ROLE OF BASE PLATFORM TO PREPARE PARPATI KALPANA W.S.R. TO RASA PARPATI

Mamta Parikh*, Prajapati Pradeep Kumar

*Associate Professor, HOD & Professor, RSBK Department, All India Institute of Ayurveda, Mathura Road, Sarita Vihar, New Delhi, India.

ABSTRACT
Parpati Kalpana is one of the famous Kalpanas of Rasashastra which is widely used and considered as a boon for digestive disorders. The Parpati name is given to this Kalpana as per its Papad or Parpata – thin flake – like appearance. Parpati Kalpana is mainly divided into Sagandha and Nirgandha Parpati Kalpana. Rasa Parpati is the type of Sagandha Parpati Kalpana. To prepare Parpati kalpana, at least one ingredient should get liquefied at normal heating and should get solidified when it gets cooled down, not only that, to get the thin flake like structure specific pressure needs to be applied. In present study Rasa Parpati was prepared by using Samaguna Kajjali (Equal quantity of Parada and Gandhaka) and to check the cooling effect and the role of base platform; here three different platforms were made i.e. cow dung and wet clay mixed platform, only wet clay platform (Earthen platform) and ice block platform. Total nine samples of Rasa Parpati were prepared, three on each platform to check which platform is convenient to prepare Rasa Parpati. The average thickness of Rasa Parpati was found minimum (2.83 mm) on cow dung and wet clay mixed platform whereas the maximum (4 mm) on ice block platform i.e. 4 mm. Average thickness of Rasa Parpati made on earthen platform was 3.57 mm which is thicker than the Cow dung and wet clay mixed platform and thinner than the ice cube platform. Which indicates the best platform to make thinnest Parpati is cow dung and wet clay mixed platform.

KEYWORDS: Parada, Gandhaka, Rasa Parpati, Wet clay platform, Cow dung and wet clay platform, Ice platform.

INTRODUCTION
Parpati is the unique form of Rasa Aushadhis, which is introduced in Chakradutta [1], for therapeutic use, firstly. But the procedure to prepare Rasa Parpati may be described in detail by Acharya Vatsanka, because it is found quoted in Bhaishiya Ratnavali [2] that, “Shri Vatsanka Vinirmita Samyaka Rasa Parpati Shreshtha”. Parpati is also one of the 25 Bandha of Parada i.e. 8th Bandha which is named as Pota Bandha [3] and its method of preparation is similar to the preparation method of Rasa Parpati. In layman language Parpati is considered as a Papad like preparation having a physical characteristics such as it produces a specific sound on breaking, flat thin fakes and fresh on both sides. It is very difficult to standardize the Parpati in term of preparation because there are lots of variations found in daily routine from pharmaceutical to pharmaceutical and batch to batch. Therefore, a trial was made to establish some facts in terms of time, temperature and condition of preparation by taking the example of Rasa Parpati. Pharmacologically, the main concept behind the preparation of Parpati Kalpana is to convert the liquefied material into a thin flake like appearance. The concept to develop Rasa Parpati from the Kajjali might be to change the therapeutic properties of Kajjali from Guru to Laghu and Grahi to Sara Guna. Here, an attempt was made to check the role of cooling effect as well as the base platform on which the pressure is applied to make Parpati from molten Kajjali to prepare Rasa Parpati. After the usage of Rasa Parpati, there is almost 22 – 23 preparation of Sagandha Parpati, described in classics. After 18th Century onwards certain Nirgandha Parpati Yogas like Malla Parpati [4], Shweta Parpati [5] Bola Parpati [6] and Bhallataka Parpati [7] Yogas were developed which are not having Parada or Gandhaka as an ingredient. Papada (thin flake) like appearance of these Nirgandha Parpati Kalpas is the main reason to give them a name of Parpati. Therapeutically, Rasa Parpati is mainly used for diseases of Digestive system i.e., Dysentery (Grahami), Cirrhosis of Liver (Yakrit Vriddhi), Ascites (Jalodara), persistent Diarrhea (Jirna Atisara) and in Anemia (Pandu) also. In Rasatarangini [8], three types of Paka
(stages) have been mentioned for Parpati preparations. These are Mridu, Madhya and Kharapaka. Mridu and Madhya paka Parpati is considered to be of therapeutic value and is advocated for clinical usage, but Parpati having Kharapaka is not recommended for clinical usage.[9]

MATERIALS AND METHODS

To Prepare Rasa Parpati, Samaguna Kajjali (Kajjali made up using equal quantity of Parada and Gandhaka) was procured from the Pharmacy affiliated to Gujarat Ayurved University, Jamnagar. As per the pharmaceutical standardization point of view, apparatus and ingredients used to prepare Rasa Parpati are given below:

Table 1: Apparatus used to prepare Rasa Parpati

| Sr. No. | Apparatus                        | Size and Shape of Apparatus                      |
|---------|----------------------------------|-------------------------------------------------|
| 1.      | Lauha Darvi                      | Round and 15.5 cm diameter                      |
| 2.      | Steel Plate                      | Round and 25.5 cm diameter                      |
| 3.      | Banana Leaves                    | Square and 20 cm x 20 cm                        |
| 4.      | Cow dung and wet clay platform   | Round and 23 cm diameter x 5 cm thickness       |
| 5.      | Earthen platform                 | Round and 23 cm diameter x 5 cm thickness       |
| 6.      | Ice Platform                     | Round and 23 cm diameter x 5 cm thickness       |
| 7.      | Spatula                          | -                                               |
| 8.      | Coal furnace as a heating device | -                                               |
| 9.      | Thermometer                      | -                                               |
| 10.     | Pyrometer                        | -                                               |

Ingredients used:
1. Samaguna Kajjali[10] - 70 g for each batch (Total 9 batches, 3 for each batch)
2. Go Ghrita - Q.S.

Preparation of Rasa Parpati

To prepare Rasa Parpati on three different platforms, three types of platforms were made up with the same thickness and diameter as mentioned above i.e. one platform was made up by using cow dung and wet clay in equal proportion, the second platform was made up by using only wet clay (Earthen Platform) and for the third platform, ice block was used. 70 g of Samaguna Kajjali was taken in a Go Ghrita Smeared Lauha Darvi and placed over the heating device to melt the Kajjali till the mixture turned into the Pankwat (Semisolid) form. The material was stirred periodically with the spatula to bring the uniformity in melting. Then the melted Kajjali was immediately poured on the smooth surface of Ghrita smeared banana leaf (Which was kept on the different platforms) and covered with another Ghrita smeared banana leaf and it was immediately compressed by using a steel plate. Thus, the obtained melted material was solidified and converted flat in shape which was collected as Rasa Parpati. Three samples of Rasa Parpati were prepared on each platform hence total nine samples of Rasa Parpati were prepared.

RESULTS

Rasa Parpati was prepared on three different types of platform to check out the role of cooling effect and the impact of pressure on different – different platforms. On each platform three samples were prepared and observations are given below:

Table 2: Cow dung and wet clay platform

| Parameters                       | Sample I | Sample II | Sample III |
|----------------------------------|----------|-----------|------------|
| Weight of Samaguna Kajjali       | 70 g     | 70 g      | 70 g       |
| Temperature of heating device    | 708°C    | 751°C     | 765°C      |
| Melting point of Kajjali         | 112°C    | 110°C     | 114°C      |
| Duration                         | 2.30 min | 1.19 min  | 1.10 min   |
| Weight of Parpati                | 65 g     | 64 g      | 66 g       |
| Thickness of Parpati (in centre) | 2.8 mm   | 2.9 mm    | 2.8 mm     |
Table 3: Earthen Platform

| Parameters                  | Sample I | Sample II | Sample III |
|-----------------------------|----------|-----------|------------|
| Weight of Samaguna Kajjali  | 70 g     | 70 g      | 70 g       |
| Temperature of heating device| 770°C   | 751°C     | 730°C      |
| Melting point of Kajjali    | 110°C    | 112°C     | 115°C      |
| Duration                    | 1.15 min | 56 sec    | 1.05 min   |
| Weight of Parpati           | 68 g     | 67 g      | 66 g       |
| Thickness of Parpati (in centre) | 3.5 mm | 3.5 mm    | 3.7 mm |

Table 4: Ice Platform

| Parameters                  | Sample I | Sample II | Sample III |
|-----------------------------|----------|-----------|------------|
| Weight of Samaguna Kajjali  | 70 g     | 70 g      | 70 g       |
| Temperature of heating device| 826°C   | 670°C     | 586°C      |
| Melting point of Kajjali    | 110°C    | 112°C     | 114°C      |
| Duration                    | 1.37 min | 1.36 min  | 1.23 min   |
| Weight of Parpati           | 62 g     | 69 g      | 67 g       |
| Thickness of Parpati (in centre) | 4 mm  | 4 mm      | 4mm        |

Table 5: Average thickness of Rasa Parpati on each platform

| Type of platform          | Sample I | Sample II | Sample III | Average thickness |
|---------------------------|----------|-----------|------------|-------------------|
| Cow dung and wet clay platform | 2.8 mm  | 2.9 mm    | 2.8 mm     | 2.83 mm           |
| Earthen Platform          | 3.5 mm   | 3.5 mm    | 3.7 mm     | 3.57 mm           |
| Ice Platform              | 4 mm     | 4 mm      | 4 mm       | 4 mm              |

Other observations found during the melting of Kajjali was dark brownish yellow colored fumes and pungent odour of SO₂ and discoloration of Banana leaves was also observed on the portion where melted Kajjali was compressed. Impression of pressure on Ice platform was clearly appeared on the portion where melted Kajjali was compressed.

DISCUSSION

All the Parpati Kalpas must have an ingredient, having a property to melt on heat and after cooling it must be solidified. In Sagandha Parpati Kalpas, Gandhaka has this property whereas in Nirgandha Parpati Kalpas Sphatika, Navasadar etc. have the same property. Quantity of Gandhaka plays a major role in the Parpati Kalpas and in present study Samaguna Gandhakuykta Kajjali was taken to prepare Rasa Parpati. Kajjali in each batch was taken 70 g by considering the size of Lauha Darvi. Variation in Temperature of heating device (Table 2, 3 and 4) was observed because coal furnace was used to prepare Rasa Parpati. Kajjali as shown in Table 5, thickness of Rasa Parpati was varied on each platform and on the Ice Platform the average thickness of the Rasa Parpati was observed maximum i.e. 4 mm that was due to Ice as a platform, the molten Kajjali got solidified immediately and there was a minimum chance to compress it because of immediate cooling; and on earthen platform, Rasa Parpati was found thicker than the cow dung and wet clay and thinner than the ice platform. It was be due to cooling effect is less than the ice platform and quite more than the cow dung and wet clay, whereas Rasa Parpati was observed thinnest on cow dung and wet clay made of platform. It was due to the proper cooling effect so that the enough time and pressure can be applied to spread the molten Kajjali.

CONCLUSION

To check out the role of cooling effect as well as the pressure to prepare Rasa Parpati among three different platforms, i.e. equal part of cow dung and wet clay mixed platform, only wet clay platform
(Earthen Platform) and Ice Platform, the platform made up of Cow dung and wet clay was found best as the thinnest Parpati could be made up on this platform.

Traditionally cow dung platform is practiced to prepare the Parpati but only cow dung made platform was unable to bear the pressure for the Parpati Kalpana therefore, it is found that the equal quantity of cow dung and wet clay platform is best to prepare the Rasa Parpati.

REFERENCES
1. Chkrapanidutta. Chakradutta edited by Dr. Indradev Tripathi. Varanasi; Chaukhambha Sanskrit Bhavan; 2018. 4/86-88; p.53.
2. Shri Govinddassen. Bhaishya Ratnavali edited by Shri Ambikadutta Shastri. Varanasi; Chaukhambha Prakashan; 18th revised edition 2019. 8/439; p. 274.
3. Shri Vagbhatta. Rasaratna Samuchchaya with edited by Acharya Siddhinandan Mishra. Varanasi; Chaukhambha Orientalia; first edition 2011. 11/71; p. 275.
4. Shri Krishnaram Bhatta. Siddha Bheshaja Manimala edited by Shri R. Kaladhara Bhatta and Shri Laxmiram Swami. Varanasi; Chaukhambha Krishnadas Academy; 4th edition 2008. 4/74-75; p. 162.
5. Vd Yadavji Trikanji Acharya. Siddha Prayoga Samgraha. Ilahabad; Shri Baidyanath Ayurveda Bhavan Ltd; Reprint 2013. 18; p. 96.
6. Rameshwar Pandey. Yog Ratnakar edited by Prof. Chandrabhushan Jha. Varanasi; Chaukhambha Vishwabharati; 1st edition 2019. 68/53 p. 863.
7. Vd. Y.G. Joshi. Kayachikitsa. Pune; Pune Sahitya Vitarana; Reprint 2009; p. 658.
8. Shri Sadanand Sharma. Rasatarangini edited by Kashinath Shastri. Delhi; Motilal Banarasidas; 11th edition 2000.6/140-141; p. 131.
9. Shri Govinddassen. Bhaishya Ratnavali edited by Shri Ambikadutta Shastri. Varanasi; Chaukhambha Prakashan; 18th revised edition 2019. 8/468; p. 278.
10. Shri Sadanand Sharma. Rasatarangini edited by Kashinath Shastri. Delhi; Motilal Banarasidas; 11th edition Reprint 2000.6/135-136; p. 129.

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*Address for correspondence
Dr. Mamta Parikh
Associate Professor,
RSBK Department,
Shri V M Mehta Institute of Ayurveda, Gardi Vidyapith,
Anandpar, Jamnagar, Gujarat.
Mo. No: 8780318048
Email: drmamtaayu7@gmail.com

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