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A CRITICAL REVIEW ON KARNA DHOOPAN MENTIONED IN AYURVEDIC SAMHITAS AND ITS MODERN RELEVANCE

Vd. Shivani R Gadewar — PG Scholar, Dept. of Shalakya Tantra, PDEA's College of Ayurved and Research Centre, Nigdi Pune, Maharashtra India.

Vd. Chandana Virkar — HOD and Professor, Dept. of Shalakya Tantra, PDEA's College of Ayurved and Research Centre, Nigdi Pune, Maharashtra India.

ABSTRACT **Background:** Karna Dhoopan (medicated fumigation of the ear) is described in classical Ayurvedic texts as a unique Kriya Kalpa procedure for Karnagata Vyadhis (ear disorders). **Objective:** To review classical references on Karna Dhoopan in Brihattrayi and Laghutrayi, and assess its possible role in modern otology. **Methods:** Literary review of Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, along with Madhava Nidana, Sharangadhara Samhita, and Bhavaprakasha. Modern correlations were explored with conditions such as otitis externa, otomycosis, and eczema of the ear canal. **Results:** Karna Dhoopan is suggested for Karna Shula, Karnakandu, Karnastrava, Krimikarana, and foul smell. Drugs such as Guggulu, Sarjarasa, Nimba, Haridra, Vacha, and Devadaru are recommended. The probable actions include antimicrobial, antifungal, deodorizing, drying, and analgesic effects. **Conclusion:** Karna Dhoopan offers a safe and potentially effective local therapy for selected ear complaints when used judiciously. Its role as an adjunct to modern ENT management appears promising, warranting further research.

KEYWORDS : Ear Disease, Fumigation therapy, Karna Dhoopan, Shalakyatantra.

INTRODUCTION

Ear disorders are highly prevalent worldwide, ranging from minor irritation and itching to chronic infections that impair quality of life. In modern otolaryngology, conditions such as otitis externa, otomycosis, cerumen impaction, and chronic eczematous otitis are frequently reported [1,2]. Despite effective antimicrobials, challenges like drug resistance, recurrence, and adverse effects of prolonged topical therapies remain [3]. Thus, there is a growing interest in safe, complementary, and localized treatment modalities.

Ayurveda describes ear disorders under Karnagata Vyadhi, with specific mention of therapeutic measures known as Kriya Kalpas. These include Karna Poorana (ear oil instillation), Karna Varti (ear wick), Karna Pichu (ear pack), and Karna Dhoopan (ear fumigation). Karna Dhoopan is distinctive as it employs medicated smoke rather than liquid instillation, offering benefits of drying, antimicrobial action, and deodorization [4].

Classical texts emphasize its utility in conditions characterized by Kledabhava (excessive moisture), Krimi (infestation/microbial growth), Kandu (itching), Shula (pain), and foul smell. [5] Unlike liquid instillation, which may sometimes increase ear dampness and predispose to infection, fumigation ensures warmth, dryness, and targeted delivery of volatile phytoconstituents.

Modern pharmacological studies have revealed that herbs used in Karna Dhoopan-such as Guggulu (Commiphora wightii), Nimba (Azadirachta indica), Haridra (Curcuma longa), and Vacha (Acorus calamus)-possess antimicrobial, antifungal, anti-inflammatory, and antioxidant activities. These actions directly correlate with pathogens like Pseudomonas aeruginosa, Staphylococcus aureus, and Aspergillus niger, which are commonly implicated in otitis externa and otomycosis [6-10].

This article critically reviews classical references of Karna Dhoopan in Brihattrayi and Laghutrayi, explores its pharmacological basis, and discusses modern clinical relevance in otology.

Classical References

Table No. 1 Showing Classical reference of Karna Roga and Karna Dhoopan

Text	Indication for Dhoopan	Recommended Drugs
Sushruta Samhita[11]	Karna Shula (ear pain), Karna Kandu (itching), Karna Shrava (discharge), Krimi-Karna (infestation)	Sarjarasa, Guggulu, Vacha, Devadaru
Ashtanga Hridaya [12]	After ear cleansing, especially in itching and discharge	Not specifically listed
Charaka Samhita[13]	Krimighna (anthelmintic), Kledaghna (reduces dampness), removes foul smell	Not specifically listed
Madhava Nidana [5] (Karna Roga Adhikara)	Krimi-Karna (ear infestation), worms, foul smell	Dhoomaprayoga (fumigation)
Sharangadhara Samhita (Madhyama Khanda) **[14]**	Ear pain, itching	Guggulu, Vacha, Aguru
Bhavaprakasha (Uttarardha, Karna Roga Prakarana) [15]	Karna Kandu (itching), Karna Shula (ear pain)	Haridra, Nimba, Karpura

These descriptions across ancient texts establish Karna Dhoopan as a time-tested procedure in ear therapeutics.

3. Indications According Modern Correlation

- **Otitis externa:** pain, itching, foul smell, mild swelling [1].
- **Otomycosis:** fungal infection with itching and debris [2].
- **Chronic eczematous otitis externa:** dampness, irritation, foul smell.
- **Cerumen impaction:** as a drying aid post-cleaning.

Contraindications:

active pus discharge, post-surgical ear, high fever with severe pain, children <5 years, patients with asthma/COPD. [16]

4. Herbs in Karna Dhoopan: Choose herbs with antimicrobial, antifungal, analgesic, and deodorizing properties. Commonly used herbs: [6-11]

Table No. 2 Showing Herbs Use For Karna Dhoopan

Herb	Botanical Name	Properties / Actions
Guggulu	*Commiphora wightii*	Antimicrobial, wound healing
Vacha	*Acorus calamus*	Antibacterial, antifungal
Nimba	*Azadirachta indica*	Insecticidal, antifungal
Haridra	*Curcuma longa*	Anti-inflammatory, antioxidant
Devadaru	*Cedrus deodara*	Antimicrobial, deodorizing
Sarjarasa	*Vateria indica*	Aromatic, cleansing, pain relieving
Karpura	*Cinnamomum camphora*	Aromatic, cleansing, pain relieving
Aguru	***Aquilaria agallocha***	Aromatic, cleansing, pain relieving

Formulation: Powdered herbs can be prepared into sticks (*Dhoopan Varti*) or used as a loose mixture for fumigation.

5. Suggested Procedure [17]

1. Instruments

- **Dhoopan Yantra** (traditional ear fumigation vessel) or modern electric fumigator.

- **Hollow tube/funnel** to direct smoke into the external auditory canal.
- **Cotton/cloth** to protect eyes and nose from smoke.

2. Patient Preparation

1. Take **informed consent** and explain the procedure.
2. Thorough ear examination with otoscopy.
3. Perform **aural toilet**ing (cleaning) if ear canal contains debris, cerumen, or discharge.
4. Seat the patient comfortably, preferably in an **upright position**, in a **draught-free room.**

3. Patient Positioning

- Head positioning to allow fumes inside the ear.
- Eyes and nose covered with cotton or cloth to prevent irritation from smoke.

4. Fumigation Procedure

1. Ignite the **herbal mixture** in the Dhoopan Yantra or modern fumigator.
2. Direct **warm medicated smoke** through a hollow tube/funnel toward the **external auditory canal.**
3. Maintain a distance of **10–15 cm** from the ear to avoid burns.
4. Allow smoke to **enter the canal gently** for **30–90 seconds per session.**
5. Repeat the fumigation **2–3 times** in the same sitting, based on patient tolerance.
6. Both ears can be treated, if needed, with same precautions.

5. Post-Fumigation Care

- Inspect ear canal to ensure no irritation or burns.
- Optionally, place a **sterile cotton pledget into the canal.**
- Advise the patient to avoid water entry into the ear for a few hours.

6. Frequency and Duration

- **Once daily or alternate days** depending on severity.
- Usually **3–5 sittings** suffice for mild conditions; more sessions may be indicated for chronic cases.

7. Precautions

- Always test the **temperature of the smoke** on the wrist before directing into the ear.
- Avoid **prolonged exposure** to prevent burns.
- Protect eyes and nose with cotton or cloth.
- Use in a **well-ventilated room** to minimize smoke inhalation.

6. Mechanism of Action

Ayurvedic view: Kledaghna, Krimighna, Vedana Shamana, Kandughna.

Modern view:

- Volatile oils → antimicrobial, antifungal.
- Warmth → reduces edema and fungal growth.
- Aromatics → deodorization.
- Heat → counter-irritation, analgesia.
- Drying → prevents recurrence.

7. Integration with Modern ENT Care

- **Otitis externa:** Aural toilet + antibiotic drops; Dhoopan accelerates symptom relief [1].
- **Otomycosis:** Cleaning + antifungal drops; Dhoopan reduces recurrence [2].
- **Eczematous canal:** Steroids for inflammation; Dhoopan reduces moisture.
- **Cerumen removal:** After irrigation/suction, Dhoopan aids drying.

8. Research Done On Karna Dhoopan

Conceptual Study: Karna Dhoopan and Karna Pichu are traditional Ayurvedic therapies used for ear disorders like otitis externa, tinnitus, and dryness. Standardization and clinical trials are suggested for wider application [18].

Karna Dhoopan as described in classical Ayurvedic texts (*Brihat Trayi*) and modern literature, highlighting its use for **ear disorders** such as Shoola, Karna Kandu, Karna Strava, and infections. It also discusses **procedure, indications, herbs used, and therapeutic benefits** of the therapy. [19]

Antibacterial Activity: In vitro studies show that Karna Dhoopan Yoga exhibits antibacterial effects against *Staphylococcus aureus*, supporting its clinical use in ear infections [20].

Comparative Clinical Trial: A trial at the National Institute of Ayurveda compares Gugguluadi Karna Dhoopan with Karna Pichu for ear discharge (Karnasrava), aiming to evaluate efficacy in Chronic Suppurative Otitis Media [21].

Integrative Review: A recent review consolidates classical references and modern understanding, highlighting procedural methods, therapeutic benefits, and clinical relevance of Karna Dhoopan [22].

Research Needs

- Standardization of Dhoopan formulations.
- Chemical profiling of medicated smoke.
- RCTs comparing Dhoopan with standard care.
- Development of controlled-temperature fumigators.

DISCUSSION

Ear disorders, from mild irritation to chronic infections, remain challenging due to recurrence and drug resistance. Karna Dhoopan, an Ayurvedic ear fumigation technique, provides a localized, non-invasive therapy that delivers warmth, dryness, and bioactive herbal volatiles directly to the ear canal. Classical texts consistently recommend it for pain, itching, discharge, and foul smell, and modern studies support its antimicrobial, antifungal, anti-inflammatory, and deodorizing effects against pathogens implicated in otitis externa and otomycosis. Recent research, including in vitro antibacterial studies and ongoing clinical trials in chronic ear conditions, confirms its therapeutic potential. Karna Dhoopan complements conventional ENT care by reducing moisture, microbial load, and inflammation while promoting comfort and symptom relief. Standardization of formulations, chemical profiling, and controlled trials are needed to establish its role in evidence-based practice.

In essence, Karna Dhoopan bridges classical Ayurvedic wisdom and modern otology, offering a safe and practical adjunct for ear disorders.

CONCLUSION

Karna Dhoopan is a distinctive fumigation therapy for ear disorders, documented in both Brihattrayi and Laghutrayi. Its antimicrobial, antifungal, deodorizing, and drying actions are highly relevant to ENT practice. With careful patient selection and safety measures, it may serve as a valuable adjunct to modern otology, especially in otitis externa, otomycosis, and eczematous ear conditions. Further research is warranted to establish evidence-based protocols.

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