



General Approach Towards Treatment of Chikungunya (Janapadodhwamsaroga) in Ayurveda –a Review Article

KEYWORDS

sandigata tridoshaja jwara, keeta visha, dooshi visha.

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ABSTRACT *Chikungunyais a viral disease transmitted from human to human by the bites of infected Aedesegypti mosquito. It is mainly characterized by fever and joint pain along with other symptoms and affects mass people. Line of management donot have successive measurements and growth of these vectors.*

Ayurveda stressescommunicable disease as epidemic condition under Janpadodhwamsa. Factors affecting are jala, vayu, desha and kala, which are known asdooshivishaprakopakanidana. Any Disturbance in these factors is responsible for production of vectors which are major cause of communicable disease like Chikungunya etc. Sushruta has also mentioned such conditions under Oupsargikaroga i.e. communicable disease. Agantukanidana's can be compared with virus,in modern era. In classics as there is not direct reference regarding chikungunyabut we can equate the symptoms of vatapittajwara and vataphajjwara and can treat with same line . Unless and until the dooshivisha and their nidana are not rectified, the signs and symptoms are not going to be relieved completely. Hence these factors are considered as the aggravating factors for the body and Agadatantra plays an important role in the management of such disorders.

INTRODUCTION:

Chikungunya virus is an arthropod- borne virus,of the genus Alphavirus, that is transmitted to humans by virus-carrying Aedesegyptimosquitoes.^[1]Chikungunya virus infection causes an illness with symptoms similar to dengue fever, with an acute febrile phase of the illness lasting only two to five days, followed by a prolonged arthralgiadisease that affects the joints of the extremities.^[2] The incubation period of Chikungunya is usually between 2-10 days and mostly affects adult population in compare to young population. ^[3,4]In India first outbreak of Chikungunya was documented in Kolkata during 1963 and after that 4 to 5 outbreaks had occurred.^[5] The last outbreak was reported in 1971 and after that no such outbreak occurred. ^[6] It was assumed that virus had vanished from this region. Surprisingly since December 2005, more than 1,80,000 cases of Chikungunya was detected in India which clearly indicates re-emergence of Chikungunya in India.

Table No: 1-Classification and Signs and Symptoms of Chikungunya:

Specific symptoms
1. Fever up to 40 °C (104 °F)
2. petechial or maculopapular rash of the trunk
3. Chills
4. Arthralgia
5. Headache
6. Nausea
7. Vomiting
8. Sleeplessness
9. Fatigue
Other Constitutional symptoms
• Anorexia
• Heaviness
• Conjunctivitis
• Slight photophobia
• Partial loss of taste ^[7]
• Conjunctival suffusion
• Mild photophobia
• Giddiness
• Diarrhea

It is very difficult to make differential diagnose these types of diseases with existing diseases, and Chikugunya is one among them. It is misdiagnosed with symptoms of Dengue. So, these specific symptoms along with other symptoms and investigation helps in diagnosing this disease. There is not any specific management of this disease except symptomatic including Antipyretics, Analgesics, and Anti-inflammatory agents.

3. Concept of chikungunya according to Ayurveda:

Ayurveda is the science of life which are based on experiential knowledge and grown perpetual addition's. 65% of population in India reported to use Ayurvedic medicines without prescription of doctor. Recent breakouts and unsatisfactory treatment makes people aware towards Ayurveda so, it is mandatory to correlate this disease symptoms with jwara's and their treatment which are mentioned by our Acharya's. As there is not any direct reference regarding chikungunya but our Acharya have mentioned such diseases according to their opinion as :

3.1 According to Acharya Charaka:

Charaka Acharya has mentioned as epidemic disease under the concept of janapadodhwamsa and devoted a whole chapter on this topic. He told 4 factors which are affected by such changes in environment are:

1. Jala
2. Vayu
3. Desha
4. Kala

Vitiation of these factors due to changes in environment are responsible for production of such vectors (mosquitoes) which are responsible for production of such diseases. After vitiation of these factors their will be vikrutalakshna which shows their effect according to their factor's. After that he have mentioned treatment as "langhanapachanadoshavs-echana."^[10].

3.2 According to Acharya Sushruta:

Sushruta(1500BC-500AD) has very clearly defined such diseases under Upasargikarogai.e., communicable diseases (S. S. N. 5/32-33). He defined various disorders which are communicable. Among them one is jwara. we can compare such factors with virus, bacteria, fungus and various other microorganisms. For these conditions charaka mentioned treatment of krimirogasas :

1. Nidanaparivarjana (avoid factors causing disease)
2. Apakarshana (removal of krumi from affected site)
3. PrakritiVighata (change of environment or selecting of that environment which are unfavorable for microbes).

The concept seems to be very similar to modern microbiology and practice of medicine.

4. Lakshana's which are similar to chikungunya symptoms are as:-

4.1 According to charaka:

In charakachikitsasthana 3/85-87 shlokalakshna's which are similar to this disease lakshna's are vata pitta jwaralakshnas:-

- Shiroruka (Head ache)
- Parvabheda (Joint pain)
- Daha (Burning sensation)
- Vamthu (Vomiting)
- Swapannasha (sleeplessness)
- Murcha (faintness)
- Aruchi (Anorexia) along with that he have given vatakapahajwaralakshna's which will discuss further.

4.2 According to Sushruta:

In Sushrutauttaratantra 39/47-49, he has mentioned the similar symptoms of vatapittaj and vatakapahajwara as mentioned by Acharya Charaka. We can correlate those symptoms with symptoms of chikungunya. In sushrutakalpasthana 8/19-22 he mentioned teekshanavishalakshana which are having similar lakshana of chikungunya.

4.3 According to AstangaHrudya

In AstangaHrudyanidanasthana 2/24-25 he has mentioned various symptoms of kaphavatajjwara which are approximately similar to chikungunya as:

- Shiroarti (head ache)
- Murcha (fainting)
- Daha

- Parvabheda
- Shosha
- Kanthaaasya (excessive thirst)

4.4 According to Astangasamgraha

In Astangasamgrahanidanasthana 2/21-22 we got symptoms of vatajkapahajwaralakshna's which can give clear cut idea about this disease.

4.5 According to Bhavaprakasha

In BhavaPrakash madhyamkhanda, jwaraadhikara chapter 1/500 they have mentioned sandhigatasannipatajjwaralakshna's as:

- Swathusandhishu (inflammation of joint)
- Kasa (cough)
- Anidra (sleeplessness)
- Jwara (fever)

Table No: 2 – correlation of symptoms of chikungunya with symptoms of jwara told by different Acharya's:

Chikungunya symptoms	Name of Samhita						
	Ch.S.Ch.	S.S.U.	As.H.Ni.	As.H.Ni.	Ma.Ni.	Bh.Pr.Ma	
	VP VK	VP VK	VP VK	VP VK	VP VK	VP VK	San-dhigatatri-doshajwara
1. Fever	P P	P P	P A	A P	P P	P P	P
2. Chills	A P	A P	A A	A A	A P	A P	A
3. Arthralgia	P P	P P	P P	P P	P P	P P	P
4. Head ache	P P	P P	P P	P P	P P	P P	A
5. Nausea	A A	A A	A A	A A	A A	A A	A
6. Vomiting	P A	P A	A A	A A	A A	A A	A
7. Fever	P A	P A	A A	A A	A A	A A	A
8. Sleeplessness	P A	P A	A A	A A	A A	P A	P

[VP- Vata Pitta Jwara; VK- VataKaphaJwara; P- Present ; A- Absent] [Ch.S.Ch. - Charaka Samhita Chikitsasthana 3/85-87; S.S.U. - Susruta Samhita Uttara Tantra 39/47-49 As.H.Ni. -AstangaHridaya, Nidanasthana 2/24-25 ; As. S. Ni. -AstangaSamgrahaNidanaSthana 2/21-22 ; Ma.Ni.-MadhavaNidana 2/14-16 ; Bh.Pr.Ma-BhavaPrakashaMadhyamaKhanda, Prathama Bhaga, 500.]

Table no. 3:-Keetavisha concept

CHIKUNGUNYA SYMPTOMS	NAME OF	
	SAMHITA	
	S.S.K.	C.CHI.
1.Fever	Jwara	Jwara
2. Maculopapular rash	Madala	Kandu
3. body ache Especially Arthralgia	Angmardas-anthshoola	Gatraraktasyavavarna with pidika
4. Vomiting	Chardi	-

5. Diarrhoea	Atisara	-
6. Difficulty in breathing	Swasa	-

Acharya Charaka has explained dooshivishakeetalakshana's in charakachikitsa 23/140-42. Sushruta, mentioned 67 types of keeta. Apart from that he explained about teekshanavishakeetalakshana. In which symptoms and cause of this disease are similar. As these keetavisha acts as dooshivisha in our body. In sushrutakalpasthanana 8/3-4 shloka it is explained very clearly that dooshivishaprokopakarana like excreta of sarpa, dooshitajala, dooshitabhoomi etc. are responsible for production of these keeta(mashaka).so, it makes us very easy to manage these types of diseases with same line of treatment.

5. Contemporary treatment of Chikungunya:

A serological test for chikungunya is available from the University of Malaya in Kuala Lumpur.¹⁰

Chloroquine is gaining ground as a possible treatment for the symptoms associated with chikungunya, and as an anti-inflammatory agent to combat the arthritis associated with the virus. A University of Malaya study found that for arthritis-like symptoms not relieved by aspirin and non-steroidal anti-inflammatory drugs (NSAIDs), chloroquine phosphate (250 mg/day) has given promising results.¹¹ Unpublished studies in cell culture and monkeys show no effect of chloroquine treatment on reduction of chikungunya disease. The fact sheet on chikungunya advises against using aspirin, ibuprofen, naproxen and other NSAIDs that are recommended for arthritic pain and fever¹².

6. Ayurvedic treatment of Janapadodwansiyaroga (chikungunya) :

Control and treatment can be characterized in to four things:

6.1 Symptomatic treatment

- Jwarahara (antipyretics)
- Sothahara (anti-inflammatory)
- Vednasthapaka (analgesics)
- Kusthaghana (raktashodhaka)
- Kandughna (antipruritic)
- Kasahara (antitussive)
- Swasahara (anti allergic)
- Atisarahara (antidiarrheal)

6.2 General line of Management

- Rasayana (immunomodulators)

- Balya

6.3 Vector control agents:

- Dhoopana
- Bhootaghna and Rakshoghna (Anti Microbial)

6.4 In terms of keetavishachikitsa¹³

- shodhana In terms of swedana and seka
- sanshamanachikitsa with vishaghnaushada i.e. DashangAgada, Lodhrasevyadi Kashaya.

Symptomatic drugs like Guduchi (*Tinospora cordifolia*), Shunthi (*Zingiber officinale*), Patha (*Cissampelos pareira*), Tulsi (*Occimum sanctum*), Nimba (*Azadirachta indica*) etc can be given. Immunomodulators like Aswagandha (*Withania somnifera*), Amalaki (*Emblica officinalis*), Guduchi (*Tinospora cordifolia*) andyasthimadhu (*Glycyrrhiza glabra*) can be given. Tulsi (*Occimum sanctum*), Nimba (*Azadirachta indica*), shalaparni (*Desmodium gangeticum*), vacha (*Acorus calamus*) etc. can be used for controlling vectors responsible in form of dhoopana karma. Sushruta has mentioned vatadidoshavishaharaswedanadravays as-shirisha (*Albizia lebbek*), vacha (*Acorus calamus*), sandhavalavana, pippali (*Piper longum*), shalaparni (*Desmodium gangeticum*) and laghupanchamoola used in form of upnaha.

Table no. 4:-formulations useful in chikungunya

S. No.	Indication	Name of the Formulation	Reference
1.	Jeerna Jvara, Sannipata Jvara	Amritottara Kvatha Curna	Sahasrayoga, Kashaya Prakarana, 30
2.	Vataroga	Gandharva-hastadi Kvatha Curna	Sahasrayoga, Kashaya Prakarana 394
3.	Sannipata Jvara	Chinnodbhavadi Kvatha Curna	Sahasrayoga, Kashaya Prakarana, 38
4.	Parsvasula, Jvara	Dasamula Kvatha Curna	Bhaisajya Ratnavali Kasarogadhikara; 13
5.	Jvara, Sannipata Jvara	Darunagaradi Kvatha Curna	Sahasrayoga, Kashaya Prakarana; 34

7. Conclusion

Chikungunya, a vector born communicable disease, can be treated according to the line of treatment of Keetavisha as the etiology and symptomatology resemble. According to lakshans we can treat this disease by Clinical trials in large number of samples for prevention, control and treatment of Chikungunya.

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