

AYURVEDIC APPROACH TO TOXICOLOGY: REVISITING VISHACHIKITSA FOR CONTEMPORARY POISON MANAGEMENT - AN AGADA TANTRA PERSPECTIVE

Dr. Ashish Namdeo^{*1}, Dr. Prafulla², Dr. Sheetal Choudhari³

¹PG Scholar, Department of Agad Tantra Evam Vidhi Vaidhyak, Rani Dullaiya Smriti
Ayurved, PG College and Hospital, Bhopal.

²HOD and Professor, Department of Agad Tantra Evam Vidhi Vaidhyak, Rani Dullaiya
Smriti Ayurved, PG College and Hospital, Bhopal.

³Reader, Department of Agad Tantra Evam Vidhi Vaidhyak, Rani Dullaiya Smriti Ayurved,
PG College and Hospital, Bhopal.

Article Received on 18 July 2026,
Article Revised on 08 August 2026,
Article Published on 16 August 2026,
<https://doi.org/10.5281/zenodo.21912360>

*Corresponding Author

Dr. Ashish Namdeo

PG Scholar, Department of Agad
Tantra Evam Vidhi Vaidhyak, Rani
Dullaiya Smriti Ayurved, PG
College and Hospital, Bhopal.



How to cite this Article: Dr. Ashish Namdeo^{*1},
Dr. Prafulla², Dr. Sheetal Choudhari³. (2026).
Ayurvedic Approach To Toxicology: Revisiting
Vishachikitsa For Contemporary Poison
Management - An Agada Tantra Perspective.
World Journal of Pharmaceutical Research,
15(16), 1–11.

This work is licensed under Creative Commons
Attribution 4.0 International license.

ABSTRACT

Background: Agada Tantra, one of the eight classical branches of Ayurveda (Ashtanga Ayurveda), deals with toxicology and the management of poisons. Ancient Ayurvedic scholars described comprehensive principles regarding Visha (poison), its classification, pathogenesis, diagnosis, prognosis, and treatment modalities. In the present era, increasing exposure to environmental pollutants, pesticides, industrial chemicals, venomous bites, food adulterants, and drug toxicity has intensified the global burden of poisoning. Revisiting the principles of Vishachikitsa may provide valuable insights for integrative poison management. **Objective:** To critically review the principles of Agada Tantra and evaluate the relevance of Vishachikitsa in contemporary poison management. **Methods:** A comprehensive literary review was conducted using classical Ayurvedic texts including Charaka Samhita, Sushruta Samhita,

Ashtanga Hridaya, and specialized Agada Tantra references. Contemporary toxicological literature from PubMed, Google Scholar, AYUSH databases, and peer-reviewed journals was also reviewed. **Results:** Agada Tantra provides systematic descriptions of different poisons

including Sthavara, Jangama, and Kritrima Visha. Ayurvedic management includes Nidana Parivarjana, Shodhana, Agada administration, symptomatic treatment, Rasayana therapy, and preventive measures. Several medicinal plants described in Ayurveda demonstrate scientifically validated antioxidant, anti-inflammatory, hepatoprotective, nephroprotective, antimicrobial, and anti-venom activities. **Conclusion:** The principles of Vishachikitsa described in Agada Tantra remain highly relevant in modern toxicology. Integrative approaches combining Ayurvedic toxicological wisdom with contemporary emergency medicine may offer effective and holistic poison management strategies.

KEYWORDS: Agada Tantra; Vishachikitsa; Ayurveda; Toxicology; Poison Management; Dushi Visha; Snakebite; Antitoxic Herbs.

INTRODUCTION

Toxicology is an essential branch of medicine concerned with the study, prevention, diagnosis, and treatment of poisoning caused by natural or synthetic toxic substances. According to the World Health Organization, poisoning due to chemicals, pesticides, venomous bites, environmental pollutants, and pharmaceutical overdoses contributes substantially to global morbidity and mortality. Developing countries are particularly affected because of widespread pesticide exposure, industrial pollution, food adulteration, and inadequate healthcare accessibility.

Ayurveda recognizes toxicology as a specialized branch known as Agada Tantra or Visha Tantra. Among the Ashtanga Ayurveda, Agada Tantra specifically deals with poisonous substances, envenomation, toxic manifestations, antidotal therapies, and preventive measures. Ancient Acharyas including Charaka, Sushruta, Vagbhata, and Kashyapa provided extensive descriptions regarding various forms of poison and their management.

The term “Visha” refers to substances that produce harmful effects in the body by disturbing Doshas, Dhatus, Agni, and Ojas. Ayurveda explains that poison spreads rapidly throughout the body due to its Sukshma (subtle), Tikshna (sharp), Ashu (rapid), and Vyavayi (pervasive) properties.

Agada Tantra classifies poisons into Sthavara Visha (plant and mineral poisons), Jangama Visha (animal poisons), and Kritrima Visha (artificial toxins). The concept of Dushi Visha described in Ayurveda resembles chronic cumulative toxicity resulting from repeated low-

grade exposure to harmful substances.

In recent years, there has been growing scientific interest in traditional toxicological approaches due to increasing environmental toxicity and adverse drug reactions. Several Ayurvedic medicinal plants and formulations used in Vishachikitsa possess validated pharmacological activities including anti-inflammatory, antioxidant, hepatoprotective, nephroprotective, immunomodulatory, and anti-venom effects.

This review aims to revisit the principles of Agada Tantra and analyze the relevance of Ayurvedic Vishachikitsa in contemporary poison management.

AIM AND OBJECTIVES

To critically review Ayurvedic Vishachikitsa described in Agada Tantra and evaluate its relevance in contemporary poison management.

Objectives

1. To describe the concept and classification of Visha according to Agada Tantra.
2. To analyze the Ayurvedic principles of Vishachikitsa.
3. To correlate Ayurvedic toxicology with modern toxicological concepts.
4. To explore the therapeutic potential of Ayurvedic antitoxic interventions in modern healthcare.

MATERIALS AND METHODS

This review article is based on a comprehensive literary study conducted using classical Ayurvedic texts including:

- Charaka Samhita
- Sushruta Samhita
- Ashtanga Hridaya
- Kashyapa Samhita
- Agada Tantra texts

Relevant contemporary literature was collected from PubMed, Google Scholar, AYUSH databases, WHO publications, and peer-reviewed journals related to toxicology, herbal medicine, and poison management.

Keywords used for literature search included

- Agada Tantra
- Vishachikitsa
- Ayurvedic Toxicology
- Poison Management
- Dushi Visha
- Snakebite
- Herbal Antidotes
- Environmental Toxicity

Concept of Visha in Agada Tantra

The term “Visha” originates from the Sanskrit root “Vish,” meaning to spread rapidly. Ayurveda explains that poison quickly spreads throughout the body and disturbs normal physiological equilibrium.

According to classical Ayurveda, Visha possesses the following properties:

- Laghu (light)
- Ruksha (dry)
- Tikshna (sharp)
- Ushna (hot)
- Sukshma (minute)
- Vyavayi (quickly spreading)
- Vikasi (loosening tissues)
- Ashukari (rapid action)

These properties facilitate rapid systemic dissemination and tissue destruction.

Classification of Visha

Agada Tantra classifies poisons into three major categories.

1. Sthavara Visha

Poisons derived from plants, minerals, and metals.

Examples

- Vatsanabha (*Aconitum ferox*)
- Dhatura (*Datura metel*)
- Gunja (*Abrus precatorius*)
- Haratala (Orpiment)

- Manashila (Realgar)

2. Jangama Visha

Poisons originating from living animals.

Examples

- Snake venom
- Scorpion venom
- Spider toxins
- Insect bites
- Dog bites

3. Kritrima Visha

Artificial or synthetic poisons produced by improper combinations or toxic preparations.

Examples

- Food adulterants
- Chemical toxins
- Pesticides
- Industrial pollutants
- Drug toxicity

Dushi Visha

One of the most significant concepts in Agada Tantra is Dushi Visha.

Dushi Visha refers to low-grade residual poison that remains in the body after partial detoxification or chronic low-level exposure. It becomes latent within tissues and gradually manifests disease under favorable conditions.

Features of Dushi Visha

- Chronic toxicity
- Delayed symptom manifestation
- Tissue accumulation
- Weakening of immunity
- Multi-system involvement

Modern Correlation

Dushi Visha may be correlated with:

- Heavy metal toxicity
- Chronic pesticide exposure
- Food preservatives
- Environmental pollutants
- Industrial toxins
- Drug-induced toxicity

Samprapti (Pathogenesis) of Poisoning

The pathogenesis of poisoning according to Ayurveda involves:

1. Dosha Prakopa

Poison aggravates all three Doshas, especially Vata and Pitta.

2. Agni Dushti

Digestive and metabolic functions become impaired.

3. Dhatu Dushti

Rasa, Rakta, Mamsa, Majja, and Ojas become affected.

4. Srotodushti

Microchannels become obstructed and contaminated.

5. Ojas Kshaya

Severe poisoning leads to depletion of vitality and immunity.

Clinical Features of Visha General Symptoms

- Nausea
- Vomiting
- Burning sensation
- Delirium
- Excessive salivation
- Dyspnea
- Convulsions
- Cyanosis
- Fever
- Loss of consciousness

Symptoms of Snakebite

- Swelling
- Hemorrhage
- Neurotoxicity
- Paralysis
- Respiratory distress

Symptoms of Scorpion Sting

- Severe pain
- Sweating
- Restlessness
- Tachycardia
- Neurological manifestations

Principles of Vishachikitsa

The management of poisoning in Agada Tantra is based on rapid elimination and neutralization of toxins.

1. Nidana Parivarjana

Immediate discontinuation and removal of exposure to poison.

2. Shodhana Chikitsa Vamana

Therapeutic emesis for ingested poisons.

Virechana

Purgation therapy for Pitta-dominant toxic conditions.

Nasya

Nasal administration in neurological toxicities.

Raktamokshana

Bloodletting in localized toxic conditions.

Agada Therapy

Agada refers to antidotal formulations used to neutralize toxins.

Important Agada Formulations

- Mahagada
- Panchashirishadi Agada
- Dushivishari Agada
- Dashanga Agada
- Bilwadi Gutika
- Mrutasanjeevani Agada

These formulations are described to possess

- Detoxifying action
- Anti-inflammatory activity
- Antimicrobial effects
- Immunomodulatory properties

Important Antitoxic Herbs in Agada Tantra

Herb	Botanical Name	Pharmacological Activity
Haridra	<i>Curcuma longa</i>	Antioxidant, anti-inflammatory
Guduchi	<i>Tinospora cordifolia</i>	Immunomodulatory, detoxifying
Shirish	<i>Albizia lebbek</i>	Anti-allergic, antitoxic
Tulsi	<i>Ocimum sanctum</i>	Adaptogenic, antimicrobial
Yashtimadhu	<i>Glycyrrhiza glabra</i>	Hepatoprotective
Nimba	<i>Azadirachta indica</i>	Blood purifier, antimicrobial
Amalaki	<i>Emblica officinalis</i>	Antioxidant
Bhumyamalaki	<i>Phyllanthus niruri</i>	Hepatoprotective

Contemporary Relevance of Vishachikitsa

The principles of Agada Tantra are increasingly relevant because of:

- Environmental pollution
- Industrial chemical exposure
- Food adulteration
- Heavy metal toxicity
- Pesticide poisoning
- Drug-induced toxicity
- Venomous bites and stings

Environmental Toxicity

Dushi Visha closely resembles chronic environmental toxic burden recognized in modern medicine.

Oxidative Stress

Modern toxicology identifies oxidative stress as a major mechanism of toxin-induced injury. Ayurvedic herbs exhibit potent antioxidant properties.

Hepatoprotection

Several herbs used in Vishachikitsa protect against toxin-induced liver injury.

Anti-venom Potential

Certain medicinal plants described in Ayurveda demonstrate anti-snake venom activity in experimental studies.

Preventive Principles in Agada Tantra

Ayurveda emphasizes preventive toxicology through:

Ahara

Consumption of pure and uncontaminated food.

Dinacharya

Healthy daily routines to maintain immunity and detoxification.

Rasayana

Rejuvenative therapies to enhance resistance against toxins.

Environmental Hygiene

Avoidance of polluted environments and toxic substances.

DISCUSSION

Agada Tantra represents a highly advanced toxicological science developed in ancient India. The detailed classification of poisons, understanding of toxic manifestations, and systematic therapeutic principles indicate sophisticated medical knowledge regarding poisoning.

The Ayurvedic approach to toxicology is holistic and includes toxin elimination, neutralization, restoration of Agni, protection of vital organs, and enhancement of Ojas. Several medicinal plants used in Vishachikitsa possess scientifically validated pharmacological activities including antioxidant, anti-inflammatory, hepatoprotective, nephroprotective, antimicrobial, and anti-venom effects.

The concept of Dushi Visha is particularly relevant in the modern era due to chronic exposure to pesticides, pollutants, food preservatives, and industrial chemicals. Modern medicine increasingly recognizes cumulative toxic burden as an important contributor to chronic diseases.

Integrative toxicological approaches combining modern emergency medicine with Ayurvedic detoxification and supportive therapies may provide effective, affordable, and holistic management strategies.

CONCLUSION

Agada Tantra provides a comprehensive framework for understanding and managing toxicological disorders. Classical Ayurvedic concepts such as Visha, Dushi Visha, Agada, and Shodhana remain highly relevant in the context of modern environmental and chemical toxicity.

Ayurvedic Vishachikitsa emphasizes rapid detoxification, antidotal therapy, organ protection, and rejuvenation. Several herbs and formulations described in Agada Tantra possess promising pharmacological properties validated through modern research.

Further experimental, pharmacological, and clinical studies are necessary to scientifically validate Ayurvedic toxicological interventions and integrate them effectively into contemporary poison management systems.

REFERENCES

1. Charaka Samhita of Agnivesha, revised by Charaka and Dridhabala, edited by Acharya JT. Varanasi: Chaukhambha Surbharati Prakashan.
2. Sushruta Samhita of Sushruta, edited by Acharya JT. Varanasi: Chaukhambha Sanskrit Sansthan.
3. Vagbhata. Ashtanga Hridaya, edited by Hari Sadashiva Shastri Paradakara. Varanasi: Chaukhambha Orientalia.
4. Sharma PV. Dravyaguna Vijnana. Varanasi: Chaukhambha Bharati Academy.
5. Dash B, Sharma BK. Agada Tantra: Ayurvedic Toxicology. New Delhi: Concept Publishing Company.
6. Patgiri BJ, Prajapati PK. Concept of Dushi Visha in Ayurveda and its contemporary relevance. AYU., 2011; 32(2): 242-246.

7. Ravishankar B, Shukla VJ. Indian systems of medicine: A brief profile. *African Journal of Traditional, Complementary and Alternative Medicines*, 2007; 4(3): 319-337.
8. Eddleston M, Phillips MR. Self poisoning with pesticides. *BMJ.*, 2004; 328: 42-44.
9. World Health Organization. Guidelines for the management of snakebites. Geneva: WHO., 2016.
10. Gupta R, Sharma AK. Antioxidant and antitoxic potential of Ayurvedic medicinal plants. *Journal of Ethnopharmacology*, 2014; 153(2): 295-305.
11. Aggarwal BB, Harikumar KB. Potential therapeutic effects of curcumin. *International Journal of Biochemistry and Cell Biology*, 2009; 41(1): 40-59.
12. Upadhyay AK, Kumar K, Kumar A, Mishra HS. *Tinospora cordifolia* (Guduchi): Validation of traditional uses through scientific studies. *International Journal of Ayurveda Research*, 2010; 1(2): 112-121.
13. Flora SJS. Metal poisoning: Threat and management. *Al Ameen Journal of Medical Sciences*, 2009; 2(2): 4-26.
14. Ghosh A. Herbal folk remedies of Bankura and Medinipur districts, West Bengal. *Indian Journal of Traditional Knowledge*, 2003; 2(4): 393-396.
15. Tilburt JC, Kaptchuk TJ. Herbal medicine research and global health. *BMJ.*, 2008; 336: 1336-1338.
16. Ernst E. Toxic heavy metals and undeclared drugs in Asian herbal medicines. *Trends in Pharmacological Sciences*, 2002; 23(3): 136-139.
17. Bisset NG. Aconitum—botany, chemistry, and pharmacology. *Journal of Ethnopharmacology*, 1981; 4(3): 247-336.
18. Warrell DA. Guidelines for the management of snake-bites. WHO Regional Office for South-East Asia, 2010.
19. Mukherjee PK. Quality control of herbal drugs. New Delhi: Business Horizons Pharmaceutical Publishers, 2002.
20. Kirtikar KR, Basu BD. *Indian Medicinal Plants*. Dehradun: International Book Distributors.