

PATHOLOGICAL AND CLINICAL PERSPECTIVE OF SNAKE POISONING AS PER
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ABSTRACT

Snake-bite is one of the most important causes of accidental death in many parts of the world. Sudden snake bites especially in rural area affected large number of population and considered as medical emergency. Thousands of death reported every year in India due to snake bite hence therefore it is very essential to know various aspects of snake bites. Ayurveda also described *Sarpa Dansha* and its management in various ancient literatures, *Acharya Vagbhata* categorized snake bites as *Savisha* means poisonous and *Nirvisha* means non poisonous. *Acharya Charaka* suggested various *Upakramas* for the management of snake poisoning. Present article explored Ayurveda perspective of snake bite poisoning.

KEYWORDS: Ayurveda, Visha, Sarpa Dansha, Snake bite poisoning.

INTRODUCTION

Ayurveda described different categories of snakes such as; *Murkha* family, *Maṇḍali* family, *Rajila* and *Ventira*, if snake bites occurs in body parts such as cheeks, nose, temples, nipples, axillary area, umbilicus and groins then poisoning may be fatal. There are various types of *Lakshana* which may appear after snake bites such as;

- Sign of cow's horn with *Agaru* smell.
- Bite with oily smell.
- Sandal wood smell with sign of bird's foot.
- Edema with smell of milk.

AIM AND OBJECTIVES

1. To discuss pathological and clinical perspective of snake poisoning mentioned as per ayurveda text.
2. To describe Ayurveda management snake poisoning.

MATERIALS AND METHODS

1. Review of literature (*Astanga Hridaya* and *Sushruta Samhita*).
2. Review of different aspect of snake poisoning collected from various sources.

Pathophysiology of snake bites

Viṣa of snake after stays at bite site for unit of time spread to the body, then combines with *Vata* and circulates throughout the body. First it travels to the forehead then eye, face and affect *Sapta Dhatus*, when

poison increases in body it combine with the *Rakta* and spreaded all over the body, signs and symptoms involve tremors, red and open eyes and edema of mouth. Rectum dilated, semen excreted out on massaging through *Mutra Nāḍi*. *Sushruta* described different types of *Sarpa Dansha*:^[1-3]

- *Sarpita*: Bite occurs deeply.
- *Radita*: Superficial bite.
- *Nirvisha*: Non poisonous bite.

Vagbhata also mentioned various *Sarpa Dansha*:

- *Tundahata*: Stained by saliva.
- *Vyalidha*: Bite marks without bleeding.
- *Vyalupta*: Bite marks with bleeding.
- *Dashtaka*: Bite marks with muscles tearing.
- *Dashtanipidita*: Multiple bite marks.^[4-6]

Ayurveda Management of Snake Poisoning

Charaka and *Vagbhata* emphasized that poison cannot damage the tissues until it reaches blood stream, however both mentioned that small amount of poison may cause significant harm by spreading all over the body along with blood, therefore the primary approaches against snake bite involve prevention of poison into systemic circulation.^[5-10]

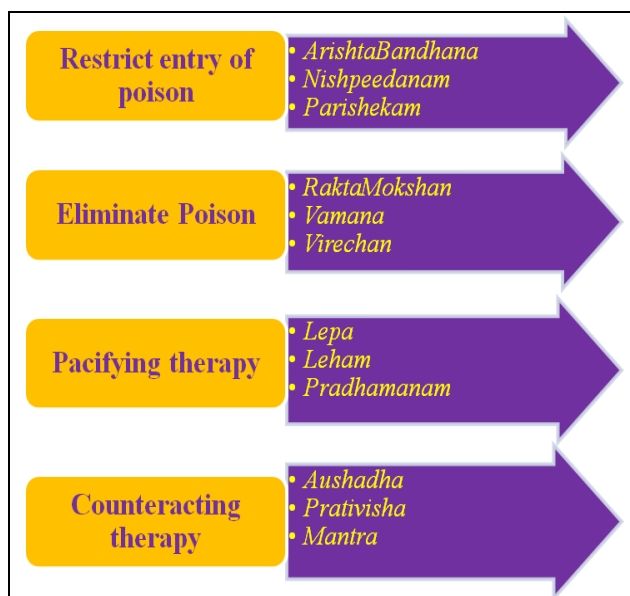


Figure 1: Mode of action of therapy used against snake bite as per Ayurveda.

Mantra: Mantra helps to combat with snake poisoning. The logical reasoning may be that the pronunciation of Vedic Mantra boosts confidence of sufferer and calm the mental and physical status which helps in relieving anxiety. Mantra establishes rhythm of sympathetic nervous system, help blood vessels to perform work of normal blood circulation throughout the body, Mantra support natural healing process of body and thus delaying pathological progression of *Visha*.

Arishta Bhandana: Arishta Bhandana means control of indication of death, Arishta Bhandana stop spreading of poison using *Plota*, *Charmanta* and *Mrudu Valka*, these materials should be tied 3-4 *Anguli* above the site of snake bite, this process delaying spreading of poison.

Utkartanam: Utkartanam means incision of bite to stop spreading of poison.

Achushana: Achushana means sucking of bite site; the poison should be suck through mouth before with *Mruth*, *Bhasma* or *Agada*.

Nishpeedanam: Nishpeedanam involve compression, squeezing of bite area help to expel out poison from body. Pressure applied in this process around affected area along with massage in opposite direction expel out poison and delay progression of *Visha*.

Avagaha: It involves immersion or dipping of affected area. Ayurveda recommended use of medicated *Kwatha* and *Taila* for *Avagaha*.

Agni: Agni *Upkarma* in snake bite involves cauterization of the biting site with *Suvarna*, *Loha* etc., burning faggot also may be used in severe condition; *Twak* and *Mamsagata Visha*.

Rakthamokshna: When *Vivarna*, *Kathina*, *Shuna* and *Ruja Yuktha* sign and symptoms appeared on biting site, then *Rakthamokshna* may be recommended. *Rakthamokshna* utilizes veins around the site of bite, veins at the end of *Shakha*/ in *Lalata*, in severe case *Shrunga* / *Jaluka* may also be applied. *Pragharshana* with *Churna* of *Trikatu*, *Gruhadhuma*, *Rajani*, *Panchalavana*, *Gorechana* and *Vartaka* may also be done.

Parisheka: *Parisheka* means sprinkling with *Chandana* and *Ushira* which should be done after *Rakthamokshana*.

Vamana: The initial stage of snake poisoning may be combat with *Vamana*, *Vamana* help to eliminate ingested poison initially, emesis is effective if poison present with in the stomach and if the bite is above the umbilical area.

Virechana: *Virechana* involve purgation, it may be used for later stage, especially indicated if bite is below umbilical region. *Agadapana* recommended after *Virechana*.

Nasya: *Nasya* utilizes nasal path for removing *Visha* especially when it move to *Shira Pradesha*. It utilizes medication through nasal path and nasal exercise for detoxification purpose. *Mula Swarasa* of *Bhandujiva*, *Bharangi* and *Surasa* may be employed. *Pippali Churna*, *Vrichikali*, *Manashila*, *Hingu*, *Apamarga*, *Lavana* and *Shirisha Bija* utilizes as medicaments through nasal route help to maintain consciousness.

Mruta Sanjeevan: *Mruta Sanjeevan* means to revive; *Mritasanjivanaagad* prepared from *Sprikka*, *Plava* and *Sthouneya* is used as *Nasya*, *Lepa*, *Dharana* and *Dhumagrahan* for reviving life.

Aushadha: Use of medication (*Aushadha*) in different Ayurvedic form (traditional formulary) or natural herbs. The various route of administration may be employed for this purpose.

Prativisha: *Prativisha* involve use of antidote therapy which may encompasses utilization of some other poisonous substances. It should be use in very severe condition when *Aushadha* fails to cure. It is recommended in *Hemanta* and *Grishma Ritu* and should not be administered in *Varsha Ritu*.

Lepa: *Lepa* pacifies the poison and help to control visible sign and symptoms of snake bite, *Sheeta lepa* recommended for the same purpose.

Dhuma: *Dhuma* recommended by traditional text of Ayurveda to open *Srotas* which clear *Swasa Avarodha*. This alleviates poison, reduces edema and help medicine to transport if given orally or through nasal route.

Lehyam: *Lehyam* means linctus as combination of *Madhu* and *Ghrta*, it is used as *Anupana*.

Pradhamana: *Pradhamana* should be done after *Upadhana Karma* using *Katabi*, *Katuka* and *Katphala Churna*.

DISCUSSION

Snake-bite is one of the most important causes of death in all over the world. Ayurveda literatures encompasses information regarding *Sarpa Dansha* and its management; *Acharya Vagbhata* categorized snake bites as *Savisha* (poisonous) and *Nirvisha* (non poisonous). *Acharya Charaka* suggested various *Upakramas* for the management of snake poisoning.

CONCLUSION

Present article explored Ayurveda perspective of snake bite poisoning. Various Ayurveda therapies are effective in different types of snake poisoning.

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