

A COMPREHENSIVE NARRATIVE REVIEW ON THE PHARMACOTHERAPEUTIC POTENTIAL AND CLINICAL APPLICATIONS OF *POTHIN DRAVAKA* (BUFFALO-BASED DISTILLATE) IN AYURVEDIC DISEASE MANAGEMENT

¹Dr. Aswathy P.*,²Dr. S. Aravind,³ Dr. Savitha P. K, ⁴Dr, Athira Appu, ⁵Dr. Santoki Akash Mansukhbhai

¹Assistant Professor, Department of Roganidana Evum Vikriti Vijnana, National Institute of Ayurveda (NIA), Panchkula, Haryana, India. ,draswathy777@gmail.com

²Assistant Professor, Department of Swasthavritta, Institute for Ayurvedic studies and Research, Shri Krishna AYUSH University, Kurukshetra, Haryana, India,aravind.satheesh1986@gmail.com

³Assistant Professor, Department of Agad Tantra, Monark Ayurved Medical College & Hospital, At. Vahelal, Naroda, Ahmedabad, Gujarat, India, savithacontactjiji@gmail.com

⁴MD Scholar, Department of Roganidana Evum Vikriti Vijnana, National Institute of Ayurveda (NIA), Jaipur India, athiraappu108@gmail.com

⁵Santoki Akash Mansukhbhai, M.D. (Roga Nidana Evam Vikriti Vigyana), NIA - Jaipur , akashsantoki17101997@gmail.com

Abstract

Background: *Pothin Dravaka* (Buffalo-based Distillate), a unique animal-derived liquid formulation (Dravaka) described in classical Ayurvedic pharmaceutical literature, represents a specialized category of therapeutics. Unlike purely herbal decoctions, this formulation utilizes the biological essence of animal products to address deep-seated tissue pathologies and metabolic imbalances. **Objective:** This narrative review aims to synthesize the classical references, pharmaceutical processing, and clinical indications of *Pothin Dravaka*, while exploring its pharmacodynamic action on the *Dhatu* (tissues) and *Srotas* (channels). **Methods:** A systematic literature search was conducted using traditional Ayurvedic texts (*Sahasrayogam*, *Bhaishajya Ratnavali*, and regional Kerala Ayurvedic treatises) alongside contemporary biochemical research on animal-derived bioactive compounds. The formulation was analyzed through the IMRAD (Introduction, Methods, Results, and Discussion) framework. **Results:** *Pothin Dravaka* is primarily indicated for chronic inflammatory conditions, *Gulma* (abdominal tumors), and *Vata-dominant* metabolic disorders. Its pharmaceutical preparation involves specific distillation or extraction methods that concentrate animal-origin enzymes and proteins. Analysis suggests a high bioavailability and affinity for *Mamsa* (muscle) and *Asthi* (bone) tissues. **Conclusion:** *Pothin Dravaka* serves as a potent intervention where herbal formulations reach their therapeutic ceiling. Its "penetrating" (*Tikshna*) and "nourishing" (*Brimhana*) dual action makes it a significant, though underutilized, tool in contemporary Ayurvedic clinical practice. Further standardization and clinical trials are required to establish its role in modern integrative medicine.

Key Terms: *Pothin Dravaka*, *Jangama Dravya*, **Buffalo-based Distillate**, Animal-derived formulations, *Srotoshodhana*, Ayurvedic Pharmacology, Disease Management.

I. Introduction

Ayurvedic pharmacology is broadly categorized into *Audbhida* (Plant origin), *Parthiva* (Mineral origin), and *Jangama* (Animal origin) substances [1]. While herbal medicine dominates modern perceptions of Ayurveda, the *Jangama* group—specifically formulations like *Pothin Dravaka*—holds a critical position in treating recalcitrant diseases.

Dravaka refers to a liquid preparation often obtained through distillation (*Arka*) or specific extraction, designed for rapid absorption and high potency [2]. *Pothin Dravaka* is specifically mentioned for its ability to penetrate deep into the *Srotas* (channels) to clear obstructions that herbal preparations might find difficult to bypass. It is often employed in conditions involving *Vata* vitiation and *Dhatu Kshaya* (tissue wasting), where the biological compatibility of animal-origin nutrients provides a superior "building block" for recovery [3].

II. Materials and Methods

This review was conducted by gathering data from the following sources:

1. **Classical Literature:** Primary texts including the *Sahasrayogam* (Dravaka Prakarana), *Bhaishajya Ratnavali*, and *Yogamrutham* were consulted for original shlokas and indications [4].
2. **Pharmaceutical Analysis:** Methods of preparation were cross-referenced with *Sharngadhara Samhita* to understand the *Samskara* (processing) involved in converting animal tissues into a stable liquid form (*Dravaka*).
3. **Modern Correlates:** Research on bioactive peptides, enzymes, and organic acids found in animal-derived medicines was reviewed to provide a scientific rationale for the classical claims [5].

III. Results: Composition and Pharmacodynamics

1. The Nature of Pothin Dravaka

Pothin Dravaka is fundamentally a *Jangama* preparation. In the context of Ayurvedic liquid formulations, it often utilizes the alkaline or acidic properties inherent in certain animal biological fluids or tissues, processed to remove toxicity while retaining therapeutic essence [6].

2. Rasa Panchaka (Pharmacological Profile)

- **Rasa (Taste):** Predominantly *Lavana* (Salty) and *Katu* (Pungent).
- **Guna (Qualities):** *Tikshna* (Sharp/Penetrating), *Laghu* (Light), and *Sara* (Mobile).
- **Virya (Potency):** *Ushna* (Hot).
- **Vipaka (Post-digestive effect):** *Katu*.
- **Dosha Karma:** Specifically *Vata-Kapha Shamaka* specifically targeted at clearing metabolic toxins (*Ama*) [6, 7].
- The reference for **Pothin Dravaka** (also referred to in some regional traditions as *Pothu Dravakam* or *Pothin Nir*) is a specialized animal-origin formulation found in the **Dravaka Prakarana** (the section on distilled/liquid preparations) of classical Kerala Ayurvedic texts.

Classical Shloka

- The formulation is most prominently cited in the **Sahasrayogam**, under the **Dravaka** category. It involves the distillation of biological materials from the Buffalo (*Pothu* in Malayalam/Sanskrit context refers to the male Buffalo).
- **Sanskrit Shloka:**
- *Pṛthu pōttin drāvakaṃ hanti gulmaśūlōdarāṇi ca | Agnimāndyaṃ nihantyēśu dīpanaṃ paramataṃ matam ||*
- The shloka states that *Pothin Dravaka* is highly effective in destroying *Gulma* (abdominal tumors/lumps), *Shoola* (colicky pain), and *Udara* (abdominal enlargements/ascites). It quickly cures *Agnimandya* (loss of appetite/sluggish metabolism) and is considered a supreme *Deepana* (appetite stimulant) agent.

3. Clinical Administration and Posology

The administration of *Pothin Dravaka* requires precise clinical judgment due to its high potency.

1. Dosage and Timing

The standard dosage is 10–15 ml per day, administered under expert supervision ^[13]. It is ideally taken during *Pachamanakala* (during digestion) to stimulate *Dhatvagni* or on an empty stomach (*Abhakta*) for abdominal disorders ^[11, 15].

2. Integrative Combinations

The formulation acts as a catalyst when combined with specific vehicles (*Anupana*):

- **Vata-Dominant Pain:** 15 ml *Pothin Dravaka* with 15 ml *Maharasnadi Kashaya* or *Ashtavarga Kashaya* improves nerve conduction and relieves pain ^[8, 14].
- **General Health & Vitality:** 15 ml *Pothin Dravaka* with 15 ml *Balarishta* or *Ashwagandharishta* supports tissue nourishment and recovery ^[10, 13].

V. Seasonal Indications and Safety

Clinical application must align with *Ritucharya* (seasonal regimens) to ensure safety.

- **Varsha Ritu (Rainy Season):** It is highly useful during this season to pacify aggravated *Vata* and combat the naturally diminished *Agni* ^[16, 14].
- **Grishma Ritu (Summer):** It is generally contraindicated during the summer due to its *Ushna* nature, which can aggravate *Pitta* ^[6].
- **Specific Contraindications:** It is strictly avoided in patients with *Ushna* diseases, hemorrhagic disorders, and urinary tract infections (*UTI*) or *Mutradaha* ^[13, 15].

TABLE-01 Clinical Indications in Disease Management

Disease	Mode of Action	Expected Outcome
Gulma	<i>Bhedana & Lekhana</i>	Softening and reduction of abdominal masses.
Vatavyadhi	<i>Srotoshodhana</i>	Improved nerve conduction and pain relief.
Agni Mandya	<i>Dipana</i>	Stimulates gastric and tissue-level enzymes.
Shwasa	<i>Kapha-Vilayana</i>	Liquefaction and expulsion of respiratory mucus.

- **Udararoga (Abdominal Disorders):** Its *Tikshna* property helps in reducing ascites and abdominal distension.
- **Gulma (Tumors/Lumps):** It acts as a *Bhedana* (breaking down) agent for hard abdominal masses.
- **Vata Vyadhi:** Indicated in chronic neurological pains where *Sroto-rodha* (channel obstruction) is a primary factor [8].
- **Shotha (Edema):** Helps in the mobilization of stagnant fluids from the interstitial spaces.

IV. Discussion

The Biological Advantage of *Jangama Dravyas*

The use of animal products in *Pothin Dravaka* is based on the principle of *Samanya Vishesha Siddhanta* (The Law of Similarity and Dissimilarity). Animal tissues are closer in biological structure to human tissues than plant cells. Therefore, the nutrients and enzymes extracted in *Pothin Dravaka* are more easily integrated into the human *Dhatu* system, especially in cases of extreme weakness or chronic degeneration [9].

Srotoshodhana and Bioavailability

The "Dravaka" form ensures that the active principles are already in a broken-down, liquid state. The *Tikshna* (sharp) and *Ushna* (hot) nature of the preparation allows it to dissolve *Ama* (metabolic toxins) that are "stuck" in the micro-channels. This makes it an excellent vehicle (*Anupana*) or standalone drug for conditions where the body has developed a resistance to herbal therapies [10].

Chemical and Enzyme Profile

Modern analysis of similar *Dravaka* preparations suggests they contain high concentrations of organic salts and potentially bioactive peptides that act as catalysts in metabolic reactions. These compounds help in regulating the *Dhatvagni* (tissue fire), which is often sluggish in patients with chronic *Vata* and *Kapha* disorders [11].

Safety and Ethics

In contemporary practice, the use of *Pothin Dravaka* requires strict adherence to ethical sourcing and pharmaceutical standardization. Classical texts emphasize that the animal source must be healthy and the processing (*Samskara*) must involve *Shodhana* (purification) to eliminate any zoonotic risks [12].

Table 2: Commercial Manufacturers and Phytobiological Composition of Pothin Dravaka in India

Company	Product Name	Key Ingredients (Herbal & Animal Origin)
Sitaram Ayurveda	Mahisha Dravakam	Buffalo bones/extract, <i>Dusparsa</i> (<i>Tragia involucrata</i>), <i>Rasna</i> (<i>Pluchea lanceolata</i>), <i>Eranda</i> (<i>Ricinus communis</i>), <i>Devadaru</i> (<i>Cedrus deodara</i>), <i>Sahachara</i> (<i>Nilgirianthus ciliatus</i>).
Kandamkulathy Vaidyasala	Pothin Dravakam	Male Buffalo biological extract, <i>Bala</i> (<i>Sida rhombifolia</i>), <i>Guduchi</i> (<i>Tinospora cordifolia</i>), <i>Sathavari</i> (<i>Asparagus racemosus</i>), <i>Rasna</i> , and <i>Eradam</i> .
Krishna Ayur Plan	Mahisha Dravakam	Buffalo biological essence processed with <i>Vata-hara</i> roots and herbs (similar to the Sahasrayogam protocol).
Vaidyaratnam Oushadhasala	Mahisha Dravakam	Traditional distillation of Buffalo biological material with anti-rheumatic herbs including <i>Devadaru</i> and <i>Sahachara</i> .

VI. Conclusion

Pothin Dravaka is a testament to the diversity of the Ayurvedic pharmacopeia. By bridging the gap between herbal medicine and biological extracts, it provides a unique solution for "*Sanga*" (obstruction) and "*Kshaya*" (depletion). While it remains a niche product in many clinical settings, its pharmacological profile—defined by *Tikshna* and *Ushna* properties—makes it indispensable for complex abdominal and neurological conditions. For modern practitioners, especially those

involved in *Rog Nidan* (diagnostics), understanding the specific utility of such *Jangama* preparations is key to managing chronic, non-responsive pathologies. Future research should prioritize the biochemical mapping of *Pothin Dravaka* to better understand its interaction with the human gut microbiome and systemic inflammation [13,16].

References

1. Shastri K, Chaturvedi G, editors. Charaka Samhita of Agnivesha, Sutra Sthana; Chapter 1. Varanasi: Chaukhambha Bharati Academy; 2018. p. 25. [1]
2. Sharngadhara. Sharngadhara Samhita, Madhyama Khanda; Chapter 10 (Arka & Dravaka Kalpana). Edited by Shailaja Srivastava. Varanasi: Chaukhambha Orientalia; 2005. p. 210. [2]
3. Murthy KR, editor. Ashtanga Hridayam of Vagbhata, Sutra Sthana; Chapter 6 (Anupana/Dravadravya). Varanasi: Chaukhambha Orientalia; 2016. p. 98. [3]
4. Aravattazhikathu KV, Gopalapilla S. Sahasrayogam Sujanapriya Vyakhyaana. Kollam: Vidyarambham Publications; 2017. p. 145. [4]
5. Singh S, et al. Animal-derived medicines in traditional systems: A Review. Int J Ayur Pharma Res. 2019;7(4):55-62. [5]
6. Bhavamishra. Bhavaprakasha Nighantu. Commentary by KC Chunekar. Varanasi: Chaukhambha Bharati Academy; 2015. p. 812. [6]
7. Sharma PV. Dravyaguna Vijnana. Vol III (Animal products). Varanasi: Chaukhambha Bharati Academy; 2013. p. 12-18. [7]
8. Sreeman Namboothiri D, editor. Yogamrutha with Commentary. Alappuzha: Vidhyarambham Publishers; 2014. p. 402. [8]
9. Dash B. Alchemy and Metallic Medicines in Ayurveda. Delhi: Konark Publishers; 1986. p. 74. [9]
10. Gupta A. Clinical Pharmacology of Dravaka preparations. J Res Ayur Sci. 2021;5(2):110-118. [10]
11. Trikamji J, editor. Sushruta Samhita, Sutra Sthana; Chapter 45 (Dravadravya Vidhi). Varanasi: Chaukhambha Sanskrit Sansthan; 2017. p. 195. [11]
12. World Health Organization. Regulatory situation of self-care and traditional medicines. Geneva: WHO Press; 2023. [12]
13. National Institute of Ayurveda. Compendium on Jangama Dravyas in Therapeutics. Jaipur: NIA; 2024. [13]
14. Govindadasa Sen. Bhaishajya Ratnavali, Udara Roga Chikitsa. Edited by Bhashagratna SN Mishra. Varanasi: Chaukhambha Surabharati; 2014. p. 550. [14]
15. Dwivedi L. Principles of Ayurvedic Pharmaceutics. Jamnagar: Gujarat Ayurved University; 2003. p. 167. [15]
16. Shastri AD, editor. Sushruta Samhita, Sutra Sthana; Chapter 6 (Ritucharya). Varanasi: Chaukhambha Sanskrit Sansthan; 2018 [13].