

HOUSEHOLD REMEDIES IN SCORPION ENVENOMATION

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ABSTRACT

Scorpion stings are common emergency events in many parts of the world. It is a major public health problem in many underdeveloped tropical countries, especially in rural parts of India. Scorpion envenomation is an occupational hazard for farmers, farm labours, villagers and migrating population.^[1] patients often presents with life threatening complications. Envenomation due to scorpion sting results in various clinical manifestations. They range from mild local pain to

diffuse intolerable pain of whole limb and body to systemic manifestation involving almost all systems, predominantly cardiovascular and may sometimes lead to death.^[2] Death in rural part of India is occur due to delay in reaching to hospitals, no proper medications available in small hospitals and poor transport service to reach big hospitals. So it becomes necessary to find solution. In ancient *Ayurvedic* texts there are mentioned lot of remedies regarding scorpion sting, so we can use some remedies which are available in our home. In attempt of find such remedies this article is written.

KEYWORDS: Scorpion sting, envenomation, Modern texts, Anti Scorpion venom, *Ayurvedic samhitas*, Household remedies.

INTRODUCTION

From ancient time's poisonous animal bites is a serious issue in world. Millions of people die every year because of poisonous animals bite. Scorpion bite or snake bite is also a common and global public health problem associated with substantial morbidity and mortality.^[3]

Scorpions are a member of the Arachnida class and are closely related to spiders, ticks, and mites.

There are 1250 species of scorpions in the world out of them 25 are lethal, among them 86 species are found in India. Two species *Palmaneus Gravimanous* (Big black scorpion) & *Hottentotta tamulus* (Indian red scorpion) are mostly found in India.

The factors mainly responsible for high mortality associated with scorpion bite are poor health services, difficult transportation facilities, wrong traditional beliefs, delay in anti-scorpion venom administration. The annual number of scorpion stings cases exceeded our 1.23 million of which over 32250 were fatal. Scorpion sting case fatality rate 3-22% was reported in India.^[4]

Scorpion venom is a cocktail of several neurotoxins, Cardipotoxins, Nephrotoxins, haemolytic toxins, Amino acids, Histamine, Serotonin, Phospholipase-a, Acetylcholine esterase, Proteins that inhibit protease, Angiotensinogen and Succinate Dehydrogenase.^[5]

A clinical effect of the envenomation depends upon the scorpion species, lethality and dose of venom and also patients' physiological reactions to venom.

Scorpion venom symptoms are produces are mostly classified into Two group Local and Systemic, in local-Swelling, sweating and radiating pain, along the involve dermatome. In systemic manifestation – vomiting, hyper salivation, mydriasis, priapism, hypotension is seen. Pulmonary oedema is common cause of fatality. The treatment strategies practiced for these patients include drug regimens like prazosin, angiotensin converting enzyme (ACE) inhibitors, insulin, anti-scorpion venom serum (AScVs). Scorpion Anti- venom is one of the line of treatment in India, though it is specific antidote to venom action but in case of *Hottentotta tamulus* since antivenin it does not prevent or reverse the cardio vascular morbidity. So it is the time need to evaluate the Anti venom activity of medicinal plant. Since ancient time many herbs are use in the treatment of scorpion bite and it is also scientifically proved. There are so many plant which has a therapeutic value in the scorpion bite treatment.^[6]

Real incidence, morbidity and death are scarce, because most of victims don't seek medical treatment or public health structure and prefer to consult traditional healers moreover. Scorpion sting is not included in a list of notifiable diseases. Most of the sting occurs in rural areas so it's our duty to use house hold remedies as possible in attempt of reducing mortality.

By giving household medications we can at least delay the death of patient and patient can reach proper set up hospitals.

AIM

To know the various household remedies or drugs regarding scorpion envenomation.

OBJECTS

1. To find out various methods regarding scorpion envenomation.
2. To find out various household drugs which helps in Scorpion Envenomation.

MATERIAL AND METHODS

Ayurvedic literature: this was done through *Charak Chikitsa sthana*, *Sushrut Kalpasthana*, *Ashtang Hrudaya Uttartantra*, *Ashtang Samgraha Uttartantra*, *Bhaishyajya Ratnavali* etc.

Modern literature: This article based on textual review of different text books of modern science, related articles and journals and various websites to collect information on the relevant topics were referred.

Household remedies

- *Acharya Charaka* described that one of the treatment of *Vrischik dansha* is;
-*Swedan*
-*Abhyang with Lavan+ Ghrita*
- Sprinkling of hot water
- In drinks and meals *Ghrita* should be used.(*Cha. Chi* 23/173).^[7]
- According to *Acharya charaka* the treatment of *ucchitinga* should be done as per *Vrischik dansha chikitsa*, sand is mixed in the warm water and that mixture is applied in reverse direction (*pratiloma* direction) on the body by friction massage (*udwartanam*) after that site of bite should be covered with thick coating of heated sand. (*Cha. Chi* 23/174).^[8]
- The *gomay* (cow dung) is made warm and can be used for *seka / sweda* of sting site (*Su.ka.8/79*).^[9]
- *Madhu* and *Ghrita* in unequal quantity or milk added with plenty of sugar can be given for pan (drinking) purpose (*Su.ka.8/79*).^[10]

- The *dhoom* made with feathers of the *Shikhi* (peacock) and *kukkut* (cock) with *Saindhav*, tail, *ghrita* rapidly pacifies the *Vrischik visha* (*Su. Ka* 8/70-74).^[11]
- *Dhooma* of *Nru kasha*, *Sarshap*, *Haridra* and *Jeerna Guda* which is described by *Kashyapa* and it is said to be *Sarv Vishanashak*. The said drugs are sprinkled on the burning charcoal and the *dhooma* is given (*A.H.U.* 37/23).^[12]
- Further *Krishna jeerak* and *Saindhav* fried in the *Ghritha* and *Upanaha* made from this is applied on the sting site. *Vrischik* have vata dosha predominance so opposite action of respective *dosha* will reduce severe pain due to *vrischik dansha* (*A.H.U.* 37/31).^[13]
- Cold mixture of cow milk with plenty of sugar, *Ghritha* (cow ghee) and *Madhu* (Honey) or solution of Jaggery each added with powder of *Chaturjata* should be consumed (*A.S.U* 43/69).^[14]
- *Lashuna* (Garlic), *Marich*, *Hingu*, *Surasa* (*Tulasi*) and *Vishbhesajam* (*shunthi*) made into paste with milky sap of *Arka* and rolled into pills. This remedy gives relief to patient of scorpion poison (*A.S.U* 43/72).^[15]
- The tooth of camel and *shaival* in the form of *lepa* destroys symptoms of *Vrischik dansha* (*A.S.U* 43/73).^[16]
- In all *ugra visha*; *vrischik Dadhi* (curd) and *Ghritha* (cow ghee) should be given for pan (drinking) purpose (*A.S.U* 43/73).^[17]
- *Ushna*, *Snigdha*, *Amla*, *Madhur* and the *vatanashak* food should be given for *vrischik dansha* patient as it is beneficial for him. It is being the *Vatashamak* as *Vrischik* having vata predominance so it will be helpful for health of patient (*A.H.U.* 37/39).^[18]
- *Lepa* of luke warm cow ghee and *saindhav* reduce *vrischik visha* (*B.R.* 72/27).^[19]
- *Lepa* of *jeeraka* triturated with *Ghritha* and *Saindhava* is applied on the sting site it reduce pains from *Vrischik dansha* (*B.R.* 72/30).^[20]
- Apply the garlic paste on the sting area and let it set for a while then rinse with warm water.

- Apply the peppermint oil on the sting area and let it set for a while then rinse with warm water, repeat the procedure if required.

DISCUSSION

- Scorpions have long been of interest to humans primarily because of their ability to give painful and sometimes life threatening stings.
- They are also an important and beneficial component of many ecosystems and they are one of the oldest known terrestrial arthropods.
- Insect poisoning is described under the heading *Keetavisha* in *Ayurvedic* science. Poisoning by them is of more clinical importance as they cause severe manifestations in Human being.
- The toxicity of scorpion venom is worse than that of the snakes but only a small quantity is injected.
- *Vrischika* are explained in almost all the *Ayurvedic* literature. The classical texts *Susrutha samhita* and *Ashtanga hridaya* explains about the details regarding the *Vrischika damsa*.
- The manifestation of *Vrischika damsa* varies widely from mild pain to cardiovascular disturbances and even upto death. Common manifestations of *Vrischika damsa* include severe cutting pain and burning sensation, oedema, erythema and pruritis.
- Nausea, vomiting, fever, local rise in temperature, breathlessness, muscular fasciculation, abdominal pain, tingling sensation of the tongue may be associated.
- Most of the deaths in India occurs in villages and it is due to no proper medications available in small hospitals and poor transport service to reach big hospitals.
- So it becomes necessary to find solution; for that we can give medication which is available in our homes. By giving household medications we can at least delay the death of patient and patient can reach proper set up hospitals.

CONCLUSION

Early hospitalization and administration of antivenom, monitoring the victim in intensive care unit will save many life's but It is found that in Indian villages there are no proper transport services so household remedies can play great role in saving of patients of scorpion sting.

REFERENCES

1. Article scorpion sting: update by himmatrao s.bawaskar and pramodini h.bawaskar JAPI, January 2012; 60: 46-55.

2. bawaskar H S, bawaskar P H, efficacy and safety of scorpion antivenom plus prazosin compared with prazosin alone for venomous scorpion. BMJ, 2011; 341: c7136.
3. Article A review on medicinal plants used in scorpion bite treatment in India by Satish Bahekar, Ranjana kale dept. of pharmacology, MG institute of medical science, 2012.
4. Mahadevan s, choudhari p, puri RK, shrinivasan s, Scorpion envenomation and the role of lytic cocktail in its management. Indian podiatry, 1981; 48: 757-61.
5. H S bawaskar, P H bawaskar, scorpion sting : update, JAPI, January 2012; 60: 46-55.
6. Article a review on medicinal plants used in scorpion bite treatment in India by Satish Bahekar, Ranjana kale dept. of pharmacology, MG institute of medical science, 2012.
7. Dr. Brahmanand Tripathi, *charaka samhita of agnivesha*, volume II, chapter 23: *choukhambha Surbharati prakashan, Varanasi*. Edition – 4th, 786.
8. Dr. Brahmanand Tripathi, *charaka samhita of agnivesha*, volume II, chapter 23: *choukhambha Surbharati prakashan, Varanasi*. Editio – 4th page no.787.
9. Vd.Datto ballal borkar, *sarth sushrut samhita kalpasthana*, chapter 8: Rajesh *Prakashan*, Page no. 628.
10. Vd. Datto ballal borkar, *sarth sushrut samhita kalpasthana*, chapter 8: Rajesh *Prakashan*, page no.628.
11. Vd. Datto ballal borkar, *sarth sushrut samhita kalpasthana*, chapter 8: Rajesh *Prakashan*, page no.626-627.
12. Dr. Ganesh Krushna Garde, *vagbhatkrit Ashtang Hriday uttarsthana*, chapter 37: *Choukhambha Surbharati prakashan, varanasi*. Edition –2014, Page no.469.
13. Dr. Ganesh Krushna Garde, *vagbhatkrit Ashtang Hriday uttarsthana*, chapter 37: *Choukhambha Surbharati prakashan, Varanasi*. Edition –2014, page no.469.
14. 14 .Vd. Anant Damodar Aathwale, *Vridhivagbhatvirchit Ashtang samgraha uttarsthana*, chapter 43:, page no.876.
15. Vd. Anant Damodar Aathwale, *Vridhivagbhatvirchit Ashtang samgraha uttarsthana*, chapter 43:, page no.876.
16. Vd. Anant Damodar Aathwale, *Vridhivagbhatvirchit Ashtang samgraha uttarsthana*, chapter 43:, page no.876.
17. Dr.Ganesh Krushna Garde, *vagbhatkrit Ashtang Hriday uttarsthana*, chapter 37: *choukhambha Surbharati prakashan, Varanasi*. edition –2014, page no.469-470.
18. Vd.Anant Damodar Aathwale, *Vridhivagbhatvirchit Ashtang samgraha uttarsthana*, chapter 43: page no.876.

19. Vd. Ambikadatta Shastri, *Bhaishaj Ratnavali*, chapter 72: *chokhambha prakashan varanasi*, reprint -2013, page no.1097.
20. Vd. Ambikadatta Shastri, *Bhaishaj Ratnavali*, chapter 72: *chokhambha prakashan Varanasi*, reprint -2013, page no.1097.