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

Dr. Dhiman Ambika
Department of Agada Tantra, PG Scholar, KLE University Shri BMK Ayurveda Mahavidyalaya, Shahapur Belgaum

Dr. S.K. Hiremath
Department of Agada Tantra, Professor and HOD, KLE University Shri BMK Ayurveda Mahavidyalaya, Shahapur, Belgaum

Dr. Deepa
PG Scholar, Department of Agada Tantra, KLEU’S Shri BMK Ayurveda mahavidyalaya, Belgaum

KEYWORDS
sandigata tridoshaja jwara, keeta visha, dooshi visha.

ABSTRACT
Chikungunya is a viral disease transmitted from human to human by the bites of infected Aedes aegypti mosquito. It is mainly characterized by fever and joint pain along with other symptoms and affects mass people. Line of management don't have successive measurements and growth of these vectors.

Ayurveda stresses communicable disease as epidemic condition under Janpadodhwamsa. Factors affecting are jala, vayu, desha and kala, which are known as asdooshivishaparakopakani. 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. Agartukanidana'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 vatapittajjwara and vatakaphajjwara 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 Aedes aegypti mosquitoes.[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:

<table>
<thead>
<tr>
<th>Specific symptoms</th>
<th>Other Constitutional symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fever up to 40°C</td>
<td>1. Anemia</td>
</tr>
<tr>
<td>2. Headache</td>
<td>2. Arthritis</td>
</tr>
<tr>
<td>4. Rash</td>
<td>4. Jaundice</td>
</tr>
<tr>
<td>5. Asthenia</td>
<td>5. Mental disorder</td>
</tr>
</tbody>
</table>

It is very difficult to make differential diagnose these types of diseases with existing diseases, and Chikungunya 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 janapadodhwamsha 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 they will be vikrutalakshna which shows their effect according to their factor's. After that he have mentioned treatment as “langhanapachanadoshavchana.”

3.2 According to Acharya Sushruta:
Sushruta (1500 BC-500 AD) has very clearly defined such diseases under Oupasargikarogai.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 shlok laxnashas which are similar to this disease lakshna’s are vata pitta jwaralakshnas:-

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

4.2 According to Sushruta:
In Sushrutatattvataratana 39/47-49 he has mentioned the similar symptoms of vata pitta and vata kapha jwaralakshnas.

4.3 According to Astanga Hrudya
In Astangahrudyanidanasthana 2/21-22 he has mentioned teekshanavishalakshna 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:

<table>
<thead>
<tr>
<th>Chikungunya symptoms</th>
<th>Name of Samhita</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP</td>
<td>VK</td>
</tr>
<tr>
<td>1. Fever</td>
<td>P</td>
</tr>
<tr>
<td>2. Chills</td>
<td>A</td>
</tr>
<tr>
<td>3. Arthralgia</td>
<td>P</td>
</tr>
<tr>
<td>4. Headache</td>
<td>P</td>
</tr>
<tr>
<td>5. Nausea</td>
<td>A</td>
</tr>
<tr>
<td>6. Vomiting</td>
<td>A</td>
</tr>
<tr>
<td>7. Fever</td>
<td>A</td>
</tr>
<tr>
<td>8. Sleeplessness</td>
<td>P</td>
</tr>
</tbody>
</table>

[V.P- Vata Pitta Jvra; V.K- VataKaphaJvra; P- Present; A- Absent] [Ch.S.Ch. - Charaka Samhita Chikitsasthana 3/85-87; S.S.U. - Susruta Samhita Uttar Tantra 39/47-49 As.H.Ni. - Astangahrudaya, Nidanasthana 2/24-25; As. S. N. - AstangaSamgrahaNidanasthana 2/21-22; Ma.Ni.-MadhavaNidanasthana 2/14-16; Bh.Pr.Ma-BhavaPrakashaMadhyaamaKhandha, Pratham Bhaga, 500.]

Table no. 3:- Keetavisha concept

<table>
<thead>
<tr>
<th>CHIKUNGUNYA SYMPTOMS</th>
<th>SAMHITA</th>
<th>NAME OF</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.S.K.</td>
<td>C.CHI.</td>
<td></td>
</tr>
<tr>
<td>1. Fever</td>
<td>Jwara</td>
<td>Jwara</td>
</tr>
<tr>
<td>2. Maculopapular rash</td>
<td>Madala</td>
<td>Kandu</td>
</tr>
<tr>
<td>3. body ache</td>
<td>Angmardas-angshvoolaa</td>
<td></td>
</tr>
<tr>
<td>Especially Arthralgia</td>
<td>Gatrarakta-syavavarana with pidika</td>
<td></td>
</tr>
<tr>
<td>4. Vomiting</td>
<td>Chardi</td>
<td></td>
</tr>
</tbody>
</table>
Achyara Charaka has explained dooshivishakeetalkashana’s in charakakhitas 23/140-42. Sushruta, mentioned 67 types of keeta. Apart from that he explained about teekshanavishakeetalkashana. In which symptoms and cause of this disease are similar. As these keetavisha acts as dooshivisha in our body. In sushrutakalpasthana 8/3-4 shloka it is explained very clearly that dooshivishaprapakaparana 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 Un-published 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 contraindicated in arthritis. The fact sheet on chikungunya also said that antipyretic like Aswgandha (Tinospora cordifolia), Shunti (Zingiber officinale), Patha (Cissampelos pareira), Tulsi (Ocimum sanctum), Nimbha (Azadirachta indica) etc. can be given. Immunomodulators like Ashwagandha (Withania somnifera), Amalaki (Emblica officinalis), Guduchi (Tinospora cordifolia) andasyamadhumadhu (Glycyrrhiza glabra) can be given. Tulsi (Ocimum sanctum), Nimbha (Azadirachta indica), shalaparni (Desmodium gangeticum), vacha (Acorus calamus,) etc. can be used for treating 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 Un-published studies in cell culture and monkeys showed 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 contraindicated in arthritis.

6. Ayurvedic treatment of janapododwansiyaroga (chikungunya):
6.1 Symptomatic treatment
a) Jwarahara (antipyretic)
b) Sothahara (anti-inflammatory)
c) Vednasthapaka (analgesic)
d) Kusthaghana (raktashodhaka)
e) Kasahara (antitussive)
f) Kandughna (antipruritic)
g) Swasahara (anti allergic)
h) Atisarahara (antidiarrheal)

6.2 General line of Management
a) Rasayana (immunomodulators)

Table no. 4:-formulations useful in chikungunya

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Indication</th>
<th>Name of the Formulation</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Jeernajvara, SannipataJvara</td>
<td>Amritottara Kvatha Curna</td>
<td>Sahasrayoga, Kashaya Prakarana,30</td>
</tr>
<tr>
<td>2.</td>
<td>Vataroga</td>
<td>Gandharvahastadi Kvatha Curna</td>
<td>Sahasrayoga, Kashaya Prakarana 394</td>
</tr>
<tr>
<td>3.</td>
<td>SannipataJvara</td>
<td>Chinnodhbhavadi Kvatha Curna</td>
<td>Sahasrayoga, Kashaya Prakarana,38</td>
</tr>
<tr>
<td>4.</td>
<td>Parsvasula, Jvara</td>
<td>Dasamula Kvatha Curna</td>
<td>BhaisajyaRatnavalikasarogadhikara,13</td>
</tr>
<tr>
<td>5.</td>
<td>Jvara, San nipataJvara</td>
<td>Darunagaradi Kvatha Curna</td>
<td>Sahasrayoga, Kashaya Prakarana,34</td>
</tr>
</tbody>
</table>

5.4 In terms of keetavishachikitsa
a) dhoopana
b) bhoogadha

5.3 Vector control agents:
a) Dhoopana
b) Bhoogadha

REFERENCES

RESEARCH PAPER
Volume : 4 | Issue : 11  | November 2014 | ISSN - 2249-555X

INDIAN JOURNAL OF APPLIED RESEARCH
40

RESeaRCh PaPeR