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Section A – Basic Sciences; Section B –Applied and Technological Sciences; Section C – Allied Sciences

Available online at www.ijit.net**Research Article****A BIRD'S EYE VIEW ON AVALEHA KALPANA W.S.R. TO PHARMACEUTICS*****DR. PRERNA VAISH **PROF. K. SHANKAR RAO****P.G. Scholar, ** Professor & Head, Department of Rasashastra & Bhaishajya Kalpana, National Institute of Ayurveda, Jaipur.***ABSTRACT**

Avaleha kalpana is one of the most important pharmaceutical preparation of Ayurveda. Avaleha kalpana may be defined as a process where various things like decoction, powder, sweetening agents, fat material and perfuming substances are employed for the preparation of soft, semi-solid ingestible medicaments. This process ensures absorption of active therapeutic properties of ingredients used. The fundamental principles of preparation of Avaleha kalpana is well designed by the Ancient scholars and these have been used in many diseased conditions viz. Chyavanaprash Avaleha etc.

KEY WORDS: Ayurveda, Kashaya, Avaleha, Pharmaceuticals.**INTRODUCTION**

Avaleha kalpana is one of the most important pharmaceutical preparation of Ayurveda. In Ayurveda, the pharmaceuticals is dealt under the heading of Bhaishajya Kalpana. Bhaishajya Kalpana deals wide ranges of medicinal preparations, they are, primarily Pancha vidhya kashaya kalpana, namely Swarasa, Kalka, Kashaya, Hima and Phanta and secondary preparations like Churna, Vati, Sneha, Asavarishta and Avaleha Kalpana.

The nomenclature of Avaleha and kalpana is sum of words Avaleha and Kalpana, where Avaleha means a product liked by all ages throughout the world. It is recognized as an ingredient of balanced drug /diet which is used for ingestion. In other words Avaleha Kalpana may be defined as a process where various things like decoction, powder, sweetening agents, fat material and perfuming substances are employed for the preparation of soft, semi-solid ingestible medicaments. This process ensures absorption of active therapeutic properties of ingredients used.

In Ayurveda, Avaleha Kalpana is first mentioned by Acharya Charaka in Charaka Samhita, but its pharmaceutical principals was first described by Sharangadhara, the author of Sharangadhara Samhita.

Qualities of Avalehas

The qualities of Avalehas over other medicaments are as follows:

1. Easy to administration
2. Pleasant and agreeable taste
3. Safe in use
4. High therapeutic efficacy
5. Economic.
6. Accepted by all age groups.
7. Provides oligeneous to throat.
8. Longer shelf life.

Requirements for Avaleha Preparation

As per the Ayurvedic Pharmaceuticals Avaleha Kalpana needs following materials ;

1. Drava dravyas (Drugs for decoction / Juice etc.)
2. Churna dravyas (Drugs for powder / pulp)
3. Madhura dravyas (Sugar, Jaggery, Sugar candy, etc.)
4. Sneha dravyas (oil / ghee)
5. Prakshepa dravyas (Drugs for additives / perfuming)

Preparation of Decoction for Avaleha Kalpana

In ancient literature there is an immense description of preparation of decoction. The word Kashaya was first mentioned by Charaka the author of Charaka Samhitha. But the word Avaleha Kalpana is first

described by Dalhana while commenting on Sushruta Samhita. Yadav ji the author of Dravyaguan vignan has Described various Kashaya preparations, which includes- Avaleha Kashaya the above two references emphasizes the importance of Avaleha Kashaya preparation for Avaleha Kalpana, which differs from Pana, Sneha and other etc...Kashayas (Table 1)

Table 1: Showing Avaleha Kashya According to Various Authors.

| Name of the Author | % of Drug | % of Water | Reduction part | Name of Kashaya |
|--------------------|-----------|------------|----------------|-----------------|
| Sushruta Samhita | 1pt. | 8pts. | 1/4 | Avaleha Kashaya |
| Sushruta Samhita | 1 pt. | 16 pts. | 1/8 | Avaleha Kashaya |
| Dravya guna vignan | 1pt. | 8pts. | 1/4 | Avaleha Kashaya |
| Dravya guna vignan | 1pt. | 16pts. | 1/4 | Avaleha Kashaya |

For Avaleha preparations generally Churna and Kashaya to be taken in the amount of 1:4 ratio. Decoctions are generally prepared with the drugs and eight / sixteen times water. All these quantities of water boiled to reduced to one fourth and one eight respectively to prepare Avaleha Kashaya. The reason for taking sixteen times of water because hard and woody drugs will take more time to release their active principles. This is a general rule of preparation of Avaleha Kashaya, where there is specific mention about reduction it should be prepared accordingly

Addition of Other Dravya Dravyas

In addition to the Kashaya (Decoction), Juice and other drava dravyas are also used in Avaleha preparation. They are namely, Ksheera, Gomutra, etc. These to be added as mentioned in the formula.

(ii) Churna Dravyas (Drugs for Powder or Pulp)

By pounding the drugs or drug into fine powder form is known as Churna. Churna is to be prepared by finely pounding or pulverising the drugs in a mortar or pulverisor when dry herbs are used where there is mention of number of drugs in a formula, the drugs are to be powdered and sieved separately. Each One of them is weighed separately and used accordingly. According to the general principle the amount of Churna dravya to be taken one fourth to the amount of dravyas.

In few cases pulp of the drugs are mentioned used in the place of Churna dravyas. In such cases pulp is obtained by subjecting the boiled fruits to the pulper and made into paste form. This can be added to thready (tantumat) paka of kashaya to prepare the Avaleha.

(iii) Sneha Dravyas

Tila taila or cow's ghee are generally used as sneha dravyas in Avaleha preparation. These are used alone or in combination i.e. Yarmaka (a mixture of taila and cow's ghee) form for frying pulp. In few cases these to be added to the Avaleha at its final stage of preparation.

The reasons behind taking sneha dravyas for avaleha preparation are as follows

1. To provide desired textural property
2. To prevent from carbonization of pulp during the process.
3. To lubricate the ingredients, thus improving overall eating qualities
4. To facilitate easily ingestable
5. To provide snigdha (oiliness) to the body and
6. Medicinal values

The oil for the purpose of Avaleha should be preferably new one and ghee (cow's ghee) should be as old as possible (purana ghrita). These sneha dravyas are to be taken according to the amount mentioned in the formula.

(iv). Madhura Dravyas

Matsyandika, Sita (Sugar), Guda (Jaggery), and Khanda sarkara are generally used as sweetening agents in the preparation of Avaleha. Where ever is no mention of its quantity, these should be taken double (guda) and (Sugar) to the amount of churna dravya added to Avaleha.

(v) Prakshepa dravyas (Drugs for perfuming)

For perfuming the Avaleha, there are many drugs like Chandana, Kasturi, Kesara, Dalchini, Lavanga, Ela, Pippali, and Tej patra etc.. are used in the quantities mentioned in the formula, made into fine powder and used.

Addition of other substances in Avaleha preparations

(vi) Honey

Where honey is mentioned is to be added when the Avaleha preparation is cool. The addition of honey is to retain water portion, hence Avalehas made with honey retains moisture for a longer period than those made with other substances

(vii) Addition of Bhasmas

Few Avaleha preparations contain metals and minerals in such cases the bhasmas of metals to be used. These are mixed with Avaleha at the luke warm stage. Generally the following bhasmas can be used for obtaining other Rasayanas and Vajikarana properties of Avaleha. They are:

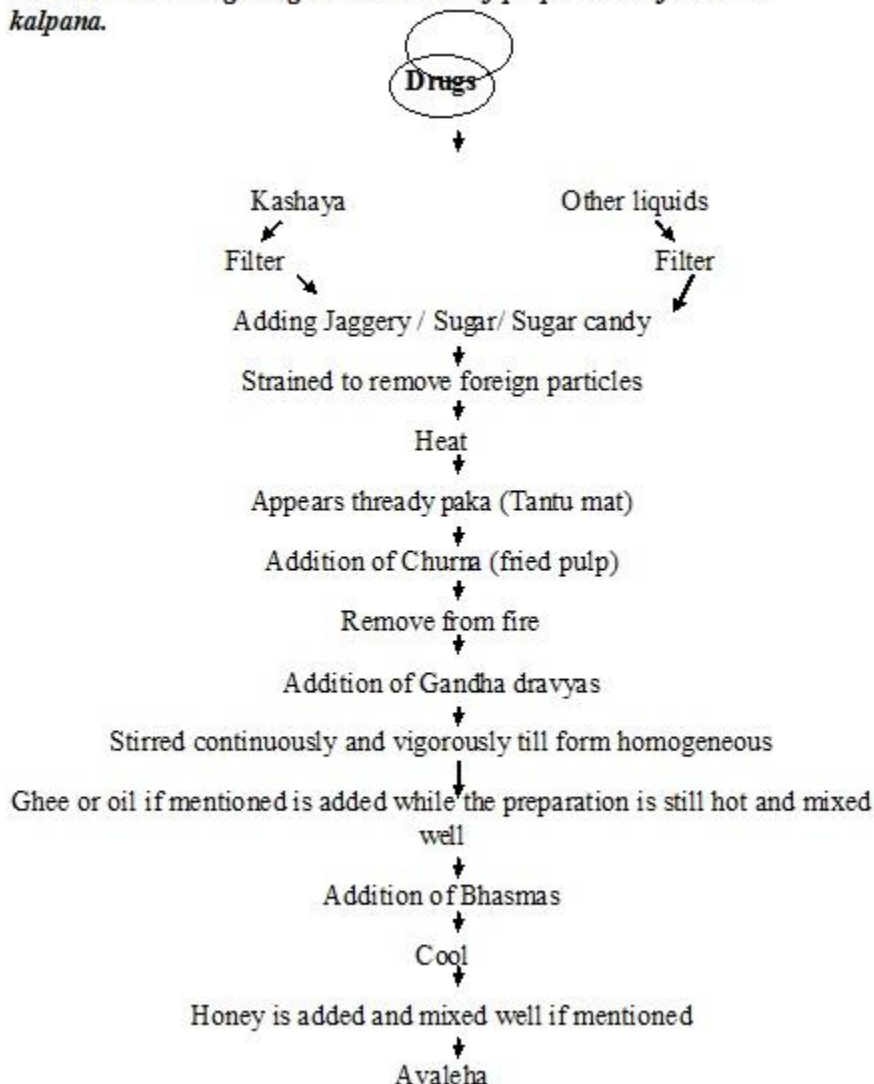
1. Tamra Bhasma
2. Roupya Bhasma
3. Swarna Bhasma
4. Pravala Bhasma / Pisti
5. Abhrak Bhasma
6. Lauha Bhasma
7. Mukta Bhasma
8. Shilajit etc.

General Method of preparation of Avaleha

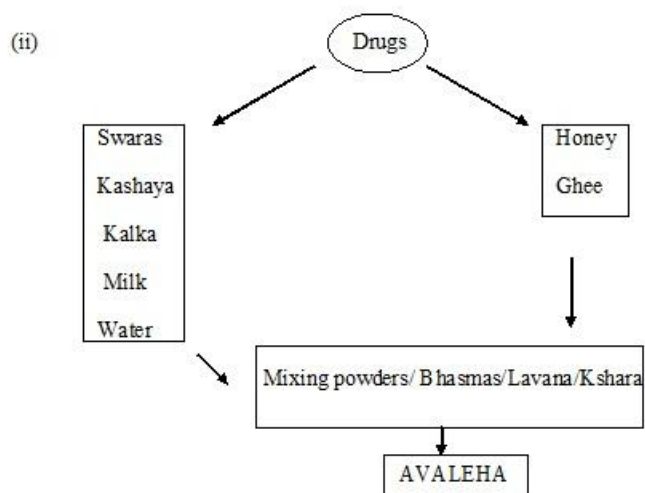
For the preparation of Avaleha of different formula first the drugs to be subjected to prepare Kashaya / Juice. In the second phase, specified amount of sugar / jaggery is added to kashaya and subjected for heating on mild fire till to the appearance of thready (two strings) paka. In the third phase, fried pulp / churna is to be added and mixed well. In the fourth phase, fine powders of prakshepa dravyas are added in a small prescribed quantities and stirred continuously and vigorously till to form a homogeneous mixture. Ghee or oil is added while the preparation is still hot; where as honey is to be added when the preparation is cool.

The above said one is general method of Avaleha paka, when there is a special mention regarding the quantity of each dravya and method of process, then the preparation should be done accordingly.

Flow chart showing the general method of preparation of Avaleha kalpana.



(II) Method

**Features of Pharmaceutically Completed Avaleha**

At the time of completion of Avaleha, the following features can be seen

1. Avaleha should neither be hard nor be a thick fluid
2. When it is dropped from spoon, spines a 5 cm thready (Tantumt)
3. It sinks down without dispersion when dropped into the normal water
4. When pressed with fingers impressions are formed
5. On touch, shows rough (kharatwa) character
6. Emerges colour, smell, taste of the drugs used

Precautions for Preparation of Avaleha: The following precautions to be taken

(A) Before Processing

1. Fresh and new drugs to be taken
2. When wet drugs are used in the place of dry one in such cases drugs which are to be taken double the amount to the mentioned quantity of dry in the formula.
3. Kashaya drugs are to be in coarsely powder form.
4. For prakshepa, drugs should be in fine powder form
5. In case of Grita, old ghee should be used preferably
6. Fresh oil to be taken

(A) During the Process

1. Maintain intensity of fire throughout the operation in order to set desirable grade of temperature
2. Lid should not be applied during the Kashaya preparation

3. Pulp should be fried till its colour becomes brownish black and no moisture
4. Pulp is added at the stage of two strings of Kashaya
5. Care should be taken to determine the completion of Avaleha paka
6. Continuous and vigorous mixing is needed after addition of prakshepa dravyas

© After the process

1. Madhu should be added after cooling Avaleha
2. Preserving containers should be free from contamination.

Shelf life of Avaleha

The Avaleha can be preserved for a year without losing its potency i.e. these can be safely used for one year without addition of any chemical preservatives.

Signs of deterioration of Avalehas

1. Emergence of foul smell
2. Appearance of fermentation
3. Growth of fungus over it etc.. are the signs of deterioration of Avaleha

AVALEHAS IN UNANI SYSTEM OF MEDICINE

In Unani system of medicine seven types of Avaleha Kalpanas are mentioned on the basis of action and name of the ingredients etc..They are

1. **Majun:** The preparation which is prepared by addition of fine powder to a thready paka of honey is termed as Majun.
2. **Lavook:** The preparation which is prepared solid than sharbat and thinner than majun called Lavook. This preparation especially

used in dryness of throat and to pacify vitiated Kapha dosha.

3. **Javarish:** this type of Avaleha is prepared to increase appetite.
4. **Khameera:** In this sugar is dissolved in Kashaya and boiled over a mild fire till it becomes semi solid is known as Khameera / Gaonjuan.
5. **Laboob:** The Avaleha which is used for general tonic (shakti vardhak) is termed as Laboob. This is prepared by using pulp of dry fruits such as Badam, Pista etc.
6. **Noshadaru:** The Avaleha which is used for digestion is called is called Noshadaru. This preparation is prepared from Amalaki.
7. **Atriphala:** This is prepared by addition of more Triphala among the other prescribed drugs.

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