gilani AH, Khan AU, Jabeen Q, Subhan F, Ghafar R. Antispasmodic and blood pressure lowering effects of *Valeriana wallichii* are mediated through K^+ channel activation. *J Ethnopharmacol*, 2005; 100(3): 347–352. doi:10.1016/j.jep.2005.05.010.
21. Katoch O, Kaushik S, Kumar MS, Agrawala PK, Misra K. Radioprotective property of an aqueous extract from *Valeriana wallichii*. *J Pharm Bioallied Sci.*, 2012; 4(4): 327–332. doi:10.4103/0975-7406.103272.
22. Zhang X, Gao R, Liu Y, Cong Y, Zhang D, Zhang Y, et al. Anti-virulence activities of biflavonoids from *Mesua ferrea* L. flower. *Drug Discov Ther.*, 2019; 13(4): 222–227. doi:10.5582/ddt.2019.01053.
23. Jalalpure SS, Mandavkar YD, Khalure PR, Shinde GS, Shelar PA, Shah AS. Antiarthritic activity of various extracts of *Mesua ferrea* Linn. seed. *J Ethnopharmacol*, 2011; 138(3): 700–704. doi:10.1016/j.jep.2011.09.042.
24. Mandal MD, Mandal S. Honey: its medicinal property and antibacterial activity. *Asian Pac J Trop Biomed*, 2011; 1(2): 154–160. doi:10.1016/S2221-1691(11)60016-6.
25. McLoone P, Warnock M, Fyfe L. Honey: a therapeutic agent for disorders of the skin. *Cent Asian J Glob Health*, 2016; 5(1): 241. doi:10.5195/cajgh.2016.241.
26. Jull AB, Cullum N, Dumville JC, Westby MJ, Deshpande S, Walker N. Honey as a topical treatment for wounds. *Cochrane Database Syst Rev.*, 2015; 3: CD005083. doi:10.1002/14651858.CD005083.pub4.
27. Gagnier JJ, Boon H, Rochon P, Moher D, Barnes J, Bombardier C; CONSORT Group. Reporting randomized, controlled trials of herbal interventions: an elaborated CONSORT statement. *Ann Intern Med.*, 2006; 144(5): 364–367. doi:10.7326/0003-4819-144-5-200603070-00013.
28. World Health Organization. *Quality Control Methods for Herbal Materials.* Geneva: World Health Organization, 2011.