



IJAYUSH
International Journal of AYUSH
AYURVEDA, YOGA, UNANI, SIDDHA AND HOMEOPATHY
<http://internationaljournal.org.in/journal/index.php/ijayush/>

International Journal
Panacea
Research library
ISSN: 2349 7025

Review Article

Volume 10 Issue 03

May – June 2021

PATHOPHYSIOLOGY AND AYURVEDA PERSPECTIVES ON *VISHA* AND THEIR MANAGEMENT

Dr. Nagsen Madhavrao Punekar¹, Dr. Rafique Ahmed Pirsahab Mujawar², Dr. Jyoti Damodar More³

¹Assistant Professor, Agadatantra Dept., Swami Vivekanand Ayurvedic Medical College, Shrigonda, Ahmadnagar, India.

²Assistant Professor (Swasthavritta and Yoga), Swami Vivekanand Ayurvedic Medical College, Shrigonda, Ahmadnagar, India.

³Assoc. Prof., Sharir Rachana Dept., Swami Vivekanand Ayurvedic Medical College, Shrigonda, Ahmadnagar, India.

Abstract

Ashtang Ayurveda is foundation of Ayurveda based on different clinical branches and *Agadatantra* is one of the branches of Ayurveda which works around poisons and treatment of poisonous conditions. Ayurveda under the heading of *Agadatantra* mentioned various types of poisons and their treatment modalities, in this regards *Charaka samhita* described different *Visha Upakrama* for treating poison. Modern medical science mentioned removal of unabsorbed poison, elimination of absorbed poison and uses of antidotes under the heading of Toxicology. *Dhuma*, *Nasya*, *Hridayawarana*, *Sadnyasthapan*, *Upadhana*, *Siravedh* and *Mritsanjivanagad*, etc. are some modalities which can relieves poisoning symptoms, similarly some natural herbs and purification measures recommended to prevent pathogenesis and consequences of poisoning. Present article described Ayurveda perspectives on patho-physiology and treatment of various types of poisons.

Key-Words: *Poisoning, Agadatantra, Visha*

Introduction

The ancient *Atharvaveda* described two types of *Visha*; *Sthavara* and *Jangama* and their *Chikitsa*. As per modern concept *Sthavara Visha* can be termed as inanimate poison while *Jangama Visha* can be termed as animate poison. *Sthavara Vishas* are those which belong from plant and metal origin. *Sarpa Visha* is a common type of *Jangama Visha* which has become major causes of casualty through poisons [1-4]. The list of poisonous substances as per classical system of medicine on the basis of their origin describe in **Table 1**. The *Visha Chikitsa* includes treatment of pathological conditions caused by poisons, toxins, spoilt food, animal bite, insect bites, accidental consumption of poisonous minerals & metals and overdosing of substances, etc. Utilization of natural drugs, *Shodhana Chikitsa*, *Mantras* recitation, *Utkartana*, *Arishta*, *Nishpidana* and *Chushana*, etc. are ancient ways to combat against poisons and their harmful effects. Ayurveda described some herbs as *Visha* (poison) or *Upa-visha* (moderately poisonous), however Ayurveda also mentioned their uses after *Shodhana* and *Samaskara*. *Upavisha* are less toxic so not considered lethal but produces some toxic symptoms after their administration in body, however therapeutic measures can be used effectively to control severity of *Upavisha* [5-8].

Table 1: List of poisonous substances on the basis of their origin

| Poisonous substance of vegetable origin | Poisonous substance of Mineral Origin |
|---|---------------------------------------|
| <i>Vatsanabha</i> | <i>Sindura</i> |
| <i>Shringivisha</i> | <i>Gauripashana</i> |
| <i>Parasika Yavani</i> | <i>Hartala</i> |
| <i>Langali</i> | <i>Hingula</i> |
| <i>Karaveera</i> | <i>Manahashila</i> |
| <i>Jaipala</i> | <i>Girisindura</i> |
| <i>Gunja</i> | <i>Parada</i> |
| <i>Dhattura</i> | - |
| <i>Bhallataka</i> | |
| <i>Arka</i> | |
| <i>Ahipena</i> | |
| <i>Danti</i> | |

Pathophysiology of *Visha Dravya*

Visha causes *Vishannatva* and *Vishada* in body due to their *Vikasi*, *Vyavayi*, *Ushna*, *Ruksha*, *Sukshma*, *Tikshna*, *Apaki* and *Ashukar* properties. *Visha dravya* produces distress, putrefaction, burning sensation and tremors, etc. in body. *Vishada guna* of *Visha dravya* leads vitiation of *Doshas* and *Vikasi guna* of *Visha dravya* breaks association of *Dhatus* and diminishes their strength, *Ruksha guna* causes vitiation of *Vata* while *Sukshma guna* lead *Rakta dhātu* vitiation, impairment of *Shira*, *Basti* and *Hridaya* occurs due to the *Tikshna guna* of *Visha*. These all consequences finally leads symptoms of *Murchha*, *Sanyasa* and *Marmaghata*.

General Pathological Symptoms of *Visha*

- ✚ Vomiting & anorexia
- ✚ Heaviness & unpleasant feeling
- ✚ Tremors and uncontrolled posture
- ✚ Swelling and edema
- ✚ Coloration or patches over the body
- ✚ Urticaria and thirst, etc.

Reduction of toxicity of poisonous substances (Purification of *Upavisha*):

Shodhana and *Samaskara* advised to reduce *Vikasi* property of *Visha Dravya*, the *Shodhana* procedures mentioned for *Upavisha* group of drugs depicted in **Figure 1**. These procedures utilize cow urine for soaking of *Visha Dravya*, poisonous substances boiled in different liquids in *Swedana*, *Bharjana* involves frying of poisonous substance while maceration with vegetable juices performed in *Bhavana* to reduce toxicity of *Visha Dravya*. Washing with hot water and removal of covering described as *Kshalana* and *Nistvachikarana* respectively these procedures used to purify mild poisons.



Figure 1: *Shodhana* procedures advised to detoxify various *Visha* and *Upavisha* substances.

Treatment of poisons:

- ✓ *Dhuma, Nasya, Hridayawarana, Upadhana* and *Siravedh*, etc. are major treatment used in poisonous condition as resuscitation measure.
- ✓ *Arishtabandhana, Nishpeedan, Chushana, Utkartan* and *Raktamokshana*, etc. can be used to remove unabsorbed poisons.
- ✓ *Parisheka* advised for contact poisoning while *Vamana* suggested for ingested poisons.
- ✓ *Prativisha, Oushadha* and *Agada* can be used as antidotes.
- ✓ *Virechana* can be used to eliminate absorbed poison.
- ✓ *Anjana & Leha* can be used for symptomatic treatment and *Prashamana* advised for - maintenance of general health during poisoning treatment.
- ✓ tying an amulate impregnated with *Mantra*
- ✓ Tying a bandage at affected place in case of insect bite

- ✓ Squeezing out blood from the place to restrict further spread of poison
- ✓ Cauterization; specially *Agnikarma* advised for topical cases
- ✓ Application of alkalies
- ✓ Recitation of *mantras* and bath with medicated water.

Ayurveda mentioned management of *Dushi Visha*, here *Shodhana*, *Swedana*, *Vamana* and *Virechana* advised for accumulated toxins (*Dushi Visha*). *Tikta* & *Katu Rasa* predominate drugs can be used in such types of conditions. Ayurveda mentioned that drugs such as *Jatamamsi*, *Yastimadhu*, *Kusta*, *Pippali*, *Dhyamaka*, *Ela*, *Suvarchika* and *Natam*, etc. can provide relief in adverse effects of *Dushi Visha* [9-11].

Treatment of *Visha* as per *Dosha* Predominance:

- ❖ Application of *Tila* on the affected site, fomentation by steam pipe and anointing with oil, etc. are advocated in *Vata* predominant poison.
- ❖ Cold irrigation and application of *Dravya* possess cold potency are useful for poison predominant with *Pitta Dosha*.
- ❖ Poison predominant with *Kapha* requires incising fomentation, scraping and application of emetics drugs.

Treatment as per Modern Science:

Hospitalization usually recommended in case of emergency, the other suggested treatment options of poisonous conditions are as follows:

- ❖ Activated charcoal can be used since charcoal binds to the poison and prevent it spread throughout the body.
- ❖ Antidotes can also be employed to prevent adverse effects of poison, these substances reverse effects of poisons, and some specific antidotes are as follows:
 - 1) n-Acetylcysteine for Acetaminophen overdosing or poisoning
 - 2) Flumazenil for Benzodiazepines poisoning
 - 3) Naloxone for Opiates poisoning
 - 4) Digibind for Digoxin poisoning
 - 5) Physostigmine salicylate can be used for poisoning of Anticholinergic agents

- ❖ Sedatives may be used if person get agitated excessively due to the effect of poisons
- ❖ Ventilator recommended during hospitalization if poison affects breathing
- ❖ Bandaging of affected parts can also be suggested in case of insect bite.

Advisory guideline during poisoning condition

Not advised to induce vomiting, however it is advised to rinse the mouth and eye so to keep person in active state. In case of inhaled poisoning person should be moved to open environment to get fresh air, tight clothing should be loosed or removed and medical attention should be availed without any delay in case of life threatening emergency [12].

Conclusion

The pathogenesis of *Visha* depends upon properties of poisonous substances; *Ruksh* causes *Vaat Prakopa*, *Tikshna Guna* leads *Sarva Dosha Prakop*, *Sukshma Guna* of *Visha Dravya* is responsible for *Sharer Avayay Pravesha*, *Ushna Guna* of *Visha* imparts *Pitta Prakopa* effects, *Laghu Guna* is responsible for *Dushchikitsya* while *Anirdeshya Rasa Guna* of *Visha Dravya* causes *Kapha Prakopa*. Traditional researcher advocates various approaches of poisoning treatment, in this regards classical texts mentioned 24 modalities for poisoning management including recitation of *Mantras*, *Arishta*, *Utkartana*, *Nishpidana*, *Chushana*, *Agni*, *Parisheka*, *Avagaha*, *Rakta-* *Mokshana*, *Vamana*, *Virechana*, *Upadhana*, *Hridayavaram*, *Anjana*, *Nasya*, *Dhuma*, *Leha*, *Aushadha*, *Prashamana*, *Pratisarana*, *Prativisha*, *Sanjna-samsthapana*, *Lepa* and *Mrita-sanjivana*. These approaches of ancient system of medicine can be employed to reduce severity of poisons.

References

1. Acharya vagbhata -Astanga Hridayam by Kaviraja Atridevagupta published by chaukhambha prakashan Varanasi Reprint 2016. pg -802, 37.
2. Pt. LalchandShastriVaidya; Ashtangasangraha; 1st edition, Shree Baidyanath Ayurved Bhavan Private Ltd, Nagpur; Uttarsthana 42/8- 9,Sarpavishapratishedh adhyay;1988, p. 676.

3. Pandit K Shastri, Dr. G. Chaturvedi; Charaka Samhita of Agnivesha; Reprint edition, Chaukhamba Bharati Academy Varanasi; Chikitsasthana 23/42, Vishachikitsa adhyay; 1998, p.632.
4. Pt. Lalchand Shastri Vaidya; Ashtangasangraha; 1st edition, Shree Baidyanath Ayurved Bhavan Private Ltd, Nagpur; Uttarsthana 42/13- 14, Sarpavishapratishedha adhyay; 1988, p.678.
5. Kaviraj Ambikadutta Shastri; Sushruta samhita of Maharshi Sushrut; Part-I, 14th edition, Chaukhamba Sanskrita Sansthan, Varanasi; Kalpastahana 5/14-15, Sarpadashtavishachikitsa adhyay; 2003, p.47.
6. Kaviraj Ambikadutta Shastri; Sushrutasaamhita of Maharshi Sushrut; Part-I, 14th edition, Chaukhamba Sanskrita Sansthan, Varanasi; Kalpastahana 5/39, Sarpadashtavishachikitsa adhyay; 2003, p.49.
7. Dr. Brahmanand Tripathi, Ashtanghridaya of Srimadvagbhata; Reprint edition, Chaukhamba Sanskrit Pratishthan, Delhi, Uttarsthana 36/75-76, Sarpavishapratishedha adhyay, 2009, p.1162.
8. C.K Parikh, Parikh's Textbook of Medical Jurisprudence Forensic Medicine and Toxicology (2014) reprint, CBS Publishers and Distributors Pvt. Ltd, Pg.8.1
9. Ashtanga Sangraha with commentary by Lalchandra Shastri, Shri Baidyanath Prakashana, 2010.
10. Ashtangahridaya V (2002) Commentaries Sarvangasundara and Ayurvedarasayana. Hari Sadashivshastri Paradkar editor. Varanasi: Chakhamba Surbharati Prakashan p: 5.
11. Pandit Kashinath Shastri, editors, Rasa taragini, 11th edition 1979, Delhi, Motilal Banarasisdas, tarang, 24/163, 164 Page No. 676.
12. Chandran J, Krishna B. Initial Management of Poisoned Patient. Indian J Crit Care Med. 2019;23(Suppl 4):S234-S240. doi:10.5005/jp-journals-10071-23307.