

**INTERNATIONAL JOURNAL OF CURRENT RESEARCH IN
CHEMISTRY AND PHARMACEUTICAL SCIENCES**

(p-ISSN: 2348-5213; e-ISSN: 2348-5221)

www.ijcrpps.com

DOI:10.22192/ijcrpps

Coden: IJCROO(USA)

Volume 4, Issue 6 - 2017

Review Article



DOI: <http://dx.doi.org/10.22192/ijcrpps.2017.04.06.005>

**Antidotes for Elikadi (Rat bite) according to the
Siddha System of Medicine – Review**

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Abstract

Wild rats, even more than any domesticated animals, enjoy very intimate living arrangements with man. They can live in the same house, share the same beds, eat the same foods, carry the same internal and external parasites, suffer from the same diseases and plagues. Man has made numerous unsuccessful efforts to terminate this close relationship and has at all times manifested a great distaste for any physical contact with these companions, either dead or alive. Rats on the other hand are less discriminating, even seeking contact with man and treating him much as they do the dying or dead members of their own species— running over him, licking him, biting him and finally trying to eat him. The latter aspect of the rat's relationship to man has not received much serious attention. This paper, therefore, deals with the frequency of rat bite man, the circumstances under which they bite.

Keywords: Antidotes, Elikadi, Siddha Medicine

Introduction

The highly systematized siddha system of medicines are based on nature and its elements. This system of medicine also describes some specific antidotes for various poisons ingested as well as for bites of several poisonous creatures and insect bites. The authors aim to reveal the Antidotes for Elikadi (Rat bite), mentioned in Siddha Literatures.

Prevalence:

In the United States, rat bite fever (RBF) is typically caused by *S. moniliformis*. The disease is rare, with only several cases documented each year. As an example, between 2000 and 2012, only 17 cases were identified

in California. However, its actual incidence is unknown because RBF is not a nationally notifiable disease, and many cases go undiagnosed since these bacteria are difficult to identify and are likely to respond to empiric antibiotic therapy.

The risk of RBF due to *S. moniliformis* after a rat bite is reported to be 10 percent, and an estimated 20,000 rat bites occur in the United States each year. Historically, over 50 percent of reported cases occurred in children, and RBF was most likely to be seen in those living in poverty. However, the demographics have changed, and now include pet store workers and laboratory technicians

as rats have become popular pets and research subjects.

In Asia, RBF is known as sodoku (so: rat, and *doku*: poison) and it is primarily caused by *S. minus*.

Microbiology

S. moniliformis — *S. moniliformis* is a pleomorphic fastidious branching gram-negative bacillus. It stains irregularly and can be mistaken for gram-positive pleomorphic rods. The bacteria are microaerophilic; they require specific media for isolation (10 to 20 percent serum) and incubation in a 5 to 10 percent CO₂ environment. Sodium polyanethol sulfonate (SPS), an anticoagulant added to most aerobic blood culture bottles, inhibits growth of *S. moniliformis*. However, anaerobic culture bottles, resin bead culture systems, and trypticase soy agar and broth may demonstrate growth since they do not contain SPS.

Types of rats

These are Eighteen varieties of Rats are mentioned in siddha texts.

1. *Pundaram*
2. *Kabilam*
3. *Suvedam*
4. *Kashaya Dentham*
5. *unthuru*
6. *Kokilam*
7. *Kabotham*
8. *Subedam*
9. *Aritham*
10. *Samalam*
11. *Arunam*
12. *Rasalam*
13. *Asitham*
14. *Krishnam*
15. *Palini*
16. *Sabalam*
17. *Sikuram and*
18. *Kunagam*

Clinical features:

The following are the clinical features of rat bite

1. Rigor
2. Hyper pyrexia
3. Intermittent fever
4. Dizziness
5. Pustules as seen in the bite of spider
6. Heaviness of head
7. Arthralgia
8. Arthritis

If the treatment is not given in the initial stage, the victim has to face dreadful consequences in phased manner.

The following signs may follow:

1. Chronic cough
2. Wheezing
3. Dyspnoea
4. Weariness
5. Squeaking sound in throat like the creaking noise of the rat.

Signs and symptoms

➤ Local

- Increasing local pain. The pain is typically described as burning and excruciating
- Swelling
- Redness
- Itching
- Ecchymoses

➤ Systemic

- Sweating
- Urticaria
- Salivation
- Vomiting
- Breathlessness and cough
- Hemoptysis
- Priapism
- Hypertension
- Bradyarrhythmias
- Pulmonary oedema
- Myocarditis
- Myocardial ischemia
- Restlessness
- Giddiness
- Convulsions
- Intracerebral hemorrhage leading to paralysis

Absorbs the poison, the severity of the disease increases. Emaciation of the body, restlessness and cyanosis occur. The bitten part becomes ulcerated and it becomes fatal.

Some kind of germs are seen in the hairs of rats. They cause plaque in humans. This infectious disease is transmitted to humans through dead rats. This fatal disease is marked by the swelling of lymph nodes associated with severe fever and pulmonary diseases. As the dead rats are the agents for plaque, they have to be removed from the place immediately after their death.

Medicine for rat bite:

1. The dry skin of elk is powdered and mixed with sesame oil and cow's ghee proportionately and given orally for ten days. The swelling burning sensation and mental stress are removed if the medicine is taken as per the clinical features

2. For the heaviness of the head and blisters all over the body, the bark and leaves of *Sterculia foetida* and the excrement of small pigeon are dried and powdered and this powder is given with ghee according to the severity
3. *Elaeocarpus ganitrus* is ground in cow's milk, ghee is added and given to neutralize the toxic effects of rat poison.
4. To reduce the swelling equal parts of *Piper longum*, *Piper nigrum*, *Pongamia glabra* root, *Mimusops elengi* root and *Tinospora cordifolia* leaf are ground well with the juice of *Aloe vera* and given.
5. 'Orpiment' (Yellow arsenic) is ground well and kept in earthen vessel and closed with a one-holed earthen cover. Fire is ignited and put off after sometime. The victim is made to inhale the hovering smoke.
6. Lime juice is processed in a heated iron rod and administered orally for three days for heaviness of the head, urticaria and swelling due to rat poison.
7. A paste made of equal parts of leaves and bark of *Pavetta indica* is given in the areca-nut size with ghee. Heaviness of the head, blisters and urticarial rashes will be cured.
8. The leaves and the bark of *Butea frondosa* are ground well and given in the size of lemon fruit with butter for cough and wheezing
9. The bark of *Alangium salvifolium* is ground well and is given in the size of a lemon with hot water
10. Root of *Indigofera tinctoria* or *Withania somnifera* is ground with milk and given for three days.
11. To remove eighteen types of rat poisoning (A prepared medicine)
 - a) Juice of *Cassia angustifolia* - 160ml
 - b) Juice of *Cassia fistula* - 160ml
 - c) Juice of *Cleodendrum phlomoides* - 160ml
 - d) Juice of *Mimusops hexandra* - 160ml
 - e) Latex of *Calotropis gigantea* (White species) - 160ml
 - f) Juice of *Eclipta alba* - 650ml
 - g) Gingelly oil - 650ml
 - h) Root powder of *Ipomoea turpethum*- 5gmare boiled well and given respectively for consumption
12. The root bark of *Plumbago zeylanica* is ground in goat's milk and given
13. The root of *Withania somnifera* is ground well in the milk and given
14. The bark of *Pongamia glabra*, *Piper nigrum*, *Allium sativum* and *Acorus calamus* are ground well in lime juice and given for chronic toxicity of rat bite.
15. Equal parts of *Zingiber officinale*, *piper nigrum*, *Areca nut* and the bark of *Acacia arabica* are ground with the juice of *Aloe vera* and given.
16. The outer cortex of *Tamarindus indica* is burnt and then given orally. Cow's milk prescribed regimen for this,

For uricaria, one of the following is given
 - a) The seed of *Jatropha curacas* is ground and mixed with milk
 - b) The bark of *Pongamia glabra* is ground with butter milk of buffalo
17. The bark of *Magnifera indica* is ground well, dried and mixed with ghee
18. Bark, leaves and flowers of *Moringa oleifera* are ground with the blood of big fowl, dried and made into pills. When the victim applies gingelly oil on his head, one pill should be given and the second pill should be given, while he takes bath. After taking bath he has to wear new footwear. Salt, tamarind and pungent tasted food are to be avoided for eight days. On the ninth day, salt and tamarind can be added with food.

Clinical features of contact in the genital secretion or sperm of rat

During the mating season of the semen of male rat or the genital secretion of the female comes in contact with human body, the following features are observed

- a) Inflammation
- b) Glandular swelling
- c) Vomiting
- d) Mental confusion
- e) Exhaustion of limbs and arthralgia
- f) Tremors
- g) Stupor
- h) Hyperpigmentation
- i) Ageusia
- j) Morbid thirst
- k) Fever with shivering
- l) Syncope
- m) Hallucination.

Incurable features of rat bite:

In the following symptoms manifest due to rat bite, it is difficult to cure.

- a) Fever
- b) Ptyalism

- c) Inflammation
- d) Hallucination
- e) Headache
- f) Haematemesis
- g) Impairment of hearing

Summary

The antidotes above cited are described in siddha system of medicines. In this world the rare human birth will be enjoyable only if it is free from diseases.

The methods of preparation of the antidotes for such rat bites mentioned in above siddha literature are not difficult. "Visha vaithiya chinthamani" describes many antidote for rat bite and it is a sample of effective antidote. "Visha vaithiya Aaruda Noolgal" also describes about many effective & essential antidotes for rat bites.

Conclusion

Even today treating the poisonous cases in rat bites is a challenge to the modern medical profession. But treating such poisonous cases through the siddha system of medicines seems to be more faithful and economical. If the siddha literatures about antidotes are usefully explored, many antidotes for rat bites can be brought out.

Acknowledgments

I wish to express my gratitude and acknowledgement to The vice-chancellor, The Tamil Nadu Dr.M.G.R. Medical University, Guindy, Chennai. The Director of Indian Medicine and Homeopathy and the Joint Director of Indian Medicine and Homeopathy Chennai and specially thank to The Principal, Government Siddha Medical College, palayamkottai and to Mrs.Y. Chitra, Mrs.Komala, my mother Malliga and my friends for their full support to complete this study.

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	Website: www.ijcrops.com
	Subject: Siddha Medicine
Quick Response Code	
DOI: 10.22192/ijcrops.2017.04.06.005	

How to cite this article:

Yuvaraj.D, Thiruthani, Abdul Khader Jeylani, Chenthamarai Selvi.G. (2017). Antidotes for Elikadi (Rat bite) according to the Siddha System of Medicine – Review. Int. J. Curr. Res. Chem. Pharm. Sci. 4(6): 28-31.
DOI: <http://dx.doi.org/10.22192/ijcrops.2017.04.06.005>