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Research Article

## Pharmaceutical study & preliminary analysis of Sheetala Parpati

\*Dr. Namitha R. Chandra, \*\* Dr. Satish P. Karjagi, \*\*\* Dr. Gazala Hussain

\*3<sup>rd</sup> year PG Scholar, Department of Rasashastra and Bhaishajya Kalpana, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan\*\* 2<sup>nd</sup> year PG Scholar, Department of Rasashastra and Bhaishajya Kalpana, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan

\*\*\* Associate Professor, Department of Rasashastra and Bhaishajya Kalpana, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan

### ABSTRACT

The *Parpati kalpana* is a thin flake form of mercurial preparation which is unique in the field of *Rasashastra*. It is one among the *Chaturvidha Rasayana* and *Agnisthayi Murchita Parada Bandha* i.e., *Pota Bandha* of *Parada*. *Sheetala parpati* is an Ayurvedic medicine that comes under *Parpati kalpana*, used in the treatment of difficulty in urination, urinary calculi, dyspepsia, etc. There are two different references of *Sheetala Parpati* where the ingredients and method of preparation are different. In the present work an attempt has been made to prepare both the varieties of *Sheetala parpati* along with its analytical study. It is mainly indicated in *Mutrakricchra* (Dysurea) and other diseases like *Amlapitta* (Hyperacidity), *Udarashoola* (Abdominal pain), *Ajeerna* (Indigestion), *Yakritvikara* (Hepatic disorder), etc.

**Keywords:** *Parpati kalpana*, *Chaturvidha Rasayana*, *Sheetala Parpati*, *Mutrakricchra* (Dysurea)**Article Info:** Received 04 Dec 2018; Review Completed 16 Jan 2019; Accepted 18 Jan 2019; Available online 15 Feb 2019

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#### \*Address for Correspondence:

Dr. Namitha R. Chandra, 3<sup>rd</sup> year PG Scholar, Department of Rasashastra and Bhaishajya Kalpana, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan

### INTRODUCTION

*Rasashastra* is an important branch of *Ayurveda*, specializing in formulations involving herbs, metals and minerals known as *Rasaushadhis*. One of the most popular forms is *Parpati kalpana*. It is one among the *Chaturvidha Rasayana* and *Agnisthayi Murchita Parada Bandha* i.e., *Pota Bandha* of *Parada*<sup>1</sup>.

*Parpati* is a thin flake like preparation consisting of Mercury and Sulphur in most of the *parpati* formulations. *Parpati* is such a preparation which is prepared by following various specialized processing techniques like *Shodhana Samskara* and *Murchana*<sup>2</sup>. *Parpati rasayanas* have high therapeutic value, potency and less toxicity. In the procedure of *Parpati kalpana*, *Agni Samskara* is adopted therefore the heat energy enhances its therapeutic efficacy in treating many disorders.

The use of *Parpati* was found beneficial for alleviating associated symptoms of *Grahani* as well as various other diseases like *Rajayakshma*, *Kustha*, *Gulma*<sup>3</sup>, etc. Later various scholars derived different types of *Parpatis* by adding one or the other ingredients like gold, silver, Iron, copper, mica, pearl and other precious stones. Some of them are *Tamra*

*Parpati (Rasa Prakasha sudhakar)*, *Panchamrita Parpati (Rasendra Sara sangraha)*, *Swarna Parpati (Rasapaddhati)*, *Loha Parpati (Rasa paddhati)*, *Vijaya Parpati (Bhaishajya Ratnavali)*, etc. *Sheetala parpati* is an Ayurvedic medicine that comes under *Parpati kalpana*, used in the treatment of difficulty in urination, urinary calculi, dyspepsia, etc. There are two different references of *Sheetala Parpati* where the ingredients and method of preparation are different. In one reference *Suryakshara* (240gms) and *Gandhakamla* (24gms) are the ingredients<sup>4</sup> and in another reference *Suryakshara* (48gms) and *Gandhaka* (1gm) are said<sup>5</sup>.

#### Preparation of Sheetala parpati:

#### According to Rasatantra Sara Siddha Prayoga (RTSSP)

#### Materials and Methods

*Chullika yantra* (Gas stove), *Loha Darvi* (Iron pan), Spoon, *Khalwa yantra*, Plate, *Vastra* (Cloth), Match box

#### Ingredients

*Suryakshara* (Potassium nitrate) – 10g

*Gandhakamla* (Sulphuric acid) –1ml

### Method of preparation

Ten gram of *Suryakshara* and 1ml of *Gandhakamla* were taken in *khalwa yantra*. They were subjected to *mardana*. During *mardana* fume was coming out of the *khalwa*. *Mardana* was continued till the fumes stopped. After it turned into a homogeneous mixture, some amount of mixture was taken in the *darvi* and heated in *mandagni* with continuous stirring by spoon till it turned liquid. After liquefaction it was poured on the smooth marble and pressed gently with plate.

### Observation

**Before Paka:** *Suryakshara* was white, crystalline form. It was easily pounded into *churna*. *Gandhakamla* was viscous in consistency. During *mardana* of mixture, appearance of fumes was observed.

**During Paka:** During heating, first the mixture became dry and fumes were observed. After some time it started to melt. During stirring some amount of liquefied mixture adhered to spoon and became solid. The liquid was colourless.

**After Paka:** The *shweta parpati* was white in colour. It was brittle on breaking. On taste tingling and cooling sensation was felt. On touch it was snigdha and mrudu.

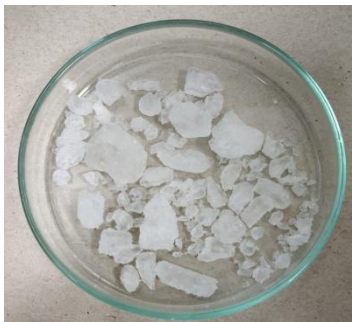
**Total amount:** 23.49g

**Obtained amount:** 16.96g

**Dosage:** 6-12 ratti

**Anupana:** *Jeeraka churna* with *sheetala jala* (cold water)

**Indications:** *Mutrakrichra*, *Mutravarodha*, *Amlapitta*, *Udarashoola*, *Ajeerna*, *Yakritvikara*



*Suryakshara*



*Gandhakamla*



*Sheetala Parpati*

### According to Siddha Bhesaja Manimala (SBM)

#### Materials and Methods:

*Chullikayantra* (Gas stove), *Loha Darvi* (Iron pan), Spoon, *Khalwa yantra*, Matchbox

#### Ingredients:

*Suryakshara* (Potassium nitrate) – 24g

*Gandhaka* (Sulphur) – 500mg

#### Method of preparation:

*Suryakshara* was powdered and taken in *darvi*, heated in *madyamagni*. When it melted, it was taken out of *agni* and *shuddha gandhaka churna* was added immediately and stirred. It caught fire due to *gandhaka*. When fire subsided the liquid was poured on marble from minimum height so as to get the shape of the *parpati*.

#### Observation:

**Before Paka:** *Suryakshara* was white, crystalline form. It was easily pounded into *churna*. *Shuddha Gandhaka* was yellow in colour.

**During Paka:** *Suryakshara* melted easily. When *Shuddha gandhaka* was added it caught fire in *darvi*. On delay in pouring some amount of liquid stuck to spoon and *darvi*.

**After Paka:** The *sheetala parpati* was white in colour. It was brittle on breaking. On taste tingling and cooling sensation was felt. After getting *parpati*, the clear sound was appreciated till some time which was indicative of some reaction happening. On touch it was snigdha and mrudu.

**Total amount:** 24.5g

**Obtained amount:** 23.16g

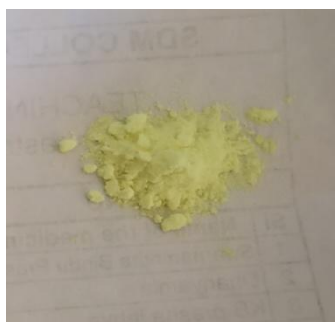
**Dosage:** 6-12gms

**Anupana:** *Jeeraka*, *dharoshna ksheera*

**Indication:** *Mutrakricchra*



*Suryakshara*



*Gandhaka*  
[82]



*Sheetala Parpati*

## Analytical Study

## Organoleptic characters:

| Characters | RTSSPS                     | SBM                        |
|------------|----------------------------|----------------------------|
| Colour     | <i>Shweta</i>              | <i>Shweta</i>              |
| Sound      | Breaking sound as of wafer | Breaking sound as of wafer |
| Taste      | <i>Amla, Kashaya</i>       | <i>Amla, Kashaya</i>       |
| Odour      | Odourless                  | Odourless                  |
| Touch      | <i>Mrudu, Snigdha</i>      | <i>Mrudu, Snigdha</i>      |

## Physico- chemical Analysis:

|                | *RTSSPS | SBM    |
|----------------|---------|--------|
| pH             | 2.50    | 8.32   |
| Ash value      | 99.93%  | 99.95% |
| Loss on drying | 0.14    | 0.07   |

\*RTSSPS- Rasatantra saara va siddhaprayoga sangraha SBM- Siddha Bheshaja Manimala

## DISCUSSION

*Parpati kalpana* is one amongst the four *murcchita parada yogas* that are unique and highly evolved pharmaceutical preparations with a wide range in therapeutics. *Parpati* is *sagandha/ nirgandha, sagni, pota bandha. Agni samskara* plays an important role in *Parpati* preparation. It helps in altering the physico- chemical properties. *Parpati* is a popular and successfully used preparation for the management of *Grahani, Mutraghata, Mutrakricchra, Rajyakshma, Gulma, Kusta*, etc. diseases.

*Sheetala parpati* is one among *Parpati kalpana* which is unique as the ingredient of *Sheetala parpati* are *Suryakshara* and *Gandhakamla* it is a mixture of alkali and acid. This preparation is not explained in any classical texts of *Ayurveda*. *Sheetala Parpati* has two references, the ingredients vary in both, common ingredient being *Suryakshara*. The reference in *Rasatantra saara va siddhaprayoga sangraha*, has *Suryakshara* and *Gandhakamla*, as ingredients. The other reference of Siddha Bheshaja Manimala has two ingredients namely *Suryakshara* and *Gandhaka*.

The method of preparation also varies. In the first reference the ingredients were added and triturated till it solidifies, then heated till it liquefies and then poured and pressed to get the *parpati*. Whereas in the other method, the *suryakshara* is first liquefied; and to it the powdered *Gandhaka* was added and then this mixture is poured on a flat surface to get the *parpati*.

*Sheetala parpati* prepared was white in colour as the ingredient is also white in colour with *Amla-kashaya rasa* and *mrudu-snigdha sparsha. Sheetala parpati* which was prepared according to RTSSP is more acidic than other one, it is due to the ratio of *suryakshara* is less compared to other method. Due to its *kshariya guna* it is mainly indicated in *Muttrakricchra* and other diseases like *Amlapitta*,

*Udarashoola, Vrikkashoola, Ajeerna, Yakritvikara*, etc. *Suryakshara* is *Atiushna, Tikshna, Agnidipaka, Dahaka, Shoshaka, Vatanashaka* and *Pittakaraka*. It is helpful in *Pleeha, Mutrakricchra, Netraroga, Vatarakta, Kumbakamala, Swasa, Shoola, Adhmana*, etc. as per RTSSPS but according to SBM, *Sheetala parpati* is indicated only in *Muttrakricchra*.

## CONCLUSION

*Sheetala parpati* is one of the unique *parpati yoga*, which does not contain *parada* in it. The method of preparation of *Sheetala parpati* is different than the other *parpati kalpanas*. Among these two references, the method of preparation mentioned in SBM was felt easier. Usually most of the *parpati kalpanas* are indicated in *grahani* and related *rogas*. But this is specially indicated in *mutrakricchra* and *mutravarodha*. Since *suryakshara* is *atiushna, tikshna, dahaka, shoshaka, vatanashaka, pittakaraka* one should not use in large dose and for long time.

## REFERENCES

1. Kulkarni DA. Rasa Ratna Samucchaya, Reprint. New Delhi: Meharchand Lachhmandas Publications; vol 1, 1998. p. 219.
2. Angadi. R. A textbook of Rasashastra, Reprint. Varanasi: Chaukhamba surbharati prakashan; 2017. p. 139.
3. Muralikrishna C, Prasannakumari, Srinivasulu bandari, Pavankumarsangu, Penchala Prasad, Narayana A.; A Prospective Study on Parpati Kalpana wsr to Panchamrut Parpati; International Journal of Ayurvedic medicine. 2010; 1 (3):1-3.
4. Anonymous. Rasatantra Sara Va Siddha Prayoga Sangraha, vol 1, 14<sup>th</sup> ed. Kaleda: Krishna Gopala Ayurveda Bhavan; 1991. p. 154.
5. Bhatta K. Siddha Bheshaja Manimala, 2<sup>nd</sup> ed. 4<sup>th</sup> guchha, Mutrakricchra chikitsam, Varanasi: Krishnadas academy; 1999. p. 248.