

Available online on 15 Jun, 2023 at http://www.hjhs.co.in/index.php/hjhs

Himalayan Journal of Health Sciences

Published by Himalayan Group of Professional Institutions Associated with Himalayan Institute of Pharmacy Copyright© 2016-23 HJHS



Review Article



Ayurveda Descriptions of Rasashstra w.s.r. to Rasakalpas: Pottali Kalpana

Vaibhav Vasant Kadam^a, Surabhi Suresh Dhopte^b, Pranaya Prabhakar Gadkari^c

^aAssistant Professor, Ras Shastra & Bhaishajya Kalpana Dept., Dr. Krishna Gopal Dwivedi Ayurvedic Medical College and Hospital, Sarmau, Jhansi, India.

^bAssistant Professor, Ras Shastra & Bhaishajya Kalpana Dept., Ideal College of Ayurved, Posheri, Wada, India.

^cProfessor, Kriya Sharir Dept., Ideal College of Ayurved, Posheri, Wada, India

Abstract

The Indian medical system is a treasure trove of extraordinary and unusual pharmaceutical dosage forms. Ayurvedic herbo-mineral drugs contain many qualities which gives unique therapeutic profile. These drugs provide potent effects even at low dosage. *Pottali kalpana* is one of such; profoundly powerful and useful herbo-mineral formulation. Its fundamental elements, is the combination of mercury and sulfur, which is treated with various plant materials which eventually given small particles of drugs molecule to acquire effective pharmacological response in quick period of time. Similarly *Rasa Kalpas* are the names given to all medicines made from *Parad* and *Gandhak*. These formulations increase the efficacy and pharmacokinetic profile of medicine. This brief review describes the history, preparation and application of the *Rasa Kalpas*; *Pottali kalpana*.

Keywords: Ayurveda, Rasashstra, Rasakalpas, Pottali Kalpana

Article Info: Received 28 Apr 2023; Review Completed 24 May 2023; Accepted 13 Jun 2023



Cite this article as:

Kadam VV, Dhopte SS, Gadkari PP. Ayurveda Descriptions of Rasashstra w.s.r. to Rasakalpas: Pottali Kalpana. Himalayan J H Sci [Internet]. 2023 Jun 15 [cited 2023 Jun 15]; 8(2):4-6. Available from: http://www.hjhs.co.in/index.php/hjhs/article/view/169

DOI: 10.22270/hjhs.v8i2.169 *Corresponding author

1. Introduction

Rasa Shastra is one of the Ayurvedic approach which gives idea about the utilization of metal and mineral based formulation. These formulations have been popular since the *Vedic* era; the ancient era also put lot of emphasis on them. The Ayurvedic philosopher indicated various strategies for cleaning, handling, preparation and uses of herbo-mineral drugs. The subject of *Rasashastra* is Indian alchemy and the core of *Rasashastra* is mercury. Sulphur is used to mitigate mercury's toxic effects and boost mercury's therapeutic effects. (1-4)

The significance of *Rasa sastra* may be attributed to its advantageous and patient compliance factors i.e.; requirement of lesser doses and faster action. These practices became famous and generally acknowledged and securely utilized since long. The changes made to organo-metallic formulation make them effective against infection and relieves symptoms of other diseases. Specialized pharmaceutical procedures used for combining *Parada* with potent herbs, minerals and drugs of animal origin. *Rasa sastra* utilizes different procedure for preparing various herbo-metallic formulations named *Rasakalpas*. These formulations are well-known for their palatability, small drug dose and quick action etc. (4-7)

2. Rasa kalpas

Rasa kalpas have a long history of popularity due to their low dosage palatability and rapid disease combating ability. Rasakalps are mercurial compounds made from Samskarita Parada, Shuddha Parada, Hingeulottha Parada. They are categorized as follows:

- 1. Sagandha murchana and Nirgandha murchana.
- 2. Sagni murchana and Anagni murchana.
- 3. Anthar, Bahir, and Nirdhuma.
- 4. Gandhapishti, Gandhabaddha, Gandhajeerna, Gandhakajalli and Dhadhupishti.

Among *Rasa* substances, *Parada* is the most significant. However, *parada* is not utilized therapeutically in its natural state, to add the helpful characteristics in *Parada*, it is handled with various substances. *Parada* processing can be broken down into four categories based on its method of preparation i.e.; *Kharaleeya*, *Kupipakva*, *Parpati* and *Pottali* formulations.

The *Khalva yantra* is used for all of the *Parada* processing. It's the fundamental processing methods. Here, herbs and *Rasa* substances are mixed into *Shuddha*

parada or Parada bhasma. Kupipakva is made out of four words; Kupi, Pakva, Ras and Ayana.

3. Pottali Kalpana

According to *Pottali Kalpana* materials is collected into a compact and comprehensive size bag called *Pottali*. This type of formulation minimizes dose and maximizes effect. The word "*Pottali*" refers to compressing a drug into a more compact and potent

form. *Pottali Kalpana* gives conservativeness to dispersed materials. The *Kharaliya*-prepared *Kajjali* is spread on the leaves of plants in square or rectangular slabs covered in cow dung cakes at a temperature of 119 degrees Celsius. After pouring the melted *Kajjali*, another slab made of similar materials presses it. When it cools on its own, the crunchy black layers of *Parpati* are collected, powdered, and stored in the bottle. Some examples of *Pottali kalpana* is depicted in **Figure 1**.

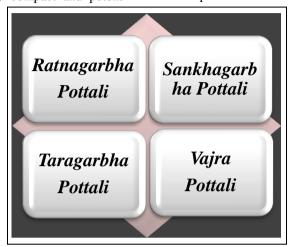


Figure 1. Examples of Pottali kalpana

The *Pottali Kalpana* was first described by *Nityanatha Siddha* in the 13th century. *Ratnagarvha pottali* and *Sankhagarvha pottali* are important since they posses enormous clinical significance. *Sharangdhar Samhita* and *Sharangdhar* also developed some formulations for these *Pottali* preparations. In his 13thcentury work *Ras Prakash Sudhakar, Yashodhara* also mentioned *Vajra Parpati*, in which he adopted the *Pottali Kalpana* method. It ought to be recall that it is *Yasodhar*, who is additionally the trailblazer in the readiness of *Kupipakwa* irregular arrangement. (6-8)

Yog Ratnakara's author, Bhiksu Mayuru pada, mentioned Hemgarbha Pottali, in which the medication is boiled in sulphur. These methods have also been utilized by Sidhyabhaishiya Manimala author Krishnaram Bhatt. The greatest insights concerning Pottali kalpana is referenced in Rasayansar of Shyam Sundar acharya.

4. Classification of Pottali Kalpana

- a) According to Nirmana Vidhi:
 - ✓ Bhavana, Putapaka and Pottali paka
- b) According to Pottali's appearance:
 - ✓ Churna Rupavata and Bhasmvata.
- c) According to ingredients of Pottali:
 - ✓ Pottali with Parada, Pottali without Parada, Pottali with Gandhaka and Pottali without Gandhaka.
- d) According to ingredients of Pottali:
 - ✓ Agni Samskara of Pottali, without Agni samskara and with Agni samskara.

5. Preparation Method

Poorva Karma:

Identification and collection of raw materials, *Shodhana* of raw materials, preparation of *Kajjali* and arrangement of *Valuka yantra*, etc. are major approaches which utilizes in the *Poorva Karma* of *Pottali* preparation.

Kajjali is first made and triturated with Kumari or Babbula niryasa. It is then shaped with Shikharakara or Pooga phala sadrusha, dried in the shade to prevent cracks, and wrapped in silk cloth before being prepared for Paaka.

Pradhaan Karma Paaka:

Pottali is suspended and kept in Valuka yantra and Shuddha gandhaka is filled in tempered steel vessel containing. Pottali than warmed to liqify Gandhaka and Paaka process begins.

Paschaat Karma:

Pottali is removed after Swangasheeta, Gandhaka adhered to that Pottali is scraped out, remove the silk cloth, polished with silk cloth and subjected for the final quality examination.

6. Properties and advantages of Pottali Kalpana

- Easy to administrate drug
- Helps to tackle the acute pathological condition
- Long shelf life
- Easily absorbable
- ♣ Effective in minimal dose and good pharmacokinetic properties

Indications of Pottali Kalpana:

Prameha, Kasa, Shwasa, Rajayakshma, Grahani, Shukra dushti, Mootradaha, Jwara, Mootrakrichha and Kaphaj & vataj roga, etc.

Anupana of Pottali Kalpana:

➤ Breast milk, honey, Ardraka swarasa, Dronapushpi swarasa or Kwatha. (8-10)

7. Conclusion

Pottali kalpana improves self-life of drug and possess ability to cure acute as well chronic diseases. The various formulations of Rasa Kalpas help in the drug administration, dose fixation and transportation of drugs. According to Pottali Kalpana materials is collected into a compact and comprehensive size bag called Pottali. Pottali kalpana offers advantages of easy administration, offers long shelf life; Pottali kalpana is easily absorbable, offers effective responses in minimal dose and imparts optimum pharmacokinetic profiles. These all formulations indicated for treating diseases like Prameha, Shwasa, Grahani, Mootradaha, Jwara, Mootrakrichha and Shukra dushti, etc.

Acknowledgements

We would like to express our gratitude to Himalayan Journal of Health Sciences who gave us the opportunity to publish the article.

Financial Disclosure statement: The authors received no specific funding for this work.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

References

- Radhakanta DR. Shabda kalpadruma. New Delhi: Naga Publications; 2003.p. 762.
- Yashodhara A. Rasa Prakasha Sudhakara, Trans Dr. Mishra. Siddhinandan. Third Edition 7/36. Varanasi: Chaukamba Orientalia; 2004.p.277.
- 3. Mulashankar DV. Parada vijnaneeyam. 2nd Edition. Varanasi: Chaukhambha Sanskrit sansthan; 1997.p.323.
- 4. Dattaram C. Brihat Rasaraja Sundara, Krishnagadh (Raiasthan), Srniyas Krishnalalii:1929.p.552.
- Sundaracharya VS.Rasayana sara. Shyam Sundar Rasayana Shala Prakashan. Varanasi: Chikitsa Prakarana. 1: 471.
- Shrikanth Murthy KR. Adhyaya Trutiya, Sharangadhara Samhita Prathama Khanda. Varanasi: Chaukhambah Orientalia; 2007.p.18.
- Joshi YG. Rasayana Chikitsa. Kayachikitsa. Pune: Sahitya Vitarana; 2014.p.37.
- Shubhash R. Rasayana, Kayachikitsa (A text book of medicine). Delhi: Chaukhambha Sanskrit Pratishtana; 2001.p.521.
- Singh RH. Rejuvination and Virilisation through Rasayana and Vajikarana. The principles of Ayurvedic Medicine. Delhi: Chaukhambha Surbharati Prakashan; 2003.p.119.
- Siddhinandan M. Prakthana. Ayurvediya Rasashastra. Varanasi: Chaukhambha Orientalia; 2007.p.16.