



## ANCIENT INSIGHTS INTO VISHA DETECTION

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### ABSTRACT

The science of Visha (toxicology) has been an integral part of traditional medical systems, offering significant insights into the diagnosis and management of toxicological conditions. Rooted in ancient Ayurvedic texts, these approaches combine knowledge of natural elements, human physiology, and pathology to understand and address the effects of toxins. This study explores the relevance of classical diagnostic methods in modern toxicology by analyzing traditional texts and reviewing contemporary research. The findings highlight a structured approach involving keen observational skills, clinical signs (Lakshanas) and holistic evaluations of physical and mental states. Techniques such as assessing skin changes, bodily secretions, and behavior are emphasized, aligning with modern toxicological principles. This study underscores the potential of integrating ancient diagnostic wisdom with modern tools to create innovative, sustainable strategies for toxin evaluation and management. Bridging these two paradigms offers a comprehensive framework for advancing toxicological practices.

**KEY WORDS:** Visha, Toxicology, Ancient diagnostics, Traditional medicine.

### INTRODUCTION

In ancient times, poisoning was a common method used by enemies to harm individuals or entire communities. Poisons were often introduced through food, clothing, bedding, or even the environment. Recognizing the severity of this threat, ancient scholars developed some methods to diagnose and manage poisoning.

Visha detection, a vital aspect of Ayurvedic medicine, involved identifying the symptoms and causes of poisoning through careful observation of physical and mental changes in the affected individuals, animals and birds. The ancient Ayurvedic texts offered detailed methodologies for diagnosing poisons, categorizing them, and understanding their effects on the body.

### Ancient methods of diagnosis of poisoning

1. Examination of poisoned material through animals and birds.

2. Agnipareekshana of poisoned material.
3. Panchaboutika pareeksha (Physical characteristics of poisonous materials).
4. Lakshanusaara pareeksha (According to signs and symptoms).
5. Diagnosis based on taste perception.
6. Diagnosis by using Jeevaraksha gulika.
7. Diagnosis using vishari lehya.
8. Diagnosis from narration of messenger.
9. Diagnosis of bite based on the direction of messenger.

### 1. Examination of Poisoned Material Through animals and birds<sup>[1]</sup>

कोकिलः स्वरवैकृत्यं क्रौञ्चस्तु मदमुच्छति । हृष्येन्मयूर उद्विग्नः क्रोशतः  
शुकसारिके ॥ २९ ॥  
हंसः श्वेडति चात्यर्थं भृङ्गराजस्तु कूजति । पृषतो विसृजत्यश्रुं विष्ठां मुञ्चति  
मर्कटः ॥ ३० ॥

Sl no	Shloka	Explanation
1	कोकिलः स्वर वैकृत्यं-	The voice of nightingale becomes abnormal.
2	क्रौञ्चस्तु मदमुच्छति	The krauncha bird gets intoxicated.
3	हृष्येन्मयूर उद्विग्न	The peacock which is otherwise cheerful becomes agitated
4	क्रोशतः शुकसारिके	Parrot and mayna birds cry aloud with fear.
5	हंसः वेडति चात्यर्थं	Swan makes more sound.
6	भृङ्गराजस्तु कूजति	The bhrangaraja bird hoots
7	पृषतो विसृजत्यश्रुं	The spotted deer sheds tears.
8	चकोरस्य अक्षिवैराग्यं जायते क्षिप्रमेव तु।	Eyes of the chakora bird soon gets discolored.
9	दृष्टान्नं विषसंसृष्टं प्रियन्ते जीवजीवकाः	On seeing the poisoned food jeeva jeevaka bird dies.



## 2. Agnipareekshana of poisoned material<sup>[2]</sup>

हुतभुक् तेन चात्रेन भृशं चटचटायते। मयूर कण्ठ प्रतिमो जायते चापि दुःसहः। (सु.क. १/२९)

Sl no	Agni pareeksha	Name of pareeksha	Effects
1	Examination of food material by throwing on fire	Shabda pareeksha	चटचटाय (Cracking sound)
2		Rupa pareeksha	मयूर कण्ठ प्रतिमो (Colour of peacock neck)
3		Gandha pareeksha	स्तीक्ष्ण धूमा (Sharp cadaveric smell)

## 3. Panchaboutika pareeksha (Physical characteristics of poisonous materials)

Sl no	Pareeksha	Shloka	Effects
1	Shabda Pareeksha <sup>[3]</sup>	हुतभुक् तेन चात्रेन भृशं चटचटायते। (सु.क. १/२९)	When the poisoned food is put on fire, it burns with a cracking sound.
2	Sparsha Pareeksha <sup>[4]</sup>	पाणिप्राप्तं पाणिदाहं नखशातं करोति च। (सु.क. १/३७)	When poison comes in contact with the hand, it produces burning sensation in the hand and falling of the nails.
3	Rupa Pareeksha <sup>[5]</sup>	मयूर कण्ठ प्रतिमो जायते चापि दुःसहः। (सु.क. १/२९)	On contact of poisoned food with fire, fumes come up with the colour of the neck of peacock (blue) and are unbearable.
4	Rasa Pareeksha <sup>[6]</sup>	नृपभक्ताइलिं न्यस्तं सविषं भक्षयन्ति ये। तत्रैव ते विनश्यन्ति मक्षिकावायसादयः ॥ (सु.क. १/२९)	Animals like flies, crow etc which eat the poisoned food die immediately.
5	Gandha Pareeksha <sup>[7]</sup>	भिन्नार्थिस्तीक्ष्ण धूमा नचिरोच्योपशाम्यति। (सु.क. १/३०)	When poisoned food put on fire fumes are of strong odour and do not subside soon .

## 4. Lakshanusaara pareeksha (According to signs and symptoms)<sup>[8]</sup>

निद्रां तन्द्रां क्लमं दाहं सपार्क लोमहर्षणम्। शोर्षं चैवातिसारं च जनयेज्जङ्गमं विषम्॥

स्थावरं तु ज्वरं हिकां दन्तहर्षं गलगृहम्। फेनवम्यरुचि चास मूत्रछाश्च जनयेद्विषम्॥ (च.चि. २३/१६)

Sl no	Visha lakshana	Shloka	Symptoms
1	Jangama visha lakshanas	निद्रां तन्द्रां क्लमं दाहं सपार्क लोमहर्षणम्। शोर्षं चैवातिसारं च जनयेज्जङ्गमं विषम्॥ (च.चि. २३/१५)	Excessive sleep, drowsiness, mental fatigue, burning sensation, inflammation, horripilation, edema and diarrhea
2	Sthavara visha lakshanas	स्थावरं तु ज्वरं हिकां दन्तहर्षं गलगृहम्। फेनवम्यरुचि चास मूत्रछाश्च जनयेद्विषम्॥ (च.चि. २३/१६)	Fever, hiccup, tingling sensation in teeth, obstruction in the throat, emitting froth from the mouth, anorexia, dyspnea and fainting.

## 5. Diagnostic Tests Based on Taste Perception

Type of Visha	Taste Perceived				
	Sour	Acrid	Sweet	Slightly bitter	Slightly bitter
Visharilehyam	Viper	Cobra	Krait	Mild poisoning	Non poisonous
Kodasari gulika	-----	Mild poisoning	Severe poisoning	----	----
Ishwaramooli root swarasa	Rajila	Cobra	Severe poisoning	Mandali	Non poisonous

## 6. Diagnosis using jeevaraksha gulika in cobra bites<sup>[9]</sup>

- ▶ One jeevaraksha gulika tablet is finely powdered and mixed with milk is given for drinking .
- ▶ If patients vomits immediately a second dose is given and if vomiting persists a third dose is given.

Assessment criteria

- ▶ If the third is also vomited ,the indication is that case of poisoning is difficult to manage.

## 7. Diagnosis using vishahari lehya<sup>[10]</sup>

**Preparation :** 250 gms of luffa amara ground in the juice of about 500 betel leaves should be tied in a cloth and hung on a hook. The juice flowing down is collected to this neem oil, 1/5<sup>th</sup> quantity of mercury and sulphur is added.

**Dose** -50 to 100 mg of lehya spread on a betel leaf is given to victim.



Sl no	Taste felt	Inference
1	Strongly bitter	Non –Poisonous
2	Astringent	Slightly –Poisonous
3	Strongly bitter	Slightly Poisonous
4	Astringent	Moderately –Poisonous
5	Sour	Viper Poison
6	Acrid	Cobra Poison
7	Sweet	Krait Poison

### 8. Diagnosis from *dootha* (Narration of messenger)

#### The narration of messenger

The total number of letters in the first word uttered by the *dootha* is divided by three ,if one remains ,then *visha* presumed

as *sukhasadya* ,if two remains then *visha* cured with difficulty and if three remains death is sure.

Sl no	Taste felt	Inference
1	If one remains	<i>Darvikara Visha</i>
2	If two remains	<i>Mandali Visha</i>
3	If three remains	<i>Rajila Visha</i>
4	If four remains	<i>Moooshika Visha</i>
5	If five remains	<i>Keeta Visha</i>
6	If six remains	False Information
7	If seven remains	<i>Nirvisha</i>

### 9. Diagnosis of bite based on the direction of messenger<sup>[11]</sup>

Sl no	Direction of Messenger	Inference
1	North ,south ,east and west	Extremely poisonous like cobra bite
2	If the <i>dootha</i> stands in corner	Krait bite
3	If <i>dootha</i> stands in middle of these two	<i>Rajila visha</i>
4	If direction is uncertain	Rat /scorpion bite

## DISCUSSION

The classical Ayurvedic descriptions of *Visha* symptoms provide insights into their alignment with modern toxicological understanding. Each symptom of *sthavara visha* reflects the intricate knowledge of the systemic and localized effects of toxins:

1. ज्वरं (Fever): Fever, a common symptom noted in Ayurveda, is indicative of systemic inflammatory responses or infections, which align with the body's immune reaction to plant toxins in modern toxicology.
2. हिकां (Hiccups): The observation of persistent hiccups in toxic exposure highlights the potential for plant toxins to irritate the phrenic nerve or diaphragm, consistent with neurogenic or chemical irritants recognized in contemporary medicine.

3. दन्तहर्ष (Teeth Sensitivity): Ayurveda's recognition of dental sensitivity due to toxic agents correlates with modern findings, where certain plant toxins, such as oxalates, lead to enamel erosion and calcium depletion, resulting in heightened sensitivity.
4. गलगृहम् (Throat Irritation): Throat irritation and swelling are described as potential outcomes of toxic exposure in Ayurveda. This aligns with modern understanding, where certain plant toxins cause neurotoxic effects, leading to throat irritation, respiratory paralysis, or swelling.
5. फेनवम्यरुचि (Gastrointestinal Irritation): The classical depiction of gastrointestinal disturbances, including nausea, vomiting, and appetite loss, is mirrored in modern toxicological evaluations of plant-induced irritation in the digestive system.

### Ayurvedic symptoms and their modern relevance to Animal Poisoning

Sl no	Ayurvedic Symptoms	Modern relevance
1	निद्रां तन्द्रां	Drowsiness and altered levels of consciousness are seen in neurotoxic snakebites, where venom affects the central nervous system.
2	क्लम	Neurotoxic envenomation can lead to confusion, lethargy, or fatigue due to disrupted neurotransmitter function or hypoxia from respiratory complications.
3	दाहं	Burning sensation is likely due to localized tissue damage, inflammation, or neurotoxin effects (Scorpion sting, Snake bite) .



4	शोफ	Localized swelling and systemic inflammatory responses caused by the venom's cytotoxic or hemotoxic effects.
5	लोमहर्षणम्	This could be due to autonomic nervous system involvement during envenomation, a response to stress or pain.

These observations underscore Ayurveda's holistic approach to understanding toxicological manifestations, emphasizing the detailed examination of systemic and localized effects. Integrating such traditional insights with contemporary diagnostic techniques offers a broader perspective for managing toxin-induced conditions effectively.

## CONCLUSION

Symptoms of poisoning described in Ayurvedic texts align closely with modern scientific observations. Ayurvedic diagnostics, with its emphasis on early detection and systemic understanding, plays a vital role in today's world. Its holistic approach focuses not just on treating symptoms but on identifying root causes, including environmental factors and dietary influences. Ayurvedic diagnostics continue to offer valuable insights into poison detection, utilizing detailed symptom analysis that remains relevant for understanding various types of poisoning today. Its focus on early symptom recognition facilitates timely intervention, especially in areas lacking advanced medical resources. With some methodical improvements, classical diagnostics can greatly enhance the early detection and treatment of poisoning. By applying classical diagnostic principles, we can provide valuable support in effectively managing poisoning cases, making classical diagnostics an essential tool in contemporary healthcare.

## REFERENCES

1. Patil V, Rajeshwari NM. Sushruta Kalpa with Dalhana's Commentary. Vol. 3. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2024. Chapter 1, Shloka 29, p. 5.
2. Patil V, Rajeshwari NM. Sushruta Kalpa with Dalhana's Commentary. Vol. 3. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2024. Chapter 1, Shloka 29, p. 5.
3. Patil V, Rajeshwari NM. Sushruta Kalpa with Dalhana's Commentary. Vol. 3. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2024. Chapter 1, Shloka 29, p. 5.
4. Patil V, Rajeshwari NM. Sushruta Kalpa with Dalhana's Commentary. Vol. 3. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2024. Chapter 1, Shloka 37, p. 7.
5. Patil V, Rajeshwari NM. Sushruta Kalpa with Dalhana's Commentary. Vol. 3. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2024. Chapter 1, Shloka 29, p. 5.
6. Patil V, Rajeshwari NM. Sushruta Kalpa with Dalhana's Commentary. Vol. 3. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2024. Chapter 1, Shloka 28, p. 5.
7. Patil V, Rajeshwari NM. Sushruta Kalpa with Dalhana's Commentary. Vol. 3. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2024. Chapter 1, Shloka 30, p. 5.
8. Agnivesha. Charaka Samhita. Edited by Yadaoji Trikamji Acharya. 4th ed. Varanasi: Chaukhambha Sanskrit Sansthan; 1994. p. 571. Chapter 23, Shloka 16.
9. Kochunni Thampuran, Prayoga Samuchchaya, Sulabha books publication, Trissur; 1982: P 135.
10. Sri Kocchunnithampuran: Prayogasamuchchayam (Malayalam): Panchamaparichedam- sarpasamanyachikitsa (kalavanchanam):1sted. 1999 November: Sulabha publisher's p.342- 133.
11. Anonymous. Vishavaidya Jyotsnika An English Translation. 1st ed., Kottakkal: Department of Agada Tantra, Vaidyaratnam P.S Varier Ayurveda College Kottakkal; 2009.