



SOURCES OF EXPOSURE TO VISHA: AN AYURVEDIC PERSPECTIVE AND CONTEMPORARY RELEVANCE

¹Dr. Debasish Satpathy., ²Prof. (Dr) .Dilip Kumar Goswami and ³Prof. (Dr.) Pradip Kumar Panda

¹Ph.D. Scholar, Assistant Professor, Dept. of Agadatantra and Vyavahara Ayurveda, Sri Sri College of Ayurvedic Science and Research Hospital, Sri Sri University, Sri Sri Vihar, Bidyadharpur, Ward No-3, Cuttack -754006, Odisha, India.

²Professor & HOD, Dept. of Agadatantra, I.A. Ayurvedic Medical College, University of Science and Technology, Meghalaya.

³Dean & HOD, Rog Nidan Evum Vikriti Vigyan, Sri Sri College of Ayurvedic Science and Research Hospital, Sri Sri University, Sri Sri Vihar, Bidyadharpur, Ward No-3, Cuttack -754006, Odisha.

DOI: <http://dx.doi.org/10.24327/ijrsr.20251601.011>

ARTICLE INFO

Article History:

Received 10th December, 2024

Received in revised form 20th December 2024

Accepted 18th January 2025

Published online 28th January, 2025

Key words:

visha, Ayurvedic toxicology, contemporary sources, holistic understanding, toxic exposure.

ABSTRACT

The concept of *visha* (poison/toxin) in Ayurveda holds timeless significance in understanding and addressing toxic exposure. Ancient Ayurvedic texts provide profound insights into the sources, classification, and management of *visha*, many of which align with modern toxicological principles. Contemporary sources of toxins, including industrial pollutants, agrochemicals, and lifestyle-related exposures, pose significant health risks today. This review highlights the Ayurvedic classification of *visha* and its relevance in the modern context, serving as a guide for students, researchers, and healthcare practitioners. The discussion bridges classical Ayurvedic concepts with contemporary toxicology, offering a holistic understanding of toxic exposure and its mitigation.

Copyright© The author(s) 2025, This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Ayurveda, the “science of life,” categorizes poisons as *visha*, emphasizing their harmful effects on the human body. Classical Ayurvedic texts, such as *Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya*, describe the origin, classification, and management of poisons in detail. In the present era, environmental degradation, industrialization, and changing lifestyles have introduced new sources of poisons with different compositions and strengths, making the study of *visha* crucial. This article explores Ayurvedic sources of *visha* alongside their modern parallels to provide students and researchers a detailed understanding of toxic exposures.

Aims and Objectives

1. To explore the Ayurvedic scholars’ concepts—*Charaka*, *Sushruta*, and *Vagbhata*—regarding the sources of *visha* (poison).
2. To examine concepts from modern toxicology on the sources of poison.

3. To prepare a comparative discussion of Ayurvedic and modern concepts on the topic.
4. To present a summary, conclusion, and references as a scientific article for publication.

MATERIALS AND METHODS

This study was conducted at the Central Library of Sri Sri College of Ayurvedic Science and Research Hospital, Sri Sri University, Cuttack, Odisha, India. The following steps were undertaken:

1. Ayurvedic classics (*Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*) and modern toxicology resources were studied to gather concepts on sources of poison.
2. A comparative statement of observations was prepared.
3. A discussion of the concepts was made.
4. A summary, conclusion, and references were added as per scientific article protocols.
5. The completed article was sent to a reputed peer-reviewed journal for publication.

*Corresponding author: **Dr. Debasish Satpathy.**

Ph.D. Scholar, Assistant Professor, Dept. of Agadatantra and Vyavahara Ayurveda, Sri Sri College of Ayurvedic Science and Research Hospital, Sri Sri University, Sri Sri Vihar, Bidyadharpur, Ward No-3, Cuttack -754006, Odisha, India.

OBSERVATION AND RESULTS

Sources of *Visha* in Ayurvedic Texts

1. Sthavara Visha (Plant and Mineral-Based Poisons)

- *Plant-Based Sources*: Toxic plants such as *Datura*, *Vatsanabha* (Aconitum), and *Snuhi* (Euphorbia) are described as lethal.
- *Mineral-Based Sources*: Metals and minerals like *Parada* (mercury), *Haritala* (arsenic), and *Manahshila* (realgar) are recognized for their toxic potential.

2. Jangama Visha (Animal-Based Poisons)

- Venoms from snakes, scorpions, wasps, and other animals are detailed extensively in Ayurvedic texts. They are categorized based on their physiological impact and treatment protocols.

3. Krutrima Visha (Artificial or Man-Made Poisons)

- These include artificially prepared toxins or adulterants, such as contaminated food or chemically treated substances.

4. Garavisha (Cumulative Poisons)

- Substances that accumulate in the body over time due to repeated exposure, including adulterants, polluted water, or environmental toxins.

5. Dushi Visha (Subtle Poisons)

- Subtle toxins that persist in the body in low concentrations and manifest under favorable conditions such as stress or weakened immunity.

Modern Context: Sources of Toxic

1. Exposure to Environmental Sources

- Air Pollution: Vehicular emissions, industrial smoke, and particulate matter (PM2.5, PM10).
- Water Pollution: Arsenic, fluoride, and heavy metals in drinking water.

2. Agricultural Sources

- Pesticides, herbicides, and chemical fertilizers.

3. Industrial and Occupational Toxins

- Exposure to benzene, formaldehyde, and asbestos.

4. Pharmaceutical and Cosmetic Toxins

- Misuse of medications and harmful additives in cosmetics.

5. Lifestyle-Related Toxins

- Tobacco, alcohol, junk food, and sedentary habits.

6. Radiation and Technological Hazards

- UV rays, X-rays, and electronic device radiation.

Relevance of Ayurvedic Wisdom in Modern Toxicology

Ayurveda's holistic approach offers practical strategies for detoxification and prevention:

1. **Shodhana (Purification)**: Panchakarma therapies to cleanse toxins.
2. **Rasayana (Rejuvenation)**: Use of herbal formulations to restore health and immunity.
3. **Herbal Antidotes**: *Agada Kalpa* and other specific antidotes.
4. **Diet and Lifestyle**: Wholesome foods and balanced living to minimize toxin accumulation.

Summary

1. Knowledge of the sources of poison is crucial for avoiding accidental exposure.
2. Ayurvedic concepts are comprehensive, addressing all types of poisons in nature.
3. Modern toxicological concepts align with Ayurvedic principles.
4. Ayurvedic concepts should be explained in modern scientific terms to enhance their relevance and understanding.

CONCLUSION

The ancient Ayurvedic understanding of *visha* offers invaluable insights into the identification, classification, and management of poisons. Its integration with contemporary toxicological principles can address modern challenges such as industrial pollution, lifestyle-related diseases, and pharmaceutical misuse. This review underscores the relevance of Ayurvedic knowledge for modern toxicology, providing a comprehensive framework for students, researchers, and practitioners.

References

1. Charaka Samhita, ChikitsaSthana Chapter 23: *VishachikitsaAdhyaya*. Translated by Sharma, P.V., Chaukhambha Orientalia, 7th Edition, 2001.
2. Sushruta Samhita, KalpaSthana Chapters 1–2. Translated by Bhishagratna, K.L., Chaukhambha Sanskrit Sansthan, 2010.
3. Vagbhata's Ashtanga Hridaya, Uttar Tantra. Translated by Murthy, K.R., Krishnadas Academy, 9th Edition, 2000.
4. Joshi, S.G. *Medicinal Plants*. Oxford & IBH Publishing, 1st Edition, 2000.
5. Sharma, P.V. *DravyagunaVijnana*. Chaukhambha Sanskrit Sansthan, 1996.
6. WHO (2021). *Air Pollution and Health*. Retrieved from <https://www.who.int>, accessed on 20 January 2025.
7. Gupta, R.C. *Veterinary Toxicology*. Academic Press, 2nd Edition, 2018.
8. Klaassen, C.D. *Casarett&Doull's Toxicology: The Basic Science of Poisons*. McGraw Hill, 8th Edition, 2013.
9. Indian Council of Medical Research (ICMR) Reports on Toxicology. ICMR Publications, 2022.
10. Park, K. *Textbook of Preventive and Social Medicine*. BanarsidasBhanot Publishers, 26th Edition, 2021.