

## EXPLORING BHANGA TOXICITY: AYURVEDIC APPROACHES TO POISONING, PREVENTION AND TREATMENT

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### ABSTRACT

**Bhanga** (*Cannabis sativa* Linn.), a revered medicinal plant in Ayurveda, is extensively utilized for its therapeutic effects such as *vedanasthapana* (pain relief), *nidrajanana* (inducing sleep), and *manah-prasadan* (mental calmness). However, when consumed improperly, excessively or by vulnerable individuals, it may act as a *vishadravya* (toxic substance), leading to a spectrum of deleterious effects. This dual nature of *Bhanga* makes it a unique and critical subject within the domain of *Agad Tantra*. This article explores *Bhanga vishakta* (Bhanga poisoning) from an Ayurvedic perspective—highlighting the causative factors (*hetu*), pathogenesis (*samprapti*), dosha involvement, clinical features (*lakshana*), and both classical and contemporary management strategies. Typical symptoms of *Bhanga visha* include delirium, hallucinations, increased heart rate, impaired cognition, and behavioral disturbances—correlating with *vata-pittaja* vikaras in Ayurvedic pathology. Ayurvedic management involves

*shodhana* (purificatory procedures), *shamana* (palliative therapies), and the use of specific *vishaghna dravyas* (antidotal herbs) like *Vacha*, *Haridra*, and *Brahmi*. Supportive measures, dietary regulations (*pathya-apathya*), and mental health balancing interventions such as *manasika chikitsa* and *sattvavajaya* therapy are also integral. This paper thus emphasizes the critical need for public awareness and practitioner readiness in addressing herbal substance misuse under the light of *Agad Tantra*.

**KEYWORDS:** *Cannabis sativa*, *Bhanga poisoning*, *Vishadravya*, *Shodhana* and *Shamana therapies*, *Sattvavajaya chikitsa*.

## INTRODUCTION

Bhanga (*Cannabis sativa* Linn.), also known as *Vijaya* in Ayurveda, is a psychoactive plant recognized for its diverse medicinal properties. Described in classical Ayurvedic texts as *vedanasthapana* (analgesic), *nidrajanana* (sedative), and *deepana* (digestive stimulant), Bhanga<sup>[1]</sup> is used in various Ayurvedic formulations with therapeutic intent.<sup>[2]</sup> However, this same herb, when improperly administered or overused, can manifest toxic effects,<sup>[3]</sup> making it a significant subject within the scope of Agad Tantra. While Bhanga holds a long history of ritualistic, recreational and medicinal use in India, its psychoactive effects, attributed mainly to delta-9-tetrahydrocannabinol (THC), can lead to central nervous system disturbances when taken in excess.<sup>[4]</sup> Classical texts refer to the intoxicating properties of Bhanga and caution its misuse.<sup>[5]</sup> *Raja Nighantu* classifies Bhanga under *madakari dravyas* (intoxicants), and *Sharangadhara Samhita* warns of its *vatapittakara* tendencies if used without proper anupana or in high doses. Bhanga exists in three primary forms—*Bhang* (leaves), *Ganja* (flowering tops), and *Charas* (resin)—each varying in potency and toxicity. Among these, *Charas* is the most intoxicating, followed by *Ganja*, while *Bhang* is comparatively milder. From an Ayurvedic lens, all three can vitiate *Vata* and *Pitta* doshas, but *Charas* particularly affects *Manovaha Srotas*, requiring more intensive *Sattvavajaya* and *Shodhana chikitsa*.

The symptoms of Bhanga visha may include delirium, disorientation, tremors, hallucinations, restlessness, and in severe cases, psychotic episodes.<sup>[6]</sup> From an Ayurvedic standpoint, these align with *vatapittaja vikara*, where *Vata*'s *chalatva* (mobility) and *Pitta*'s *ushnata* (heat) vitiation affect *manovaha srotas* (channels of the mind).

The present article aims to explore the concept of Bhanga Vishakta through Ayurvedic and modern lenses, outlining the pathophysiology, symptomatology, and classical management techniques. Ayurvedic management includes *Shodhana* (purificatory procedures), *Shamana* (palliative measures), and the use of *vishaghna dravyas* (antidotal herbs) such as *Vacha*, *Haridra*, and *Brahmi*.<sup>[7]</sup> These are often supported by *Sattvavajaya chikitsa* and *daivavyapashraya* for psychological balance. Recent pharmacological studies also validate the neuroprotective and calming roles of herbs used in Bhanga poisoning.<sup>[8]</sup>

In the current age of increasing cannabis use and potential misuse, it becomes essential to revisit and re-establish the principles of *Ayurved Science* for timely intervention, awareness and holistic recovery.

## MATERIALS AND METHODS

This is a descriptive and analytical review-based study focusing on Ayurvedic and modern perspectives of *Bhanga* (*Cannabis sativa*) toxicity. The study incorporates classical Ayurvedic texts, modern toxicology research papers, pharmacological data and clinical observations regarding cannabis poisoning.

All literature, classical and modern, related to the toxicology, pharmacodynamics, symptoms and treatment of *Bhanga* poisoning were included. Articles and references focusing solely on the recreational or economic use of cannabis were excluded unless they discussed toxicity.

**METHODOLOGY:** Detailed textual analysis was performed on the classical Ayurvedic texts to extract references on *Bhanga*, its properties (*guna, karma*), indications, and toxic symptoms.

The *dosha* involvement, *samprapti* and *chikitsa siddhanta* were derived based on Agad Tantra frameworks. The therapeutic interventions like *Shodhana, Shamana, Vishaghna dravyas, Sattvavajaya chikitsa* and *Pathya-Apathya* were compiled systematically.

Comparative toxicological data from modern research on cannabis poisoning were analyzed to validate and correlate *Ayurvedic* principles.

## RESULTS / OBSERVATIONS

The literary analysis and review revealed the following key findings regarding.

### *Bhanga* toxicity and its Ayurvedic management

#### 1. *Dosha* Involvement

- Predominantly **Vata and Pitta** doshas are vitiated in *Bhanga visha*.<sup>[9,11]</sup>
- *Vatapitta prakopa* leads to **manasika vikara** (mental disturbances), restlessness, dryness, dizziness, and hallucinations.<sup>[12]</sup>

## 2. Clinical Features of *Bhanga Vishakta*<sup>[13,14]</sup>

Based on Ayurvedic and modern descriptions, common symptoms include

Symptom	Ayurvedic Term	Dosha Involvement
Anxiety, restlessness	<i>Chittodvega</i>	Vata-Pitta
Hallucinations, altered sense	<i>Moha, Bhrama</i>	Vata
Dryness in mouth	<i>Mukhshosha</i>	Vata
Tachycardia	<i>Hridrava</i>	Pitta
Sleep disturbances	<i>Nidranasha</i>	Vata
Excessive laughter or crying	<i>Hasa-Rodanayoga</i>	Vata

## 3. Ayurvedic Management<sup>[15,16]</sup>

Step	Details
<b>Shodhana Chikitsa</b>	Mild <i>Mridu Virechana</i> , <i>Nasya</i> with <i>Anu Taila</i>
<b>Shamana Chikitsa</b>	Use of <i>Brahmi</i> , <i>Vacha</i> , <i>Shankhpushpi</i> , <i>Haridra</i> , <i>Jatamansi</i>
<b>Sattvavajaya Chikitsa</b>	<i>Manonigraha</i> , <i>Aatmavijnana</i> , positive counsel and meditation
<b>Pathya-Apathya</b>	Light, cooling, unctuous diet; Avoiding spicy, dry, and stimulating substances
<b>Daivavyapashraya Chikitsa</b>	<i>Mantra jap</i> , <i>hom</i> , and <i>spiritual grounding techniques</i>

## DISCUSSION

The current review highlights that ***Bhanga***, though revered in Ayurveda for its therapeutic uses, can exhibit significant toxicological effects when misused or consumed excessively. Classical texts like *Raja Nighantu* categorize *Bhanga* as a *madakari dravya* with the potential to unbalance mental and physical doshas, especially Vata and Pitta. The manifestation of toxicity reflects a *Vatapittaja* pathogenesis, affecting *manovaha srotas*.

Interestingly, the clinical presentation of ***Bhanga Vishakta*** shows remarkable similarities with modern accounts of **cannabis toxicity**, including psychotic symptoms, cognitive disturbances, tachycardia, and emotional imbalance. This aligns with the ancient observations of *Bhrama*, *Moha*, *Chittodvega*, and *Nidranasha*.<sup>[17,18]</sup>

The *Ayurvedic chikitsa* emphasizes a **holistic approach**: not merely detoxification but calming the *mano-dosha* through *Sattvavajaya* and supportive herbs. *Brahmi*, *Jatamansi*, and *Vacha* act as *medhya rasayanas*, proven in modern studies too for their neuroprotective effects.<sup>[19]</sup> Herbs like *Haridra* offer anti-inflammatory and antioxidant properties that aid recovery.

The integrated *chikitsa* plan—*shodhana*, *shamana*, *sattvavajaya* and *pathya*—makes Ayurvedic management uniquely equipped to deal with *Bhanga* poisoning, both physically

and mentally. This becomes especially relevant in today's era of rising recreational cannabis use, where Ayurvedic toxicology can offer non-invasive, plant-based alternatives for detox and emotional balance.

## CONCLUSION

*Bhanga*, while traditionally valued for its medicinal properties in Ayurveda, poses significant risks when consumed improperly, resulting in a distinct toxidrome primarily characterized by *vata-pitta* imbalance affecting the mind and body. This article underscores the classical and modern understanding of *Bhanga* toxicity, affirming the crucial role of *Agad Tantra* in diagnosing and managing such poisonings.

Ayurvedic treatment modalities combining *Shodhana*, *Shamana* and *Sattvavajaya chikitsa* provide a comprehensive approach to detoxification, symptom relief, and mental stabilization. The use of *vishaghna dravyas* like *Brahmi*, *Vacha*, and *Haridra* further supports neurological and psychological recovery, highlighting Ayurveda's holistic strength in toxicology. In light of increasing cannabis use globally, revisiting and revitalizing Ayurvedic protocols for *Bhanga* poisoning is timely and essential. Integrating classical wisdom with contemporary toxicological insights offers a sustainable, effective and patient-centric pathway for managing *Bhanga visha*, safeguarding health while honouring ancient traditions.

## REFERENCES

1. Acharya, Rabinarayan & Tavhare, Swagata. (2016). *Bhanga* (*Cannabis sativa* L.) as an activity potentiator in Ayurvedic classics and Indian alchemy (*Rasashastra*): A critical review. *International journal of Ayurvedic Medicine*, 7: 136-152. DOI-10.47552/ijam.v7i3.829.
2. Ranade, Anagha & Tavhare, Swagata & Acharya, Rabinarayan & Pawar, Sharad. (2022). *Cannabis* (*Bhanga*) in Classical Text of Ayurveda: An Evidence-Based Rationale. 10.1007/978-981-16-8822-5\_12.
3. Sethi, Lincon & Lincon, Kumar & Chauhan, Parul & Negi, Deepti & Tiwari, Ramesh & Dikshit, Manisha & Singh, Anoop & Sharma, Ved. (2023). *BHANGA:-A DRUG REVIEW*. 6: 205-208.
4. Patel J, Marwaha R. *Cannabis Use Disorder*. [Updated 2024 Mar 20]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK538131/>

5. Ranade, Anagha & Tavhare, Swagata & Acharya, Rabinarayan & Pawar, Sharad. (2022). Cannabis (Bhanga) in Classical Text of Ayurveda: An Evidence-Based Rationale. 10.1007/978-981-16-8822-5\_12.
6. Chaudry HR, Moss HB, Bashir A, Suliman T. Cannabis psychosis following bhang ingestion. *Br J Addict.*, 1991 Sep; 86(9): 1075-81. doi: 10.1111/j.1360-0443.1991.tb01874.x. PMID: 1932878.
7. Acharya, Rabinarayan. (2014). Shodhana: An Ayurvedic detoxification Technique and its Impact on certain Medicinal Plants.
8. Priyanka, & Tiwari, R. & Yadav, Aditi & Sharma, Akshu & Indermani,. (2023). Medicinal Uses of Poisonous Plant - A Brief Review. *International Journal of Ayurveda and Pharma Research*, 48-51. 10.47070/ijapr.v10i12.2614.
9. Ram, G Siva & Krishna, C & Kumar, D & Mohan, K. & Babu, Gajji. (2018). Conceptual review on vijaya (cannabis sativa linn.): a forgotten ambrosia. *International Journal of Research in Ayurveda and Pharmacy*, 9: 18-27. 10.7897/2277-4343.09228.
10. <https://www.somamatha.org/ayurvedic-view-of-marijuana.html>
11. <https://ayurveda.pureindianfoods.com/the-use-of-cannabis-in-ayurveda/>
12. <https://www.cadabams.org/blog/bhang-side-effects-treatment>
13. <https://www.planetayurveda.com/library/bhanga-cannabis-sativa/?srsltid=AfmBOorN5-V2XRJliEFQHjGajJwHzOjIC33vqRNBsM5XlMVA3S4ifuN>
14. <https://ishanayurved.com/medicinal-plants/bhanga-marijuana-indian-hemp/>
15. Sandeep Binorkar., et al. "A Review on Mechanism, Therapeutic Uses and Pharmacological Activities of Cannabis sativa". *Acta Scientific Medical*
16. <https://hempstreet.in/blog/future-acmes-of-cannabis/>
17. Hindley G, Beck K, Borgan F, et al. Psychiatric symptoms caused by cannabis constituents: a systematic review and meta-analysis. *Lancet Psychiatry*: 2020; 7(4): 344-353. doi:10.1016/S2215-0366(20)30074-2
18. D'Souza DC, Sewell RA, Ranganathan M. Cannabis and psychosis/schizophrenia: human studies. *Eur Arch Psychiatry Clin Neurosci.*, 2009; 259(7): 413-431. doi:10.1007/s00406-009-0024-2
19. Sorathiya, Parth. (2025). Ayurvedic Management of Substance Abuse Disorders: A Holistic Framework for De-Addiction and Psychosocial Rehabilitation.