Critical analysis of applicability of Shadanga Paneeya in Jwara Chikitsa: A Review

Srinivas Avula¹*

¹. Associate Professor/Reader, Department of Samhita Siddhanta, Raja Rajeshwari Ayurvedic Medical College and Hospital, Humnabad, Bidar District, Karnataka.

Abstract

Jwara is one of the dreadful diseases, which affects the human body, mind as well as senses. The jwara has been described in all the classics of Ayurveda with prime importance. The fever has been described in detail with its etiology, pathology, sign symptoms, and management. Diet is being equally important as that of medicine. Jwara occurs due to the depletion of the digestive fire leading to the formation of aama. In Charak samhita different diet and drinks have been described as per the condition of jwara. Siddha jala (medicated drinks) has been described in jwara such as Ushna jala in vata kapha jwara, Tiktaka shruta sheeta jala in madhyaja and paittika jwara, Shadanga Paneeya in all kinds of jwara. Shadanga paneeya has been described as useful in all kinds of jwara. Shadanga contains six drugs, viz., Musta (Cyperus rotundus Linn), Parpatak (Fumaria parviflora Lam.), Usheera (Vetiveria zizanoides (Linn) Nash.), Chandana (Santalum album Linn.), Uddichya (Pavonia odorata Willd), Nagar (Zingiber officinale Roscoe). This combination is unique, and helpful in all kinds of jwara. The drug possessing the properties of sheeta veerya and tikta, katu rasa, by virtue of which they are useful in pacifying the jwara. Therefore, here an attempt is made to understand the applicability of Shadanga paneeya in all kinds of jwara.

Key Words: Jwara, Shadanga paneeya, Fever.

Introduction

Samhitas are the source of knowledge of Ayurveda. In order to achieve the four pursuits of life Ayurveda helps to maintain the health and cure the disease. Diseases are described in Samhitas with their etiology, sign symptoms and management. Jwara (fever) is the disease which present at the time of birth and death also. Jwara is considering as important disease as it afflicts the body, mind and senses.

In Charaka samhita jwara has been described with its etiology, sign symptoms and management principle in Nidanasthana, whereas its detailed management with different types described in chikitsasthana. (1, 2) Different treatment modalities has been described for the jwara. As Agni dushi is the prime cause in manifestation of jwara. Diet is being equally important as that of medicine. Jwara occurs due to the depletion of the digestive fire leading to the formation of aama. In Charak samhita different diet and drinks have been described as per the condition of jwara. Siddha jala (medicated drinks) has been described in jwara such as ushna jala in vata kapha jwara, tiktaka shruta sheeta jala in madhyaja and paittika jwara, shadanga Paneeya in all kinds of jwara. Shadanga contains six drugs, viz., Musta, Parpatak, Usheera, Chandana, Uddichya, Nagar. This combination is unique, and helpful in all kinds of jwara. The drug possessing the properties of sheeta veerya and tikta, katu rasa, by virtue of which they are useful in pacifying the jwara. Therefore, here an attempt is made to understand the applicability of Shadanga paneeya in all kinds of jwara.

Aim

To understand the applicability of Shadanga Paneeya in all kinds of Jwara.

Material and methods

For this conceptual study Ayurveda Samhitas – Charaka Samhita, Shushruta Samhita, Bhavaprakash nighantu books of Dravyaguna vijnana, and online journals in which study of the concern drug has been carried out have been re-viewed.

Limitation: The data published in different articles about these drugs has been studied in vitro, no human trials had been done, so here interpretation has made on the basis of that data.

Observations

Charaka samhita and Shushrta samhita both consider the origin of jwara is from lord Shiva. Jwara is considered as supreme among all the diseases named by different name in different creature. (4, 5) Due to presence of devotional power in human being they can tolerate the fever, but rest of all animals could not survive once get afflicted by fever. (5)
Etiopathogenesis of fever

Nidana (Causative factor)

Charaka samhita: (6) In nidanasthana there is description about eight types of jwara. The Strotas involved in occurrence of jwara is Rasavaha and Swedavaha. Nidana, samprapti and laxanas have been described separately for vataj, pittaja, kaphaja, Dwandaja, sannipataja jwara. Vishamprajanaana and prajata miithyapachara are also elaborated as a causes for jwara.

In Sushruta samhita the common causative factor for all kinds of jwara has been described viz., Snehadi karma mithyayoga (improper application of oleation, sudation), Abhichar (grief), Viparyaya (not following the seasonal regimen), Satmya viparyaya (ingestion of unwholesome food), Rutu viparyaya (not following the seasonal regimen), Oushna jala (medicated drinks), Shrama (indigestion), Jeeerna jwara (yawning), Rutu (yawning), Abhighat (curse of stars), Nakshatrapeeda (curse with its satmya), Rutu, Shrama, Abhighat, Nakshatrapeeda, Manasika abhishang (psychological disturbances), Apprajata (not having normal labour), Strotas (obstruction), Aamaashaya ushma (diminished, and manifest the Aamaashaya ushma)

Purvarupa (Prodromal sign)

In Charaka samhita the prodromal signs of fever have been described as, aalasya, nayanasrava, Jeerna jwara: (7)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Charaka Samhita(10)</th>
<th>Sushruta samhita (11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purvarupa</td>
<td>Laghu, apatarpana</td>
<td>Vataj- Pure ghee</td>
</tr>
<tr>
<td>Aamashaya samutha:</td>
<td>Kashayapana, abhyangaa, sneha, swedaa,</td>
<td>Apatarpana, Vaman, Langhana, Ushnambu</td>
</tr>
<tr>
<td></td>
<td>pradeha, parisheka, lepana, vaman, virechana,</td>
<td>Vaman, Viechana, Aasthapana, shirovirechana</td>
</tr>
<tr>
<td></td>
<td>aasthapana, amuvasan,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nasya, dhupa, dhuma, ksheerabhojana.</td>
<td></td>
</tr>
<tr>
<td>Jeerna jwara:</td>
<td>Sarpi pana</td>
<td>Sarpi pana</td>
</tr>
</tbody>
</table>

Table no. 2: Siddha jala (Medicated drinks) to be administered in jwara

<table>
<thead>
<tr>
<th>Shadanga paneeya</th>
<th>Vata kapha jwara</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ushna jala</td>
<td>Vata kapha jwara</td>
</tr>
<tr>
<td>Tiktaka shruta sheeta jala</td>
<td>Madyaja and paaitika jwara</td>
</tr>
<tr>
<td>Shadanga paneeya</td>
<td>All kinds of fever</td>
</tr>
</tbody>
</table>

In Charaka samhita siddha jala (medicated drinks) has been described as above. Ushna jala and Tiktaka shruta sheeta jala is advisable among specific jwara, but the Shadanga paneeya is useful in all kinds of jwara.

Shadanga Paniya

The medicated water prepared with six medicinal herbs viz., musta, parpatak, usheera, chandana, uddichya, nagar is known as Shadanga paneeya.

Table no.3: Properties of six drugs:

<table>
<thead>
<tr>
<th></th>
<th>Musta(12)</th>
<th>Parpatak(13)</th>
<th>Usheera(14)</th>
<th>Chandan(15)</th>
<th>Uddichya(16)</th>
<th>Nagar(17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin (Family)</td>
<td>Cyperus rotundus Linn.</td>
<td>Fumaria parviflora Lam.</td>
<td>Vetiveria zizanoides (Linn) Nash</td>
<td>Santalum album Linn</td>
<td>Pavonia odorata Wild</td>
<td>Zingiber officinale Roscoe</td>
</tr>
<tr>
<td></td>
<td>Cyperaceae</td>
<td>Fumariaceae</td>
<td>Graminaceae</td>
<td>Santalaceae</td>
<td>Malvaceae</td>
<td>Scitaminae</td>
</tr>
<tr>
<td>Rasa</td>
<td>Tikta, katu kashaya</td>
<td>Tikta</td>
<td>Tikta madhura</td>
<td>Tikta madhura</td>
<td>Tikta</td>
<td>Katu</td>
</tr>
</tbody>
</table>
The overall analysis of the drugs among Shadanga paneeya is as follows.

**Rasa (Taste)**

Among the six drugs the predominant rasa is *tikta* (bitter), then *madhura* (sweet) and followed by *katu* (pungent) and *kashaya* (astringent). *Tikta* rasa is the superior to mitigate the fever as it does the aamapachana, aamashayakledanashana, agnideepaka. Shadanga paneeya is having dominancy of *tikta* rasa, therefore useful to counteract the samprapti of jwara. As per doshic predominance, *tikta* mitigate the *pitta* dosha, Kashaya mitigate the *kapha* dosha and *madhura* mitigate the *vata* dosha. Therefore on analysis of rasa combination of shadanga paneeya, it is useful in all kinds of jwara.

**Guna (Properties)**

Among the six drugs the predominant *guna* are *laghu*, *ruksha*, followed by *guru* and *teeksha*. *Laghu* and *Ruksha* *guna* having the predominance of *vayu*, *aakasha* and *agni mahabhutas*. These properties are useful in depletion of *aama*. Due to these properties it is useful in *santaranpanotha* jwara.

*Guru* property is useful in nourishment as it is having *prithvi* and *aapa mahabhuta* predominance. Due to this *guna* it is useful in *kshataj*, *kshajay* and *vata* jwara. *Teeksha* *guna* by its nature works rapidly in body. Therefore combination of these properties in shadanga paneeya is applicable in all kinds of jwara.

**Veerya (Potency)**

The predominance of *sheeta* veerya is present among the drugs of shadanga paneeya along with lesser proportion of *ushna* veerya. *Jwara* is disease of *ushna* in nature therefore *sheeta* veerya drugs is useful in it. Also in conditions like *sheetapurvak* *jwara* (fever with chills) shadanga paneeya is useful as it contain *ushna* veerya drug also.

*Visha* (poison) are having *ushna* veerya in nature therefore shadanga paneeya by virtue of its *sheeta* veerya dominancy useful in *vishaj* *jwara* (fever due to poison or poisonous contact).

**Vipaka**

The drugs of shadanga paneeya having combination of *katu* and *madhura* vipaka with dominancy of *katu* vipaka. As *katu* vipaka does the aamapachana, aamashayakledanashana useful in all kinds of *jwara*. *Madhura* vipaka is useful in *vataj*, *bhayaja*, *shokaj* jwara. Therefore the vipaka combination of shadanga paneeya is present in such a way that it is useful in all kinds of jwara.

**Karma (Pharmacomological action)**

The pharmacomological action of each drug is useful in breaking the etiopathogenesis of *jwara*. Almost all the drugs does the *deepan* *pachan* by which they are depleting *aama*. *Parpataka* (13) does the *trishna nigrahana* (pacifies the thirst), *Chandana* (15) does the *dah prashaman* (mitigates burning sensation), *Musta* (12) does the aamapachana, *Usheera* (14) does the *pachana* with *pitahamana*. *Uddichya* (16) does the *dah prashaman* (mitigates burning sensation), *Shunthi* (17) does the aamapachana, *agnideepana*.

So here the combination involved in shadanga paneeya is effective in dengue, typhoid and exhibiting antimalarial effect. These drugs are also exhibiting the antimicrobial effect by which they are useful in pyrexia caused by the infections of those microbes.

Advance researches has also revealed the antipyretic effect of these drugs.

**Musta (Cyperus rotundus Linn.) (18)**

The Cyperus rotundus tubers from which the isolation of patchoulenone, carophyllene or-oxide, 10,12-perooxycalmenene and 4,7-dimethyl-l-tetralone has been done. These compounds had shown the antimalarial activities as the higher efficacy at ECso 2.33 × 10⁻⁶ M.

The Cyperus oil had shown the antibacterial activity among various micro organisms. The microorganisms viz., Klebsiella pneumoniae, Proteus vulgaris, Streptococcus pyogenes, E. coli and P. aeruginosa, S.Aureus were studied by using inhibition zone method (Aromatogram). The MIC and MBC for each microbe were estimated. The oil of Cyperus rotundus was shown an efficacy over the bacteria, in which efficacy was more among the Gram-positive bacteria, as compared to Gram-negative bacteria. The bacteria leads to the infection in the body. Any infection in the body leads to the pyrexia, as *musta* has shown antibacterial activity for various micro organisms the drug is useful for pyrexia.

**Parpataka (Fumaria parviflora Lam.)(19)**

*Fumaria indica* (parviflora) possesses the two major phytochemicals *Narlumicine* and Oxysanguinarine, these two are efficacious in the inhibition of dengue virus (DENV) . The binding affinity is more than eight kcal/mol against DENV4-NS4B. These phytochemicals are highly reactive in the
Usheera (Vetiveria zizanoides (Linn.) Nash.) (20)

Extract of Vetiveria zizanoides at 75 mg, 150mg and 300 mg/ kg dose had shown the significant reduction in the elevated temperature which was occurred due to the subcutaneous injection of yeast suspension (10ml/kg body weight).

Chandana (Santalum album Linn.):(21)

The oil of the Santalum album had shown an effective antibacterial effect against Methicillin resistant Staphylococcus aureus and antimycotic resistant Candida species. The oil also exhibits the inhibition against Herpes simplex virus Type 1. The santalol has shown the anti-influenza activity against H3N2 virus. Methanol extract of Santalum album effective against Bacillus subtilis, Salmonella typhi, Staphylococcus aureus and Pseudomonas aeruginosa and highly active against Candida albicans.

Uddichya (Pavonia odorata Willd.) (22)

Pavonia odorata has shown the good antimicrobial activity against S.aureus, Diplococcus pneumonia, Chrysoporium indicum and Botrydipodia spp.

Nagar (Zingiber officinale Roscoe.)(23)

An ethanolic extract of Zingiber officinale was shown the anti-inflammatory, analgesic, antiptyreic, antimicrobial and hypoglycaemic activities. In rats, the extract of Zingiber officinale had shown the reduction in the carrageenan-induced paw swelling and yeast-induced fever. The Zingiber officinale had shown the efficacy in the inhibition of the growth of both Gram-positive and Gram negative bacteria.

Discussion

In Charaka samhita nidana has been described separately for each types of fever. In Sushruta samhita the common cause for nipa jwara have been described. Stanyavaran as a cause for jwara have been described in Sushruta samhita. Both the treatise consider the rasawaha and swedavaha strotas involvement in occurrence of fever. The description of specific prodromal signs as per the involvement of doshas is the contribution of Sushruta samhita. The treatment principle as per prodromal signs, aamavastha has been described in both samhitas. In Sushruta samhita administration of specific medicine as per the dosha involvement in prodromal stage have been described viz., vataj- pure ghee, pittaj- virechana, kaphaja – mrudu prachachardhana. The description about treatment as per the stages viz., purvarupa, Aamashaya samuttha, jeerna jwara have been described in both samhitas.

The paneeya has been mentioned in charaka samhita in jwara as, as Usnha jala in vata kapha jwara, Tikta shruta sheeta jala in madyaja and paittika jwara, Shadanga Paneeya in all kinds of jwara. Shadanga contains six drugs, viz., musta, parpatak, usheera, chandana, uddichya, nagar. The conceptual analysis of shadanga paneeya in context with their Rasa, Guna, Veerya, Vipaka, Karma highlights the applicability in all kinds of jwara.

Shadanga contains six drugs, viz., musta, parpatak, usheera, chandana, uddichya, nagar. The every drug had shown the antimicrobial effect in different spectrum. The micro organisms are the responsible for the infection which in turns induces the fever. Hence the inhibition of the microorganism will control the infection and helpful in the reduction of fever.

The Cyperus rotundus was shown an efficacy over the Gram-positive bacteria, and Gram-negative bacteria. Parpatak is efficacious in the inhibition of dengue virus (DENV), Usheera is efficacious in fever due to yeast. Uddichhya is effective against S.aureus, Diplococcus pneumonia, Chrysoporium indicum and Botrydipodia spp. The Santalum album is effective against Methicillin resistant Staphylococcus aureus and antimycotic resistant Candida species Herpes simplex virus Type 1, H3N2 virus, Bacillus subtilis, Salmonella typhi, Staphylococcus aureus and Pseudomonas aeruginosa, Candida albicans. Zingiber officinale had shown the reduction in yeast-induced fever and shows the inhibition of the growth of both Gram-positive and Gram negative bacteria.

Hence the drugs of shadanga paneeya have also shown in researches the antipyretic effect ranging from dengue, malaria, typhoid to exhibition of antimicrobial effect.

Conclusion

Shadanga paneeya is a unique combination of different herbs, which by virtue of its combination of different Rasa, Guna, Veerya, Vipaka useful in all kinds of jwara. The combination possesses the antipyretic effect in all kinds of fever which are originating from viral, bacterial and parasitic origin. Therefore this is to conclude that shadanga paneeya as adjuvant medicated liquid is useful in all kinds of jwara.

References

4. Charaka samhita by Agnivesha revised by charaka and Dridhabala with the Ayurved Dipika commentary of Chakrapanidatta, Editor Acharya


