



## A CRITICAL REVIEW ON KEETA VISHA: AN AYURVEDIC APPROACH

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### ABSTRACT

Indian system of medicine plays an important part in health care system all over India. *Ayurveda* is an ancient Indian system of medicine having eight important branches. *Agad tantra* is among one of them which deals with toxicological conditions and their management. Sage *Susruta* in *Kalpasthaana* of his work *Susruta Samhita*, and Sage *Vaagbhata* in *Uttaratantra* of his work *Ashtaanga Hridaya*, and in other classics and regional texts have narrated regarding the origin of *Visha* and *Keeta Visha*. There are several types of *Keeta Visha* described. Among animal poisoning, *Acharayas* have described different creatures (*Sarpa*, *Keeta*, and *Luta*) responsible for life threatening situations. The importance of *Keeta Visha* is more because it causes severe manifestations in the human being, even death also. *Acharya Suhsruta* described *Keeta Visha* under *Jangama Visha* and explained 67 varieties of *Keeta* under 4 groups. According to its variety diagnosis and treatment of *Keeta Visha* is found to be very difficult because these varieties are not yet correctly identified and besides, regional variations of these *Keetas* manifests very differently.

## INTRODUCTION

### Keeta in Samhitas

According to *Acharya Charka*, insects (*Keetas*) are also called because they are procreated from the *Keetas* or waste products like stool and urine of the snakes.<sup>1</sup> According to *Vaachaspathya*, it is defined that '*Krimibhyah Sthoole Kshudrajantu Bhede*' i.e., *Keeta* is a variety of *Krimi* with macroscopic body. *Krimis* are animate things, which use their individual legs independently for movements.

*Acharya Sushruta* has described *Keeta* in his treatise after the chapters on snakes (*Sarpadashtvishavigyaniya*) and rodents (*Mooshikakalpa*). According to definitions, these may or may not be seen with naked eye. Therefore, they can even be interpreted as insects, worms and even microbes. The *Paada* may be legs, flagella or cilia; it can even be a part of single cell itself. When considering unicellular animals; here the character of shifting with respect to place is making them to be included under *Jangama* since *Jangama* included under live beings (*Cetana Dravya*); *Acharyas* may know that this minute entities

also can be included under living. *Keetas* are generally accepted as type of *Krmi*, which can be visualized by naked eye (*Sthoola*).

### Origin of Keeta

*Keeta* are born from the putrefied urine, feces, semen, egg, and cadaver of snakes.<sup>2</sup> According to *Acharya Sushruta* the origin of *Keeta* is said to be from *Sarpa*, they are described in the continuity. Their formation is alleged as putrefaction of '*Shukra-Vid-Mutra-Pooti-Und-Sambhava*'. Accordingly, *Keeta* are of four types and according to their *Prakruti* and the symptoms they produce, they are called as *Vayavya*, *Aagneya*, *Ambu* and *Sarva-Dosha*. All in all, the *Keeta* are 67. Since they are of myriad types and their habitat is open with the humans, it causes frequent stinging cases, and anaphylactic reactions too, in a few people.<sup>3-4</sup>

### Classification of Keeta (As Per the Dosha):

According to *Acharya Sushruta*:-

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- Vaatika
- Paitika
- Shaleshmaka
- Sannipataja<sup>5</sup>

According to Acharya Vagbhata:-

- Vatolavana
- Pittolavana
- Kapholavana
- Sannipatulavana<sup>6</sup>

According to Acharya Charka:-

- Dushivisha Keeta
- Pranhara Keeta<sup>7</sup>

### Types of Keeta:

1. Vaatika - 18
2. Paitika - 24
3. Shaleshmaka - 13
4. Sannipataja - 12

Most of the insects or Keeta are neurotoxic. Some are vasculotoxic and some causes allergies. Spiders are more vasculotoxic and causes severe inflammatory reactions. Hence it is said to cause Pitta Kaphaja Vikaras. Scorpions are more neurotoxic and cause severe neurological reactions, hence it is said to be Vaata Kopna. So their poisonous effects are stated in detail. All the other insects cause mild poisonous reactions. They are practically, mild form of neurotoxic, vasculotoxic and allergic.<sup>8</sup>

According to Acharya Vaagbhata, the four types of insects (Keetas) are as follows: (Table: 1)

Vaataja	Paitika	Kaphaja	Sannipataja
Kumbheenasa	Kaundilyaka	Visvambhara	Tungeenaasa
Tundikeri	Kanabhaka	Panca sukla	Cipilaka
Srngi	Varaati	Panca-krshna	Taalaka
Sata kuleeraja	Patra vrschika	Kokila	Vaahaka
Ucchitanga	Vinaasika	Sthairyaka	Koshtaagaari
Agni naama	Braahmanika	Pracalaaka	Krmikara
Cicchitaanga	Bindula	Vatabha	Mandala Pucchaka
Mayooraka	Bhraamara	Kitibha	Tunda naabha

Ahija	Baahyaki	Jati	Sarshapika
Oorabhraka	Picchita	Sooci-mukha	Madguli
Avarta	Kumbhi	Krshna-godha	Sambuka
Saarikaa	Varcha keeta	Kaasaaya vaasika	Agni keeta
Mukha Vaidala	Arimedaka	Dabhra	
Saraava	Padma keeta		
Kurda	Dundubhi		
Parusha	Makara		
Chitra seersha	Sata paadaka		
Jaaraka	Pancaala		
	Paaka-matsya		
	Sookshmatunda		
	Gardabhi		
	Kleeta		
	Krmi saraari		
	Utklesaka		

According to Acharya Sushruta the following insects are mentioned according to Dosha predominance: (Table: 2)

Vaataja	Pittaja	Kaphaja	Sannipaataja
Kumbheenasa	Kaundilyaka	Visvambhara	Tungeenaasa
Tundikeri	Kanabhaka	Panca sukla	Vicilaka
Srngi	Varaati	Panca-krshna	Taalaka
Sata kuleeraja	Patra vrschika	Kokila	Vaahaka
Ucchitanga	Vinaasika	Saireyaka	Koshtaagaari
Agni naama	Braahmanika	Pracalaka	Krmikara
Cicchitaanga	Bindula	Vallabha	Mandala pucchaka
Mayoorika	Bhraamara	Kitibha	Tunda naabha
Abheeraaji	Baahyaki	Gardhabaka	Sarshapika
Oorabhraka	Picchita	Sooci-mukha	Valguli
Aavarta	Kumbhi	Krshna-godha	Sambuka
Saarikaa	Varcha keeta	Kaasaaya vaasika	Agni keeta

Mukha	Arimedaka	Trotka	Maakshika	+	+	+	-	+	-
Vaidala			Grha	+	+	-	-	+	+
Saraava	Padma keeta		godhika						
Kurda			Masaka	+	+	+	-	+	-
Parusha	Dundubhika		Pipeelika		+	+	-	+	-
Chitra	Makara		Mooshika	+	+	-	-	-	-
seersha			Arana (mal)	-	-	-	-	+	+
Satabaahu	Sata paadaka		Ceretta	-	-	-	-	+	+
Raktaraaji	Pancaala		(Mal.)						
	Paaka-		Bhraamara	-	-	-	-	+	+
	matsya		Tottaarotti	-	-	-	-	+	+
	Krshṇa-Tunda		(Mal)						
	Gardabhi		Vettalan	-	-	-	-	+	-
	Kleeta		(Mal.)						
	Krmi saraari		Coriyan	-	-	-	-	+	-
	Utklesaka		puzhu						
			(Mal.)						
			Jalauka	+	-	+	-	+	+
			Godheraka	-	+	-	-	-	-

#### Other insect (Keetas) Mentioned In Sushruta Samhita are:

1. Wasp (Kanabha)
2. A kind of flying insects (Trikantaka)
3. Chameleon (Krikalaasa)
4. Frog (Dardura)
5. Fish (Matsya)
6. Scorpion like creature (Visvambhara)
7. Centipede (Uchchitinga)
8. House lizard (Ghrha godhika)
9. Mosquito (Masaka)
10. Bee (Maakshika)
11. Ant (Pipeelika)
12. Scorpion (Vrscika)etc.<sup>9</sup>

Table showing insects described by various Ayurvedic texts in Keeta Visha Prakarana: (Table: 3)

Name of insect	Ca. Sa.	Su. Sa.	As. Sa.	As. Hr.	Kri. Kau.	Pra. Sa.	Vi. Jyo.
Loota	+	+	+	+	+	+	+
Vrscika	+	+	+	+	+	+	+
Uchchitinga	+		+	+	-	-	-
Satapadi	+	+	+	-	+	-	+
Kanabha	+	+	+		+	+	+
Trikantaka	-	-	+	-	-	-	
Krkalaasa	+	-	+	-	+	-	+
Mandooka	+	+	+	-	+	+	+
Matsya	+	-	+	-	+	+	+

#### According To Kriyakoumudi:

Some more types of Keeta are mentioned they are as follows:-

Brahmanik (Arana)	Teratta
Tottarotti	Njandu (crab)
Vettalan	Karimbada
Koora (Americana periplanata)	

#### Incurable Keeta:

According to Sushruta, the following are Keeta whose bite is incurable:-

Godheraka	Sthaalika	Svetha
Agniprabha	Brakuti	Kotika <sup>10</sup>

#### Symptoms of Bites of Visha Keeta in General:

According to Acharya Charka insects belonging to mild chronic (Dooshi Visha) category cause red, white, black or brownish black coloration of the part of the body, which is bitten, and the area becomes covered with pimples. The patient suffers from itching and burning sensation, erysipelas, suppuration and sloughing. The bites of the insects belong to the fatal (Praanahara) category produces expanding edema, as it happens in snakebite, associated with strong odor and bleeding. The patient suffers from pain, heaviness of the eyes, fainting and dyspnoea. The patient afflicted with bite of insects

causing chronic poisoning (*Dooshi Visha*) suffers from intense thirst and anorexia.<sup>11</sup>

According to *Acharya Sushruta* the poisonous *Keeta* cause *Jawara*, *Angamarda*, *Romanch*, *Chhardi*, *Atisara*, *Trishana*, *Daha*, *Murchha*, *Jrimbha*, *Kampanna*, *Swasa*, *Hikka*, *Atisheeta*, *Shopha*, *Mandala*, *Dadru*, *Karnika*, *Visarpa*, *Kitibha* etc.<sup>12</sup>

*Acharya Vagbhatta* said that in all types of *Keeta Damsha* *Karnika*, *Sopha*, *Jwara*, *Kandu* and *Arochaka* will be prominent.<sup>13</sup>

### (Keeta Visha) - Dosha Relationship

Poison of insects (*Keeta*) has predominance of *Vaata* –*Pitta* that of wasp and mouse has predominance of *Kapha* that of scorpion and centipede probably has predominance of *Vaata*. Insects (*Keeta*) are of four kinds depending upon the *Dosha* predominance, three with the features of individual doshas and the fourth with the features of all of them together. When bitten by insects (*Keeta*) with the predominance of *Vaayu* (*Vaata*) pricking and pain are greatly increased; when bitten by *Pitta* predominant insects, there is less of exudation, but more of burning sensation, redness, spreading and appears like a ripe fruit of coffee (*Peelu*) or *Kharjoora* (*Phoenix dactylifera*); when bitten by *Kapha* predominant insects, there is mild pain and the swelling appears like a ripe fruit of *Udumbara* (*Ficus glomerata*). When bitten by those of all the *doshas*, there is copious exudation, presence of all the symptoms and such cases are to be rejected.<sup>14</sup>

In *Vaitika Visha* heart pain, pain in joints and bones, tremors, dyspnea, colour of the skin become black, and stiffness like symptoms occur. In *Paitika Visha* heart burn, loss of sensation, bitterness of mouth, muscle fatigue, tenderness of tissues following red and yellow colour like symptoms are prominent. The symptoms prominent in *Kaphaja Visha* are *Vamana*, *Arochaka*, *Peanus*, coldness, sweetness of mouth, salivation etc. (As. Sa. 37/17)

### Treatment Principle of Keeta Damsha:

Vitiation of *Doshas* is to be understood from the symptoms present and treatment should be with drugs that have opposing properties of the *Doshas* deranged. (As. Hr. U. 37)

### Treatment of (Keeta Visha) According To Dosha:

In case of poison predominant with *Vaata*, application of *Tila* (sesamum seeds) on the site, anointing with oil, fomentation

either by steam pipe or ball of cooked rice and nourishing foods are the treatments ideally suited. Poison predominant with *Pitta* should be controlled with cold irrigation and cold potency topical applications. Poison predominant with *Kapha* should be treated with scraping, incising fomentation and administration of emetics.<sup>15</sup>

The person who was bitten by the *Visha Keeta*, after doing *Sansodhana*, *Lepa* the bark of *Kshrivrikshas* (*Vata*, *Pippal*, *Gullara*, *Pakkar*, *Paras Pippal*) should be used for treatment of poisoning. All types of inflammation, burning sensation, pain, fever, will be subsides by the application of *Pearl*.<sup>16</sup>

### CONCLUSION

By studying above it seems that spider, scorpion, mosquitoes, flies, fleas, ants, lizards etc are included under *Keetas*. Their poisons cause more severe manifestations in man. The treatment is also more important. Besides this, several small creature seen in our surroundings, called *Keetas*, cause certain poisonous illness to man. Their number and name not fully identified. *Susrutha* described 67 types of *Keetas* which are not possible to identify presently. They are seen from the place where decaying substances and creatures are seen.

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