

AN INSIGHT TO PURIFICATION OF *MADANPHALA* (EMETIC NUT)Dr. Jatinder Verma*¹ and Dr. Gopesh Mangal²

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ABSTRACT

Shodhana (purification) of a drug is important before it is used for any therapeutic use. *Shodhana* is necessary in removing toxicity and unwanted materials to increase the efficacy. Ayurveda also focus on the *Shodhana* of various metals, non-metals, plants, minerals etc. The first chapter of *Kalpasthanana* of *Charaka Samhita* “*Madankalpa Adhyaya*” deals with the basic and important concepts about the drugs used for *Vamana* (therapeutic emesis) and *Virechana* (therapeutic purgation). Among the drugs used for *Vamana Karma*, *Madanphala* (*Randia dumetorum*) is the best and most common drug because it does not produces any adverse effect. *Shodhana* of *Madanphalapippali* is necessary before it is used for the purpose of

Vamana Karma. There is a rare description/ articles on *Madanphala Shodhana*. Sequential stepwise process is used for its purification. *Shodhana* of *Madanphalapippali* was done as prescribed in *Charaka Samhita* in P.G Department of Panchkarma, National Institute of Ayurveda, Jaipur, Rajasthan, to be used in *Vamana Karma* in the patients indicated for *Vamana*. Present article describes the stepwise procedure adopted for the purification of *Madanphalapippali*.

KEYWORDS: *Emetic nut, Madanphala, Madanphalapippali, Shodhana, Vamana.*

INTRODUCTION

Shodhana (purification) is a process by which unwanted impurities are separated from the substance by various pharmaceuticals methods such as *Kshalana* (washing), *Mardana* (pounding), *Bhavana* (levigation), *Swedana* (boiling), *Bharjana* (frying), *Nirvapa* (heating

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and dipping in specified liquids) etc. In Ayurveda all these processes are carried out with the help of specific drugs or media to minimize the toxicity of the substance or drug. The method of *Shodhana* thus, enhances the properties of the drug suitable for desired action. By *Shodhana*; Physical and chemical impurities are removed, toxicity is removed, potency of the drug is increased, change in physiochemical properties occurs, desired qualities are induced and makes poisonous drugs non toxic and accountable to use. The use of special media for *Shodhana* is very important. In Ayurveda, it is mentioned that specific media is required for specific drug or substance for its *Shodhana*. The media acts like a solvent to dissolve the material for easy separation from the insoluble impurities to eradicate toxic chemical substances from the drugs and also helps in physical transformation of some metals and minerals.

Kalpasthanana of *Charaka Samhita*, deals with the preparation of recipes for *Vamana* (therapeutic emesis) and *Virechana* (therapeutic purgation) through different pharmaceutical processes. The first chapter of *Kalpasthanana*, '*Madanakalpa Adhyaya*' deals with the pharmaceuticals of *Madanphala* (*Randia dumetorum*), also known as *Emetic nut*. Among the drugs used for *Vamana Karma*, *Madanphala* is the best and commonest drug because it does not produce any adverse effects. Therefore the section of *Kalpasthanana* is started from *Madanphala* formulations. The drugs become capable of producing maximum therapeutic effects when their potency is augmented by *Desha-Sampata* (collecting the plants from the appropriate habitat), *Kala-Sampata* (collecting plants in appropriate season), *Guna-Sampata* (collecting plants when these are enriched with excellent attributes) and *Bhajana-Sampata* (storing these plants in appropriate containers).^[1] *Charaka* also described collection, storage and recipes of *Madanphala* in this context before it is used for *Vamana Karma*. An attempt is made to summarize the process of *Shodhana* of *Madanphala*^[2] as mentioned in *Charaka Samhita*. *Shodhana* of *Madanphalapippali* was done prior to be used for the patients indicated for *Vamana*. *Shodhana* was conducted in the PG Department of Panchkarma, National Institute of Ayurveda, Jaipur, Rajasthan.

AIM

To conduct *Shodhana* of *Madanphalapippali* for the purpose of *Vamana Karma*.

OBJECTIVE

To obtain *Shodita Madanphalapippali* for the purpose of *Vamana Karma*.

MATERIALS AND METHODS

The method adopted here for *Shodhana* of *Madanphalapippali* was as mentioned in *Charaka Samhita*, chapter 1, *Kalpasthanas*.

Method of Collection, *Shodhana* and Storage of *Madanphala* as mentioned in *Charaka Samhita*

Madanphala is considered to be the best among the emetics because it is free from any adverse effects. These fruits are to be collected during the middle of the spring and summer in a *Maitra-Muhurata* (at auspicious period of the day) when moon is in the constellation of *Pushya*, *Ashwin* or *Margshirsha*. These fruits should be fully matured, not perforated, not green but yellowish white in color, not rotten, not infected with parasites and not small in size. These fruits should be cleaned and tied up inside a bundle of *Kusha* grass. These bundles should not be kept inside a heap either of barley, husk, *Masha*, *Shali* type of paddy, *Kulattha* or *Mudga* for eight nights. After they become soft and endowed with desirable smell like that of honey, these fruits should be taken out of the bundle and dried up and seeds should be taken out. These seeds should be rubbed with *Ghee*, curd, honey and *Tila Palala* (paste of sesame), and dried again. These seeds should then be kept in a new jar cleaned of sand and dust particles and filled up to the brim. This jar should be properly covered with a lid, and after the performing the protective rituals, should be placed in a swing. This *Shodhita Madanphalapippali* is then used in a dose of *Antarnakhamushti Pramaan* (12-15 gm)^[3] for *Vamana Karma*.

The method adopted in this context is same as described in *Charaka Samhita*. *Shodhana* was conducted in following steps [Table 1]:

- Step 1: Collection of *Madanphala*
- Step 2: Process of separation of *Madanphalapippali* from *Madanphala*
- Step 3: *Gharshana* (mixing and rubbing with hands) with *Go-Ghrita*
- Step 4: *Gharshana* with *Dadhi*
- Step 5: *Gharshana* with *Madhu*
- Step 6: *Gharshana* with *Tila Palala*
- Step 7: Drying and sieving
- Step 8: Packing and preservation

Table 1: Steps in *Madanphalapippali Shodhana*.

Step 1	Collection of <i>Madanphala</i>	2 Kg of Fully matured, non-perforated, yellowish white, non rotten and medium sized fruits of <i>Madanphala</i> were purchased from a local supplier of herbal raw drugs in Jaipur, Rajasthan.
Step 2	Process of separation of <i>Madanphalapippali</i> from <i>Madanphala</i>	<i>Madanphalapippali</i> was taken out by breaking the outer covering of fruits. The quantity obtained for <i>Madanphalapippali</i> was approximately 500 grams.
Step 3	<i>Gharshana</i> with <i>Go-Ghrita</i>	The obtained <i>Madanphalapippali</i> was subjected to mix and <i>Gharshana</i> with approximately 750 ml (Q.S.) of <i>Go-Ghrita</i> .
Step 4	<i>Gharshana</i> with <i>Dadhi</i> (curd)	<i>Ghrita Vimarditta Madanphalapippali</i> was then subjected to mix and <i>Gharshana</i> with <i>Dadhi</i> (curd) (800 ml)
Step 5	<i>Gharshana</i> with <i>Madhu</i> (honey)	<i>Dadhi Vimarditta Madanphalapippali</i> was then subjected to mix and <i>Gharshana</i> with 500 ml of <i>Madhu</i> (honey).
Step 6	<i>Gharshana</i> with <i>Tila Palala</i>	Approximately 500 grams of <i>Tila</i> (Sesame) was taken and paste was made by mixing it with about 250 ml of water. <i>Madhu Vimarditta Madanphalapippali</i> was then subjected to <i>Gharshana</i> by mixing it with this prepared <i>Tila Palala</i> .
Step 7	Drying and sieving	After the completion of sequential process of mixing and <i>Gharshana</i> with <i>Go-Grhita-Dadhi-Madhu-Tila Palala</i> , so obtained processed <i>Madanphalapippali</i> was dried up by placing it on a paper in a clean room devoid of dust for two days. Dried <i>Madanphalapippali</i> was then sieved to get <i>Shodhita Madanphalapippali</i> . The final quantity of <i>Shodhita Madanphalapippali</i> was about 300 grams.
Step 8	Packing and preservation	<i>Shodhita Madanphalapippali</i> is then filled in a clean glass jar, covered with a lid and stored after performing protective rituals.

**Figure 1: Step 1: Collection of *Madanphala*.**



Figure 2: Step 2: Separation of Madanphalapippali From Madanphala Fruits.



Figure 3: Step 3: Mixing of Go-Grhrita.



Figure 4: Step 4: Mixing With Dadhi (Curd).



Figure 5: Step 5: Mixing with Madhu (honey).



Figure 6: STEP 6: Mixing With Tila Palala, Washing of The Mixture.



Figure 7: Step 7: Final Stage of Washing, Drying And Obtaining Madanphalapippali.

DISCUSSION

It is necessary to purify a drug in order to remove its toxicity before it can be used for therapeutic purpose. Hence is the case of *Madanphalapippali* before it can be used for the purpose of *Vamana Karma*. There are different types of media used for *Shodhana* and specific media are indicated for specific substances (metals, non-metals, plants, drugs etc.). *Shodhana* by *Sneha Varga* such as *Taila*, *Ghrita*, *Dugdha* makes the hard materials soft. *Amla Varga* like *Takra*, *Kanji*, *Nimbu*, *Amalaki* makes Mass breaking and disintegration. *Shodhana* with *Kshara Varga* like *Mutra*, *Kulattha Kwatha*, *Kadali Kanda* makes the material soft and brittle. *Shodhana* with *Katu Varga* like *Nirgundi*, *Hariraki*, *Bhringaraja* is carried out for Disintegration and breaking the cohesion. *Tikta Varga* such as *Vasa*, *Swarna Ksheeri*, *Shireesha* are used for absorption of moisture. *Kashaya Varga* like *Kanchnara*, *Haritaki*, *Vibhitaki* eliminates external impurities. *Visha Varga* like *Shringataka*, *Kalakuta*, *Vatsanabha*, *Saktuka*, *Peeta Visha* removes inertia in the substance. *Vit-gana* or *Varga* like *Paravata*, *Chasha*, *Kapota*, *Kalapina*, *Gridhra*, *Kukkuta* are used *Sarva Loha Shodhana*. *Mridukara Varga* such as *Mahishasringi*, *Indrayava* is used for the softening of hard metals. *Dravaka Varga* like *Guda*, *Guggulu*, *Gunja*, *Ghrita*, *Madhu*, *Tankana* softens and liquefies

the metals. *Lavana Varga* like *Samudra*, *Saindhava*, *Kacha*, *Vida*, *Sauvarchala*, *Romaka*, *Chullika*, *Audbhida Lavana* is used for *Sarvaloha Dravana* and *Shodhana*. Total 2 kg of *Madanphala* was taken initially, from which about 500 grams of *Madanphalapippali* was left and taken for the process of *Shodhana*. *Mardana* (by hand) and *Gharshana* (mixing and rubbing with hands) is the process applied for *Shodhana*. By *Mardana*, particle size of the drug becomes synergistic additives and causes an agonistic effect. *Gharshana* brings down the toxicity and also cause separation of outer covering. Sieving separates the unwanted impurities left behind. Drying removes moisture content and is necessary for proper storage. Sequential *Mardana* and *Gharshana* with *Go-Ghrita*, *Dadhi*, *Madhu* and *Tila Palala* (here paste of *Tila* is used) were done. Approximate 300 grams of *Shodhita Madanphalapippali* was obtained after sieving and drying and stored at last. Total four days were required to complete the whole *Shodhana* process. The *Shodhana* process was carried out by three PG Scholars and two Panchkarma technicians from the Department of Panchkarma, NIA, Jaipur, Rajasthan.

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Conflict of Interest

There is no any conflict of interest.

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