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Review Article

## Dhattura Lavana: An Eccentric Salt Preparation in Folklore

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### ABSTRACT

*Lavana kalpana* is a formulation in Ayurveda which is prepared from combination of certain drugs with *lavana* (Salt). A particular heating pattern is followed for drugs and *lavana* in an earthen crucible by subjecting it to *putapaka*. Number of *lavana kalpana* like *Narikela lavana Arka lavana* and other such formulations are being practiced in Ayurveda. *Dhattura lavana* is also a formulation of *Dhattura* and *lavana* used in alcohol dependence. An attempt was made in this work to gather the information about this formulation. It is observed that this formulation is used by traditional practitioners of Kerala. The reference of *Dhattura lavana* could not be found in the books or literatures of *Ayurveda*. Deviating from the general method of preparation of *putapaka*, *Dhattura lavana* is prepared in a unique way. In this formulation, a decoction of *Dhattura* is prepared first and to that equal amount of *lavana* is added and dehydrated.

**Keywords:** *Dhattura lavana*, *Lavana kalpana*, *madatyaya*, *tadarthakari chikitsa*.**Article Info:** Received 25 April 2019; Review Completed 29 May 2019; Accepted 31 May 2019; Available online 15 June 2019

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### INTRODUCTION

*Lavana* (Salt) is defined as “*lunaati iti lavana*”,<sup>1</sup> where *lunaati* means *chedana* (scraping). This definition indicates that the one which has *chedana* property in it is called as *lavana*. *Lavana* in general possess *lavana rasa*, *snigdha*, *ruksha*, *tikshna* properties, *ushna virya*, *kapha pitta vardhaka* and act as *agnideepaka* (appetizer).<sup>2</sup> *Lavana* by virtue of their *chedana* property become *sukshma srotogami* ie; which helps in quick penetration to minute channels of body. There are mainly five varieties of *lavana* mentioned in *Ayurveda* known as *panchalavana*<sup>3</sup> viz. *Saindhava*, *Sauvarchala*, *Vida*, *Samudra*, and *Audbhida Lavana*. Among *pancha lavana*, *Saindhava lavana* (rock salt) is considered as best<sup>4</sup>. It is a salty, stony, hard whitish red crystalline material which dissolve in water.<sup>5</sup> *Saindhava lavana* possess *madhura rasa* (sweet taste), *sheeta veerya* (cold potency), *snigdha* (unctuous) and *laghu* (lighter for digestion)<sup>6,7</sup> pharmacological properties. Therapeutically it act as *hrudya*,

*vrshya*, *netrya*, *ruchiprada*, *tridosha shamaka*, *vrnanadoshahara*.<sup>8,9</sup>

*Lavana kalpana* is a dosage form mentioned in authoritative literatures of *Ayurveda* where *lavana* (salt) is the main ingredient in the formulation. It is prepared by combining *lavana* along with different herbs and subjecting to heat (*agni samskara*).<sup>10</sup> most of the *lavana kalpa* are prepared by using *puta*, where the drugs along with *lavana* are placed in an enclosed *sharava* and subjected to fire using cowdung cakes. *Arka lavana*<sup>11</sup>, *Patra lavana*<sup>12</sup>, *Kanda lavana*<sup>13</sup>, *Shwasari lavana*<sup>14</sup> & *Putikadi lavana*<sup>15</sup> are few examples of such *lavana kalpa* prepared in this pattern. Here the type of *puta* determines the quantum of heat needed for the proper burning of drugs kept inside.

*Dhattura lavana* is a formulation used in folklore practice of Kerala in the treatment of alcohol dependence (*madatyaya*). The formulation is prepared by combining the drug *Dhattura* along with *lavana* and subjecting to heat. However, the

method of preparation is different from the general *putapaka* method of preparation.

## MATERIALS AND METHOD

In this work an attempt was made collect the information regarding *Dhattura lavana*. A detailed search was done in books, journals, articles and internet to find out the details of this formulation. An interview based survey could reveal a few details of *Dhattura lavana*.

## OBSERVATIONS AND RESULT

*Dhattura lavana* is a formulation used in the treatment of alcohol use disorder. The references of this formulation could not be found in books or literatures of Ayurveda. Traditional practitioners of Kerala use this formulation. Fresh plant of *Dhattura* except fruits, flowers and seeds are used in this preparation. In the beginning a decoction of fresh *Dhattura* plant is prepared. To the filtered decoction, crystalline rock salt is added and heated till only salt remains.

During literature search it was found that there are many *Lavana Kalpana* found scattered in authoritative Ayurvedic books. They are prepared by *agni samskara* (processing with the help of fire). The use of *agni* (heat) for the method of preparation differs for each type of *lavana*.<sup>17</sup> But most of them such as *Arka lavana* & *Narikela lavana*<sup>16</sup> are prepared with *putapaka* method. The quantum of *agni* should be in a way that the contents are well formed as well as not get charred.

Based on the method adopted for preparation in classics there are mainly two different types of *lavana kalpana*<sup>18</sup>

1. *Lehapaaka vidhi*: The drugs to be added in the form of decoction are first boiled in water. The strained decoction is condensed again on fire along with the *lavana*. To that concentrated decoction the powder made up of the other drugs in the formulation is added and mixed well to obtain the *Lavana Kalpa*. Ex. *Abhaya Lavana*<sup>19</sup>

2. *Putapaka vidhi*: Raw drug along with *lavana* is taken in an earthen vessel called *Sharava*, closed with another earthen ware and the joint is sealed with mud smeared cloth and subjected to *puta* (heat) with cowdung cakes. Ex. *Arka Lavana*

While comparing to these two methods, the preparation of *Dhattura lavana* adopted in the folklore practice is almost similar to the first method. However, a slight difference can be noted as there no other additives (*prakshepaka*) added during the preparation. So it can be considered under a separate heading called *kwathapaka vidhi*.

### Method of preparation of *Dhattura laavana*:

**Ingredients:** Whole plant of *Dhattura* (*Datura metel*) except fruit, flower and seed - 1part, *Saindhava lavana* -2 part.

**Method of Preparation:** There are two steps in the preparation of *Dhattura lavana*. In the first step a decoction will be prepared and later dehydrated after addition of *lavana*.

### Preparation of *Dhattura kashaya*:

Fresh plant of *Dhattura* has to be collected. Proper rules and regulations of collection of the drug to be ensured. *Datura metal* species is usually used in the folklore. So authentication of drug from experts may be a necessity before continuing. Fruits, flowers and seeds are to be separated from the plant. Remaining parts of *Dhattura* has to be added with 16 parts of potable water in a vessel. Kept

over stove or any convenient heating device and heated on mild fire. Preferably the vessel should not be closed with a lid. Heating is continued till the water content reduces to 1/8<sup>th</sup> of original quantity. The *kashaya* is strained with a clean cloth or suitable filter.

### Preparation of *Dhattura lavana*:

*Lavana* is weighed in a quantity equal to amount of *Dhattura kashaya* taken for preparation. Powdered or crystalline *Saindhava lavana* is added to the vessel containing filtered *Kashaya*. Kept on fire again and continued to heat. Stirring whole mass may be essential to avoid charring of the medicaments. The heating is continued till all the *kashaya* gets dehydrated and only *lavana* remains.

### *Paka lakshana*:

Total absorption of decoction to the *lavana* as well as characteristic odour and color of *Dhattura* could be considerable features of proper *paka*.

### Dose:

The dosage of this formulation is 2.5 gms twice in a day.it can be taken with proper adjuvants like *takra*.

## DISCUSSION

*Lavana kalpana* is a dosage form in which *lavana* (salt) is the prime ingredient in its preparation. By virtue of the pharmacological properties, *lavana* can enter in to the minute channels of tissues and enhance the absorption. Logically the formulation prepared by using it as a main ingredient also shall possess similar properties. Hence the formulations with *lavana* have gained importance for the ability to transfer and transform quicker in the body after their consumption.

*Samyoga* and *agnisannikarsha* are the two phases of processing that are adopted during the preparation of any *lavana*. The combination of two or more raw drugs in a formulation is a *samyoga*. Heating the combination of drugs over fire is *agni sannikarsha*. In preparation of any *lavana* both the above processes are applied. The combination of drugs with *lavana* is an important step in *lavana kalpana*. The combination helps the *lavana* to imbibe the properties of additional drugs that are added along with. Heating pattern on the other hand helps the formulation to be lighter for digestion. *Lavana* generally is known for its ability to give taste to the food items also serves the same purpose in formulation too.

The literature search done in this work could reveal that the *lavana kalpana* essentially requires heating process. However there are two methods of heating that are adopted in the preparation of any *lavana kalpana*. The first method simulates the *putapaka* method and second method to *avaleha paka* method. None of *lavana kalpana* can be prepared without these two methods.

Literature survey also revealed that the formulation under search that is *Dhattura lavana* has not been referred to by any of the authoritative books of Ayurveda. Rather it is a formulation traditionally used by folklore practitioners.

The method of preparation of *Dhattura lavana* is similar to *lehapaka vidhi* of preparation. However, there are no additives mentioned in *Dhattura lavana* except main ingredients *Dhattura* and *Lavana*. So the method can be incorporated under *lehapaka vidhi* with a variant terminology *Kwathapaka vidhi*.

The survey done by interview method could reveal that *Dhattura lavana* is used as an anti-craving medicine in

alcohol dependence by the folklore practitioners. The pharmacological properties of *Dhattura* like *madaka*, *kapha vatahara*, *laghu rooksha guna* which seems to be in line with the properties of *madya*. The method of using drugs of similar properties to treat diseases caused by *dosha* having similar properties is known as *Tadharthakari Chikitsa*.<sup>20,21</sup> Hence the use of *Dhattura* in *madakari avastha* can be considered as *tadarthakari chikitsa*.

*Saindhava lavana*, a prime ingredient in *Dhattura lavana* possess *tridosha shamaka*, *sukshma*, *vyavayi*, *teekshna* and *chedana* properties. These properties can help clearing the obstructions of channels and cure the diseases. Thus it may also clear the obstruction of *Manovaha Srotas* by which the hampered *dhi*, *dhruti* and *smriti* gets corrected. Proper *jnanotpatti*, *indriyartha sannikarsha* etc thus may be possible reducing the ill effects of alcohol consumption.

*Hridaya* is the controlling organ of the channels of circulation of *rasa*, *vata*, *indriya*, *atma* and *ojas* which is the most important one. This *ojas* gets destroyed by the excess intake of alcohol, and morbidities appear in the heart and in the *dhatu*.<sup>22</sup> Because of *hridaya karma* in the *saindhava lavana*, it protects *hridaya* from the affliction by alcohol which further helps to nourish *ojas*.

Based on above observations it is pertinent to note that *Dhattura* and *lavana* independently have a possible effect on craving. *Samyoga*<sup>23</sup> of these two drugs will imbibe both the qualities of the drugs in the final product and *agni sannikarsha* will add to minuteness of the particles.

## CONCLUSION

*Dhattura lavana* is a formulation which contains *Dhattura* and *Saindhava lavana* as the ingredients. It is an indigenous formulation practiced in folklore for alcohol dependency. Out of two methods of preparation of *lavana*, *Dhattura lavana* is preparable with *kwathapaka* method. Use of *Dhattura* in alcohol dependency can be understood with concept of *tadarthakari chikitsa*. Owing to *sukshma* property of *lavana*, these *kalpana* will easily penetrate into the minute channels of *srotas* and does its action. The *agni samskara* adopted during the preparation makes the *lavana kalpana* lighter for digestion. Thus a combined action of the ingredients *Dhattura* and *lavana* drugs along with the *samskara* makes the formulation more potent.

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