

## MADANAPHALA AS A DRUG OF CHOICE IN VAMANA KARMA

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**ABSTRACT**

*Chikitsa* in *Ayurveda* depends on 3 principles which are *Hetu* (cause), *Linga* (symptoms), *Aushadha* (medicine). All the *Aushadhis* are derived from nature in the form of either plants or minerals which later used in for fulfilling the prime objectives of *Ayurveda*. From the *Chutspada* we came to know that the knowledge of *Aushadhi* is also important. *Panchakarma* is a field of *Ayurveda* which incorporates the *Pradhana Chikitsa* of *Shodhana*. *Vamana Karma* is one among the *Pradhan Chikitsa*<sup>[1]</sup> in *Panchakarma* to expel the morbid *Doshas* in *Bahumatraavastha*. Therefore it is a need to find the best drug for the procedure commencement which is having properties like *Savibhatsama* (Unpleasant), *Ahridya* (disliked by soul).<sup>[2]</sup> *Alpa Matra* (drug dose is least), *Maha Vegama* (Rapid Acting), *Bahudoshaharama Sukhama* (Easily removes *Dosha* in a greater extend),

*Vyadhinashanam* (Capable in pacifying disease), *Avikari Cha Vyapatto* (Should not create any complication and discomfort).<sup>[3]</sup> Many *Vamaka Dravyas* are mentioned in the *Ayurvedic* literatures among which *Madanaphala* stands out. *Acharyas* have given *Shresthta* to *Madanaphala* among all *Vamaka Dravyas* and also it is now widely used across the India and became the first preference by the physicians. Therefore an attempt is made to see whether the *Shresthta* of *Madanaphala* is true in its nature as explained by our *Acharyas* by the means of collecting different medicinal properties and research works to establish it as a choice of drug for *Vamana Karma*.

**KEYWORDS:** *Madanaphala*, *Vamana Karma*, Drug of Choice, *Vamana Yogas*.

## INTRODUCTION

Since the beginning of the life there also exists *Rogas* which tends to be treated. To fulfil the need our *Acharyas* researched many minerals and plants for their medicinal properties. Phytomedicine have deep roots in the Indian medicine system right from the beginning. In today era medicinal plants have tremendous contribution towards health system as it is now used by contemporary fields by deriving abstracts and chemicals as therapeutic agents. In last few years the research in medicinal plant species have increased involving researcher from different parts of the world. There is a huge amount of herbal drugs available in the classical texts. The Rubiaceae is the family of flowering plants which consist of terrestrial trees, shrubs, lianas or herbs that are recognizable by simple, opposite leaves with interpetiolar stipules. This family contains about 13,500 species in 611 genera which makes it the fourth-largest angiosperm family. *Madanaphala* (*Randia dumetorum* Lam) is found throughout in moist and dry deciduous forests, up to an altitude of 1350m in Himalayas from Jammu to Sikkim and 1200m in the Western Ghats. It is seen in Gujarat, Tamil Nadu, Bengal and South Maharashtra. Vamana Karma as one among the Shodhana and being Pradhana is widely used to manage various diseases. The drug selection is very much important in concept to the *Chikitsa* principle and *Chatuspada* so as to generalize the drug used to reduce the complications and maintain uniformity. As still the Drug used is highly reliable on the *Yukti* of physician and hence cannot be standardized for all, but the idea to make a choice of drug for a procedure can be considered. Our *Acharyas* also stated choice of drug as *Shrestha* which they quoted *Madanaphala* for *Vamana Karma*. *Vamaka Dravaya* must contain the property of *Savibhatsama* (unpleasantness of the drug), *Ahridya* (drug should be disliked by the soul)<sup>4</sup>. The other properties told for a Shodhana drug to have are *Alpa Matra* (least drug dose needed), *Maha Vegama* (Rapid Acting of drug), *Bahudoshaharama Sukhama* (easily removal of *Dosha* in a greater extend by the drug), *Vyadhinashanam* (Capable in pacifying disease), *Avikari Cha Vyapatto* (drug should not create any complication and discomforts)<sup>5</sup>. *Charaka* explains about the qualities of ideal drug like *Bahuta* (having abundant supply), *Yojnyatva* (wide applicability), *Anekavidha Kalpana* (can be prepared in many forms and different process) and *Sampat* (dependable with valuable qualities). To make a medicine *Shrestha* and Drug of Choice, these qualities must be met.

## Morphological characters

*Madanaphala* (*Randia dumetorum* Lam) is a large thorny deciduous shrub that grows up to maximum height of 5m. It have ovate, simple, opposite and shiny green leaves. On the end of

short branches fragrant and white flowers are present. Fruits are of round in shape with numerous vertical ribs and are yellow-brown in colour of about 1-5cm long. Fruits contain numerous long seeds that are hard in nature and brown in colour.



**Figure 1: Showing full plant of *Madanaphala*. Figure 2: Showing *Madanaphala Pippali*.**

#### **Name in other languages**

- Sanskrit - Maadani, Madana Phala
- Latin name - *Randia dumetorum* Lam
- English - Emetic nut
- Hindi - Mainphala
- Kannada - Madakari
- Gujarati - Mindhala
- Marathi - Golaphal

#### **Synonyms**

*Bhavaprakash Nighantu* has stated 9 synonyms<sup>[6]</sup> where in *Charaka Samhita* we found 6 synonyms for *Madanaphala*.<sup>[7]</sup> These synonyms give immense information regarding identification, description, functions, therapeutic use and properties of respective plant. *Madana* – induce vomiting, *Pindi* – Having round shaped fruit, *Vishapushpak* –poisonous flowers, *Phala* – Excels amongst fruits used in *Chikitsa*, *Shwasana* – Even grows in scanty water.

#### **Classification**

- Kingdom - Plantae
- Sub kingdom - Tracheobionata

- Super division - Spermatophyta
- Division - Magnaliophyta
- Class - Magnoliopsida
- Sub Class - Asteridae
- Order - Rubiales
- Family - Rubiaceae
- Genus - Randia
- Species - Dumetorum

### Ayurvedic properties

- *Rasa* - Madhura, Katu, Tikta, Kashya
- *Virya* - Ushna
- *Vipaka* - Katu
- *Guna* - Laghu, Ruksha
- *Prabhava* - Vamaka
- *Karma* - Plant pacifies vitiated *Pitta*, *Kapha*, widely used in *Vamana*.

It is also used to treat ulcers, abscess, inflammation, wounds, tumors, skin disease and have antibacterial activities. Its bark is given in case of diarrhea and dysentery.

*It is Uttama Chardaka* (best emetic), *Kapha Vata Shamaka* (subsides *Kapha* and *Vata*), *Lekhana Karma* (scraping action). It is also used in cough, skin diseases, ulcers, asthma, flatulence, colic. The therapeutic effect of fruit is curing abscess, inflammation, wounds, ulcer and tumour while having antibacterial properties. Its bark is used in the case of diarrhoea and dysentery. It is administered internally and applied externally in the form of paste in rheumatism and to relieve pain of bruises and bone aches during fevers and to disperse abscesses.

### Part used

*Phala* (fruit), *Beeja* (seed), *Moola* (root), *Twak* (bark), *Patra* (leaf) and *Pushpa* (flower).

### Description in classical text

*Acharya Charka* has included *Madanaphala* in *Asthapnopaga Gana*, *Anuvasnopaga Gana*,<sup>[8]</sup> *Phalini Virechana*.<sup>[9]</sup> It is the best drug for *Vamana*.<sup>[10]</sup> It is included in *Aragvadhadi Gana*<sup>[11]</sup> and *Mushkakadi Gana*.<sup>[12]</sup> According to *Karma* it is included in *Urdwabghahara*.

*Astanga Sangraha* has included *Madanaphala* in *Aragvadhadi Gana*<sup>[13]</sup> and *Tiktakandha*<sup>[14]</sup> *Astanga Hridaya* has included it in *Aragvadhadi Gana*,<sup>[15]</sup> *Vamanakarak*<sup>[16]</sup> and *Niruhan*<sup>[17]</sup> It is included in *Haritakyadi Varga* by *Bhavaprakasha Nighantu*<sup>[18]</sup> *Raj Nighantu* has included it in *Shalmalyadi Varga*<sup>[19]</sup> *Dhanwantari Nighantu* has included it in *Guduchyadi Varga*.<sup>[20]</sup>

### Chemical constituents

**Fruit** - Ripe fruit contains glycosides, randioside A, mollisidial triterpenoid glycosides and randianin, six Saponins named as dumentoronin A, B, C, D, E and F.

**Bark** - Root bark of *Randia dumetorum* contains triterpene-1-keto-3-hydroxyoleanane. Bark of *Randia dumetorum* contains mannitol, saponins, coumarin glycosides.

**Leaf** - Leaves contain an iridoid-10-methylxoside, Iridoid glycoside.

### Madanaphala collection and processing

The *Madanaphala* is best among the *Vamaka Dravyas* and develop least or nil complications when administered. It is generally collected between *Vasanta* and *Greeshma Ritu* (autumn and summer) in *Ashwani*, *Mrigashira*, *Pushya* or other pious *Nakshatra*. The fruit collected should be fully ripen, yellow in colour, free from worm infestation. Fruits which are green in colour, putrefied, partly eaten, worm infested, smaller in size should be avoided. These collected fruits are cleaned and packed in dried *Kush* which then covered with cow dung. It is then placed in a heap for 8 days in any among *Yava*, *Tusha*, *Masha*, *Shali*, *Kulatha*, *Mugada*. After 8 days its seeds within the fruit are extracted. The seeds are processed in *Ghrita*, *Dadhi*, *Madhu*, *Palal* and then dried and stored in a new clean pot.<sup>[21]</sup>

### Different yogas of madanaphala

Total *Yoga* of *Madanaphala* are 133 according to *Charaka* which are enlisted among which 9 *Kashaya Yoga*, 8 *Matra Yoga* with 1 *Anjali Kwatha*, 5(4+1) *Ksheera* and *Ghrita*, 1 *Phanita Yoga*, 1 *Nasya Yoga*, 6 *Varti Yoga*, 20 *Leha Yoga*, 20 *Modaka Yoga*, 20 *Utkarika Yoga*, 16 *Saskuli Yoga*, 16 *Apipa Yoga*, 10 *Kshadavadi Yoga* are there.<sup>[22]</sup>

1. **Matra yoga** – 3 parts of *Madanaphala Pippali* is divided and the two parts are 21 times processed by *Kovidaradi Kwatha*. The third part is made into small pills (*Gutika*) equivalent to *Haritaki*, *Bibhitaki* and *Amalaki* using the filtered *Kwatha*. These *Gutika* are taken along with *Koviradi Kwath* in a dose of *Anjali*. It is indicated in *Vitiated Kapha*, *Sleshma Praseka*, *Granthi*, *Jwara*, *Udara roga*, *Aruchi*.<sup>[23]</sup>

2. **Ksheera yoga** – For *Vamana Madanaphala* and *Pippali* is processed with *Ksheera/Ksheera Yavagu* or Curd/Cream of the processed milk is used. The indication for this *Yoga* is *Raktapitta, Hirdyadaha, Kaphaja Chardi, Tamak Swasa, Praseka, Pitta Prakopa* in chest and throat region and in *Tanu Kapha*.<sup>[24]</sup>
3. **Madanaphala ghrita** – The butter of milk processed in *Madanaphala Pippali* and this butter is processed in *Phaladi Kalka* and *Kwatha* which is indicated in *Agnimandhya* due to *Kapha* and *Visushkadeha*.<sup>[25]</sup>
4. **Ghreya yoga** – *Madanaphala Pippali* powder is to be filtered 21 times by *Phaldi Kwatha* and this powder is dusted on flower of lotus in evening and the next morning. The flower is plugged and given to the subjects for inhalation after the intake of *Haridra, Ksheera, Yavagu* with *Saindhava, Guda, Phanita* in *Akanta* Dose (completely filled stomach). After inhalation of this flower *Vamana* is induced in a *Sukumara* (delicated) person with vitiated *Kapha* and *Pitta* who is not able to take oral medicines.<sup>[26]</sup>
5. **Swarasa yoga** – *Swarasa* of *Madanaphala Pippali* is extracted and then heated to make it thickens or it is dried in sunlight. This prepared paste or powder is taken orally with *Jemutakadi Kwatha* for *Vamana*.<sup>[27]</sup>
6. **Varti yoga** – *Madanaphala Pippali* powder is filtered with *Phaladi Kwatha* and made into *Varti* and Administered.<sup>[28]</sup>
7. **Avaleha yoga** – *Madanaphala Pippali* by using *Kwath* of and one drug among *Aravagadha, Vrakshaka, Swadu Kantaka, Patha, Patala, Shrangestha, Murva, Saptaparna, Naktamala, Pichumarda, Patola, Sushavi, Guduchi, Somavalkal, Dipika, Pippali, Pippalimoola, Hasti Pippali, Chitraka, Kshringabera* can be made into *Avleha* form to be used in *Vamana*.<sup>[29]</sup>
8. **Utkarika and Modaka yoga** – The *Madanaphala Pippali* is made into *Utkarika* or *Modaka* using *Kwatha* of listed drugs – *Ela, Harineuka, Satpushpa, Tumberu, Tagara, Kustha, Choraka, Urobaka, Agar, Guggulu, Elavaku, Shrivesthaka, Paripleva, Mansi, Shelayaka, Paripleva, Mansi, Shelayaka, Sthanayaka, Sarala, Paravatapadhi, Asholarohini*.<sup>[30]</sup>

9. **Saskuli and Pupa yoga** – *Madanaphala Swarasa* and *Kwatha* is used to prepare *Saskuli* and *Pupa* with powdered *Tila* and *Shali Tandula* and other drugs among *Sumukha*, *Surasa*, *Kutheraka*, *Kandiraka*, *Amalaka*, *Parnayasa*, *Kshavaka*, *Phanijajaka*, *Gajanaka*, *Kasamarda*, *Bhringaraja*, *Poatam Ikshuvalika*, *Kalakantaka* and *Dandaedaka*.<sup>[31]</sup>

10. **Madanaphala pippali yoga** – *Madanaphala* and *Pippali* powder are taken along with following formulations – *Badara*, *Shadava*, *Raga*, *Leha*, *Modaka*, *Utkartika*, *Tarpana*, *Panaka*, *Mamsarasa*, *Yusha*, *Madhya*.

*Acharya Shusruta* also stated *Madanaphala* as best *Dravya* for *Vamana Karma* stating 31 formulations of the drug.<sup>[32]</sup>

1. *Atapsushka* (dried in sunlight – *Madanaphala Pushpa Choorna* 1 *Prakunja* (~12g) with any one of *Apamarga*, *Amraphoola* or *Nimba Twaka Kwatha* with *Madhu* and *Saindhava Lavana*.
2. Unripe *Madanaphala* powder 1 *Pala* (~50 gm) with among of *Apamarga*, *Amraphoola* or *Nimba Twaka Kwatha* with *Madhu* and *Saindhava Lavana*.
3. Unripe *Madanaphala* powder 1 *Pala* processed in *Tila* and *Yavagu*.
4. *Madnaphala Majja* powder processed in *Madanaphala Kwatha* administered with *Madanaphala Kwatha*.
5. For *Vamana Karma* the cream of *Madanaphala Majja Siddha Ksheera* is administered with *Madhu*.
6. *Madanaphala Majja Ksheera* is administered for *Vamana*.
7. *Yavagu* prepared form *Madanaphala Majja Ksheera* is administered for *Vamana* in *Adhogaraktapitta* and *Hridya Daha*.
8. *Dadhi* prepared from *Madanaphala Majja Siddha Ksheera* is administered with *Madhu*.
9. *Avaleha* prepared from oil extracted from *Madanaphala* or *Kwatha* of *Madanaphala* is used for *Vamana Karma*.
10. Dried Powder of *Madanaphala Majja* with *Jivanti Kwatha* is used for *Vamana* in *Kaphasthangata Pitta*.
11. *Kwath* of *Madanaphala Majja* with powder of *Pippaliyadi Gana*.
12. *Madanaphala Majja Churna* with *Nimba* and *Arka Kwatha* is used for *Vamana* in *Santarpanajana* or *Kaphaja Disorders*.
13. *Madanaphala Majja Churna* with *Madhuyasti*, *Gambhari*, *Draksha Kwath* is tend to be used for *Vamana*.

Acharya Vagbhata also stated best *Vamana Dravya* to be *Madanaphala* as they can be used in almost every condition in compare to other drugs which are used in disease specific conditions.<sup>[33]</sup>

1. *Madanaphala Pippali* powder processed in *Madanaphala Kwatha* is mixed with 1/3<sup>rd</sup> part of *Triphala Churna* and administered with *Kovidaradi Kwatha*. The formulation is used in *Jwara, Aruchi, Kaphapraseka, Granthi, Apachi, Arabuda* and *Udararoga*
2. In *Kaphasthangata Pitta Churna* of *Pippali* with *Kwatha* of *Jeemutaka, Ishwaku, Koshtaki* and *Kutajaphala* is used
3. *Madanaphala Siddha Ksheera* or *Peya* prepared from *Madanaphala Siddha Ksheera* is used in *Hridyadaha* and *Adhogaraktapitta*.
4. *Dadhi* prepared from *Madanaphala Siddha Ksheera* is used in *Kaphapraseka, Chardi, Tamaka Swasa*.
5. In *Mandagani* due to *Kapha* or in *Sushka Sharira Vamana* is induced using *Ghrita* prepared from *Ksheera Siddha* from *Kalka* of *Madanaphala*.
6. *Madanaphala Avaleha* is prepared using *Madanaphala Majja* and *Swarasa*.
7. *Madanaphala Majja Kwath* with *Vatsakadi Gana* is used in *Santarpana Janya Vyadhis*.
8. *Ghreya Yoga* – Fine powder of *Madanaphala* or flower or unripe fruit is sprinkled on flowers and given to patient to induce the *Vamana* after intake of *Manda, Mamsarasa*.<sup>[34]</sup>

## DISCUSSION

Rigveda (10.097.15) have said “Let fruitful plants and fruitless, those that blossom and blossomless, urged onwards by *Brihaspati*, release us from pain and grief” and gives the importance of all the plants in releasing us from *Vyadhis*. In *Urdhva Jatrugata Rogas* (diseases of head, neck, throat, eyes, shoulder) and *Kapha Pravrudha Avastha, Vamana Karma* is a procedure which is tends to be adopted.<sup>[35]</sup> It is a process in which *Shleshma* and *Apakva Pitta* is expelled from the *Sharira* through the *Urdwa Marga* and the best drug to fulfil this purpose is *Madanaphala*.<sup>[36]</sup> *Vamana Karma* is to be administered when *Kapha* gets increased in its own place, when *Kapha* gets associated with *Pitta* or if *Pitta / Vata* is present at the site of *Kapha*. *Charaka* gives an outlay of the criteria for the selection of the drug for the treatment by having the knowledge about *Prakriti* (Nature of Substance), *Guna* (quality of substance), *Prabhava* (Specific action), *Desha* (place of their growth/production), *Ritu* (season of collection), *Matra* (dose), Mode of administration etc. Six *Vamaka Dravyas* have mentioned by *Acharya Charaka* where *Madanaphala* is considered as the *Shreshta Vamaka Dravya* because of its *Rasa Panchaka* and is *Anapayitvat* (free from any adverse side effects)

in nature.<sup>[37]</sup> If we talk about the discussion done in Astanga Sangraha Kalpa Sthana by Indu, It tells that considering the *Dosha*, *Dushya*, *Bala* (*Dosha Bala*, *Roga Bala*, *Rogi Bala*), *Kaal*, *Prakriti* and *Koshta*, among all *Vaman Dravya*, *Madanphala* is best as many preparations or *Kalpna* can be prepared with it due to its *Samyog* and *Sanskara* properties where *Kalpna* and *Samyog* both these words can also be understood as in the context of *Dosha Kalpna* and *Dosha-Dushya Samyoga*. It is not just because, as it is best in only one property, it is also good in other properties too. It has some unique qualities as per condition of *Dosha*, *Dushya* etc. The functional uniqueness and modalities which are present in *Madanphala* are not to be found in other *Vaman Dravya* as *Jimutaka* etc. Similarly, properties which are present in *Jimutaka* are not to be found in *Madanphala* and other *Vaman Dravya* as *Jimutaka* and other *Vaman Dravya* are indicated in specific conditions of *Dosha* or in other word we can say that they have specific functionality in respect of *Dosha Sthiti*. Instead of its excellence, *Madanphala* is also contraindicated in some conditions, but it is superior in all *Vaman Dravya* due to its Potency (*Shakti*), *Kalpna* and *Prayog Vidhi*. It is considered to be superior among all *Vaman Dravyas* because of many *Bahu Kalpana*. But those *Kalpna* can also be prepared with other *Vaman Dravya* but the potency and *Prayog Vidhi* of those *Kalpna* are not equal to the potency and *Prayog Vidhi* of *Kalpna* when they are prepared from *Madanphala*. In other *Vaman Dravya* it is clearly seen at the level of *Samyog*, *Sanskara* etc. that *Madanphala* and other *Vaman Dravya* shows their superiority as per *Dosha*, *Dushya* conditions which mean each *Vaman Dravya* shows its superiority as per disease or *Dosha* condition. *Madanphala* have maximum number of *Yogas* than any other *Vamaka Dravyas* which make it easier for the physician to choose accordingly with reference to *Rogi* and *Roga*. *Madanphala* is highly recommended and proved to be a milestone drug used in *Vamana Karma* along with having different therapeutic effects. *Madanphala* is unpleasant and disliked by soul providing *Maha Vegama*, *Bahudishaharama Sukhama*, *Vyadhinashanam*, *Avikari Cha Vyapatto*. It also follows the set mark of quality of being an ideal drug. *Madanphala* is a large deciduous thorny shrub belonging to family Rubiaceae as of the occurrence in almost throughout India up to 4,000 ft altitude. It is widely applicable to an extent to various disease as it also have antibacterial, anti-allergic, anti-inflammatory, analgesic activity, immunomodulatory activity and mainly in *Vamana Karma* which itself used in the treatment for several disorders. It also fulfils the criteria of *Anekavidha Kalpana* because of having 133 *yogas* according to *Charaka*, which can be practically used by *Yukti* to fulfil the prime objectives of *Ayurveda* and is dependable with valuable qualities. Because of

its *Ayurvedic* properties it is found to commence *Vamana* easily without any complications even in *Sukumaras* person.

## CONCLUSION

*Madanphala* is highly recommended and proved to be a milestone drug in commencement of the *Vamana Karma*. The plant has been attributed with a number of actions in the classical literature and the multifaceted actions have been proved by researchers in well designed clinical trial and experimental models. It is included in *Vamaka Dravyas* and stated as *Shrestha* among them by all the acharyas because of its variety of formulations, its use for various disease purposes and many more discussed before. *Madanphala* is having way more qualities to be called as best drug for *Vamana* in compare to the other *Vamaka Dravyas*. Therefore, *Madanphala* can be taken as a drug of choice for the *Vamana Karma*.

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