Practical Processing of Dadimaavaleha: A Review

Namitha R. Chandra\textsuperscript{1}\textsuperscript{*}, Sharada Khanal\textsuperscript{2}, and Basavaraj Y. Ganti

\textsuperscript{1,2}Department of Rasashastra and Bhaishajya Kalpana, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan, KA, India

ABSTRACT

Avaleha is a semisolid dosage form, prepared by solidifying many of the liquids (Kwatha and Swarasa). Dadimaavaleha is one of the common Avaleha prescribed in Atisara. It is explained in Yogaratnakara Atisararogadhikara. The preparation consists of 22 ingredients. In the present work an attempt has been made to prepare the Dadimaavaleha from the ingredients available, also to study the Phytoconstituents and therapeutic efficacy of each drug w. s. r. to its indication. Dadimaavaleha has properties like Agnideepana, Pachana, Grahi, Anulomana, Shoolagna, Balya which are required in the treatment of Atisara. Hence, Dadimaavaleha can be administered in all types of Atisara and its complications.

KEYWORDS

Avaleha, Dadimaavaleha, Atisara, Phytoconstituents
INTRODUCTION

The branch of preparing and dispensing medicine is known as Bhaishajya Kalpana\textsuperscript{1}. Ancient Scholars of Ayurveda have developed the basic preparations in 5 different forms such as Swarasa, Kalka, Kwatha, Hima, Phanta\textsuperscript{2}. Due to need of time, less shelf life, more demand of medicines the formulations were further modified into secondary preparations like Avaleha, Arka, Taila and Ghruta. Avaleha is a semisolid dosage form, prepared by solidifying many of the liquids (Kwatha and Swarasa). Dadimaavaleha is one of the Avaleha Kalpana. It is explained in Yogaratnakara Atisararogadhikara\textsuperscript{3}. The formulation is formulated by 19 ingredients adding Madhu and Ghrita, Sharkara having indication in Jwara, Atisara, Amashoola, Agnimandya, Shotha, Kshaya and Dhatugata jvara. The aetiological factors of Atisara\textsuperscript{4} includes consumption of excessive heavy, unctuous, dry hot liquids, cold & cool foods i.e., Viruddhaahara, Adhyashana, Ajirna, Vishamaashana, Shoka, Bhaya, Madhyaatipana. The pathogenesis starts from Agnimandhya resulting in disturbance & vitiation of Ap Dhatu which mixes with pureesha (Stool) which is driven downwards by Samana & Apana Vata, with force it expels mostly water mixed stools frequently through Guda.

\textit{Dadima} is one of the main ingredients of this Avaleha which shows promising result in Atisara, hence an attempt has been made to prepare and review the Dadimaavaleha from the references available.

METHODOLOGY

Preparation of Dadimaavaleha was done as per reference. An extensive literature search was done for individual ingredients through books and digital media.

METHOD OF PREPARATION:

Reference:

\textit{Yogaratnakara Atisararogadhikara}

\textbf{Table 1} Ingredients of Avaleha and their proportion

<table>
<thead>
<tr>
<th>Sl no</th>
<th>Ingredients</th>
<th>Quantity taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dadima phala</td>
<td>96g</td>
</tr>
<tr>
<td>2</td>
<td>Jala</td>
<td>384ml</td>
</tr>
<tr>
<td>3</td>
<td>Sharkara</td>
<td>96g</td>
</tr>
<tr>
<td>4</td>
<td>Nagar</td>
<td>6g</td>
</tr>
<tr>
<td>5</td>
<td>Pippali</td>
<td>6g</td>
</tr>
<tr>
<td>6</td>
<td>Pippalimula</td>
<td>6g</td>
</tr>
<tr>
<td>7</td>
<td>Dhanyaka</td>
<td>6g</td>
</tr>
<tr>
<td>8</td>
<td>Jaitphala</td>
<td>6g</td>
</tr>
<tr>
<td>9</td>
<td>Jaitpatra</td>
<td>6g</td>
</tr>
<tr>
<td>10</td>
<td>Maricha</td>
<td>6g</td>
</tr>
<tr>
<td>11</td>
<td>Jeeraka</td>
<td>6g</td>
</tr>
<tr>
<td>12</td>
<td>Vamshalochana</td>
<td>6g</td>
</tr>
<tr>
<td>13</td>
<td>Patha</td>
<td>6g</td>
</tr>
<tr>
<td>14</td>
<td>Nimba patra</td>
<td>6g</td>
</tr>
<tr>
<td>15</td>
<td>Manjishita</td>
<td>6g</td>
</tr>
<tr>
<td>16</td>
<td>Lavanga</td>
<td>6g</td>
</tr>
<tr>
<td>17</td>
<td>Ghrita</td>
<td>96ml</td>
</tr>
<tr>
<td>18</td>
<td>Madhu</td>
<td>96ml</td>
</tr>
</tbody>
</table>

Materials:

Khalvayantra, Stove, Frying pan, Measuring jar, Weighing balance.

Method of Preparation:
In Khalvayantra, Dadimaphala 96g was taken and crushed. Then in a vessel, crushed Dadimaphala was taken and 384ml of water was added to it (1part:4 parts), subjected to heat and reduced to 1/4th quantity. Kwatha (decoction) was filtered through cloth, time taken was 35 minutes. The Kwatha was taken in stainless steel vessel and sugar was added to it. It was then heated on mild flame and continuous stirring was done till one thread consistency was obtained. Ghrita was added and mixed well. Pan was taken out from the fire; Prakshepaka dravya’s Churna were added and mixed well till it becomes homogenous mixture. Madhu was added when Avaleha cooled completely.

**Dose:** 1 Tola (12 grams)

**Anupana:** Madhu, Goksheera, Ushna jala

**Indication:** Jwara, Atisara, Amashoola, Agnimandya, Shotha, Kshaya, Dhatugata jwara

**PROPERTIES OF INDIVIDUAL DRUGS:**

- **Dadima phala**
  - Phytconstituents – Glucose, Fructose, Maltose, Starch, Oxalic acid, Thiamine, Vitamin C, Tannin, Riboflavin.
  - *Amayika prayoga* - Ripen fruit should be cooked in closed heating, the juice extracted from fruit cures all types of Atisara

- **Nagara**
  - Phytconstituents- Aromatic oil (1 - 4%), Starch (40-60%), Fat(10%), Fibre(5%), Camphene, Zingiberine, Gingerol, Gingerin

  *Amayika prayoga* - In Agnimandya-Nagara & Haritaki churna in equal quantity has to be taken with Guda/Saindhava. *Parinama sula* - paste of Nagara, Tila, Guda when consumed with milk is beneficial. *Shotha* - equal quantity of Nagara & Guda with Punarnava Kwatha. *Atisara* - Kwatha prepared from Nagara & Bilva

- **Pippali**
  - Phytconstituents- Piperine, Piplartine, Zingiberene, Piperundecalidine, Terpinolene, P-cymene

  *Amayika prayoga* - Jwara- Kwatha prepared by Pippali with 4 times water. *Udara shula* - combination of Pippali & Sringaver

- **Dhanyaka**
  - Phytconstituents- Volatile oil(0.3-1%), Fixed oil(13%), Proteins(20%), Tannin, Malic acid

  *Amayika prayoga* - Atisara- Dhanyaka Kwatha

- **Jatiphala**
  - Phytconstituents- Myristicin, Myristic acid, D-pinene, D-camphene, Safrole, Eugenol, Iesoeugenol
Amayika prayoga- Atisara- paste prepared from Jatiphala is applied over the umbilicus

- **Maricha**

Phytoconstituents- Alkaloid(5-9%), Volatile oil(1-2.5%), Pungent resin(6%), Piperidine, Starch

Amayika prayoga- Atisara- fine powder of Pippali & Maricha

- **Jiraka**

Phytoconstituents- Volatile oil(2.5-4%), Fixed oil(10%), Proteins

Amayika prayoga- Jwara- paste prepared from Jiraka with Guda

- **Vansalochana**

Phytoconstituents- Silica, Iron peroxide, Potassium, Alumium, Glycosides

- **Nimba patra**

Phytoconstituents- Nimbin, Nimbinene, Nimbandiol, Azadirone, Azadiracthin

Amayika prayoga- Jwara- Nimbadi Kwata

- **Samanga**

Phytoconstituents- Manjishtin, Purpurin, Rubifolic acid, Fatty acids, Rubianin

Amayika prayoga- Sotha- Manjistadi Lepa

- **Ativisha**

Phytoconstituents- Atisine, Atidine, Tannic acid, Aconitic acid, Hestisine, Heteratisine, Doterpene

Amayika prayoga- Amatisara- The Peya processed with Tivisha, Nagara & Amla

- **Patha**

Phytoconstituents- Alkaloids, Quercitol, Sterol, Saponins

Amayika prayoga- Atisara- Patha triturated with curd

- **Lavanga**

Phytoconstituents- Volatile oil(15-20%), Tannin(10-13%), Resin, Chromone, Eugenin

Amayika prayoga- Amatisara- Lavanga catuhsama. Agnimandya- Lavangadya modaka

- **Dipyaka**

Phytoconstituents- Thymol, Thymine, Dispentene, r-terpinen

Amayika prayoga- Agnimandya- Yavani pancake

- **Kuta Salmali**

Phytoconstituents- Napthaquinone, Lupeol, β-D-glucoside, β-sitosterol

Amayika prayoga- Atisara- Basti of Salmali leaf petioles/exudates boiled with milk then mixed with ghee

**DISCUSSION**

Dadimaavaleha is one of the commonly practiced Avaleha in Annavahasrotogata vikara. It is one of the drugs of choice in Atisara. There are only few references available in the Authentic Ayurvedic text. The ingredients, methods of preparation, indication are same in all the references available. There are 22 ingredients in total.
At the temperature of 102.5°C paka was attained. It took 35 minute for preparation.

Table 2 Rasapanchaka of drugs

<table>
<thead>
<tr>
<th>Name of the drugs</th>
<th>Rasa</th>
<th>Guna</th>
<th>Veerya</th>
<th>Vipaka</th>
<th>Karma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dadima phala</td>
<td>Madhura, amla, kashaya</td>
<td>Laghu, sheeta</td>
<td>Sheeta</td>
<td>Madhura</td>
<td>Tridoshahara</td>
</tr>
<tr>
<td>Nagara</td>
<td>Katu</td>
<td>Laghu, ruksha</td>
<td>Ushna</td>
<td>Madhura</td>
<td>Kaphavatahara</td>
</tr>
<tr>
<td>Maricha</td>
<td>Katu</td>
<td>Laghu, tikshna</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphavatahara</td>
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<tr>
<td>Pippali</td>
<td>Katu</td>
<td>Laghu</td>
<td>Anushna</td>
<td>Madhura</td>
<td>Kaphavatahara</td>
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<tr>
<td>Dhanvaka</td>
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<td>Laghu, sheeta</td>
<td>Ushna</td>
<td>Madhura</td>
<td>Tridoshahara</td>
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<td>Ajamoda</td>
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<td>laghu, ruksha</td>
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<td>Tridoshahara</td>
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<td>Jatiphala</td>
<td>Katu, Tikta</td>
<td>Laghu</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphavatahara</td>
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<td>Jiraka</td>
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<td>Ushna</td>
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<td>Kaphavatahara</td>
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<tr>
<td>Vamsalochna</td>
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<td>Laghu, ruksha</td>
<td>Sheeta</td>
<td>Madhura</td>
<td>Kaphapittahara</td>
</tr>
<tr>
<td>Pata</td>
<td>Tikta</td>
<td>Laghu, tikshna</td>
<td>Ushna</td>
<td>Katu</td>
<td>Tridoshahara</td>
</tr>
<tr>
<td>Vijaya</td>
<td>Katu, tikta</td>
<td>Laghu, ruksha</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphavatahara</td>
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<tr>
<td>Nimba patra</td>
<td>Tikta, kashaya</td>
<td>Laghu, ruksha</td>
<td>Sheeta</td>
<td>Katu</td>
<td>Kaphapittahara</td>
</tr>
<tr>
<td>Samanga/Manjista</td>
<td>Madhura, tikta</td>
<td>Guru, ruksha</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphapittahara</td>
</tr>
<tr>
<td>Kutashalmali / Mocharasa</td>
<td>Madhura</td>
<td>laghu, snigda</td>
<td>Sheeta</td>
<td>Madhura</td>
<td>Vatapittahara</td>
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<td>Aralu</td>
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<td>Ruksha</td>
<td>Sheeta</td>
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<td>Kaphapittahara</td>
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<tr>
<td>Lavanga</td>
<td>Katu, tikta</td>
<td>Laghu, sheeta</td>
<td>Sheeta</td>
<td>Katu</td>
<td>Pittakaphahara</td>
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</tbody>
</table>

OBSERVATION

Table 3 Organoleptic characters

<table>
<thead>
<tr>
<th>S. No</th>
<th>Kwatha</th>
<th>Avaleha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Varna</td>
<td>Dadima colour</td>
</tr>
<tr>
<td>2.</td>
<td>Rasa</td>
<td>Kashaya Madhura</td>
</tr>
<tr>
<td>3.</td>
<td>Gandha</td>
<td>Sugandha</td>
</tr>
<tr>
<td>4.</td>
<td>Sparsha</td>
<td>Liquid</td>
</tr>
</tbody>
</table>

Atisara is the Vatapradhana tridoshaja vyadhi. The symptoms of Vataja Atisara can be obtainable under two headings Ama and Pakwa Atisara. In Amaja, Vata lodged in alimentary tract, getting obstructed moves obliquely making gurgling sounds and colicky pain. Here Grahi but Anulomana dravya can be used like Dadima, Ajamoda, Ativisha, Dhanvaka, Jatiphala, Pata, Nagar, Jeeraka, Vijaya, Vamsalochna, Nimba patra, Mocharasa, Aralu which brings back the Ap dhatus in prakritavastva & to decrease Dravata of pureesha in Pakvashaya along with Sulaghna drugs like Ajamoda, Lavanga, Pippali are needed to do Shamana of Shula. In Pakwa stage Vibadha, Alpalapam Sashabdam, Shula, Phena, Picha, Parikarthika, Romaharsha associated with Swasa and Sushkamukha. There will be pain in Kati, Uru, Trika, Janu, Prishta, Parswa. Ajamoda, Lavanga, Pippali are needed to do Shamana of Shoola. For Swasa
Lavanga, Nagara, Jeeraka and for Sushkamukha Dadima, Ajamoda, Dhanyaka, Jeeraka will be helpful.

In Pittaja Atisara Trishna, Daha, Sweda, Murcha, Shoola, Santapa, Paka. Dadima, Ajamoda, Dhanyaka, Jatiphala, Lavanga, Nagara, Jeeraka helps to relieve Trishna, Daha, Santapa. For Shoola Ajamoda, Lavanga, Pippali are benefited.

In Kaphaja Atisara heaviness in the Abdomen, Rectum, Hypogastric and Inguinal region, Krite api akruta samjata(sense of incomplete evacuation), Romaharsha, Utklesa, Nidra, Alasya, Sadana, Annadweshi. The drugs like Dadima, Ajamoda, Dhanyaka, Jeeraka, Lavanga, Pippali, Jatiphala, Pata helps in reducing the heaviness by their Laghu guna and Kaphahara property. In condition like Utklesa, Annadweshi Dadima, Ajamoda, Ativisha, Dhanyaka, Jatiphala, Lavanga, Nagara, Jeeraka, Vijaya, Pippali, Maricha having Agnideepana & Pachana properties are required.

The Upadravas of Atisara as mentioned by different authors are compiled as Trishna, Daha, Shwasa, Bhrama, Hikka, Jwara, Shopha, Ruja, Kasa, Aruchi, Pravahika, Parikartika, Murcha. Dadima, Ajamoda, Dhanyaka, Jatiphala, Lavanga, Nagara, Jeeraka helps to relieve Trishna, Daha, Pippali, Nimba, Jeeraka are Jwaraghna drugs helps to subside Jwara. Ajamoda, Lavanga, Pippali helps to decrease Ruja. For Kasa, Swasa, Hikka drugs like Nagara, Jeeraka, Lavanga, Pippali, Maricha, Jatiphala are helpful. Most of the Upadravas are well indicative of severe stage of dehydration. Balya dravyas like Dadima, Ghrita, Madhu, Sarkara having nourishing properties helps to regain the Bala (strength) in severe dehydration.

The drugs which are used in the preparation of Dadimaavaleha are having properties like Agnideepana, Pachana, Grahi, Anulomana, Shoolagna, Balya which are required in the treatment of Atisara. Hence Dadimaavaleha can be administered in all types of Atisara.

**CONCLUSION**

Dadimaavaleha is an effective preparation for Atisara which is practiced till date. It is also useful in jwara with atisara, raktaja vikaras as it as stambana property. The pharmacological actions of the formulation and its constituents are largely supported for eliminating the diseases Atisara, Jwara, Shula, Aruchi, Agni mandhya, Pravahika. Focusing to Atisara drugs having properties like Dipana, Pachana, Grahi, Vatanulomana and Balya which is found in Dadimaavaleha.
Color plate 1 Preparation of Dadimaavaleha
REFERENCES


