

A COMPARATIVE PHARMACEUTICAL STUDY OF DIFFERENT SAMPLES OF PANCHTIKTA GRHITA

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ABSTRACT

These pharmaceutical processes are known as “Samskara”. In view of the present trend of commercialization in the preparation and marketing of Ayurvedic medicine and to ensure the interests of the profession and public, it has become our prime duty to establish the standard pharmaceutical parameter of Sneha Kalpana including manufacturing. Process as well as to find out the physicochemical changes occurring during the process.

Keywords: *Murchhana, Panchtikta Grhita, Avartana.*

INTRODUCTION

Sneha Kalpana was one such evolution from the basic Kalpanas viz. Swarasa, Kalka, Kwatha, Hima and Phanta carving a niche for itself. It is the only Kalpana which can be administered by all the administrable routes of the body, quite efficacious and having a wide acceptability. Shamana, Shodhana, Brimhana, Rasayana are some amongst the multiple effects exerted by Sneha Kalpana with a small variation in the dose or route of administration. Hence, understanding the wide potential of the Sneha Kalpana, this is selected for the current study. Ghrita as the Sneha and the pentabitters that is Panchatikta processed to formulate Panchatikta Ghrita reference Sha. Sam. M. Kh. 9/92. Prepared Panchtikta Ghrita by Different methods and evaluate

and potential its therapeutic effect in the disease Eka Kustha (psoriasis).

Aims & Objectives: To Prepare *Panchatikta Ghrita* by 3 Different Methods viz.

- (a) Amurchhita and Anavartita,
- (b) Murchhita and Anavartita
- (c) Murchhita and Avartita (10 times) sample of the drug.

MATERIALS & METHODS

Pharmaceutical Study: In this important section of the study, the details of the drug manufacturing are explained. To procure three samples of the study are prepared as according to the classical methods in the laboratory of R.S. & B.K. department I.P.G.T. & R.A., Jamnagar. The three samples of Panchatikta Ghrita are prepared viz.

Sample I: Panchatikta Ghrita according to the classical references – (Sa. Sam. M. Kh. 9/92) i.e. with Murchhana and without any Avartana.

Sample II: The concept of Avartana has been proclaimed to have enhancing effect on the therapeutic efficacy of the drug. To know this 2nd sample of Panchatikta Ghrita is prepared by performing Ten Avartana of Panchatikta Kwatha and subjected to further study.

Sample III: 3rd sample of Panchatikta Ghrita is prepared without performing Murchhana and Avartana to evaluate any modifying action at the level of “*Murchhana Samskara*” and “*Avartana Samsakara*” on the drug. All the above pharmaceutical study is carried out in detail to develop standard operative procedure (SOP) for manufacturing of Panchatikta Ghrita.

Observation and Results of Pharmaceutical study: Ghrita Murchhana was carried as per the reference of Bhaishajya Ratnavali Jwara Chikitsa. The Murchhana of Ghrita is carried in a stainless steel vessel and the whole procedure is completed in 4 days. In average of four batches, it took total 16.32 hours duration to complete the Murchhana process and ultimately I have obtained 3.575 kg of Murchhita Ghrita. Hence, there was a loss of 4.75% and weight wise it was 172.5g. The temperature after half an hour of the initiation of the Paka range from 52^o to 56^oC. It is to regulate the intensity of the fire. So as to prolong the duration of the Paka. At the last stage on 4th day reaches a range of 102^o to 104^oC. As the moisture in the Kalka Dravya remain mortally, it becomes essential to regulate the range of temperature for getting a Madhyama Paka Sneha.

In all ten (10) avartana of panchatikta ghrita each paka was observed undergoing stages.

Stage of Boiling: Usually after ½ hour of time period this appears. The time period may vary as per the quantity of the whole contents. Here temperature reaches on an average of 66^oC.

Stage of Mixing: Here proper mixing of Kalka drugs along with Ghrita can be well appreciated.

Stage of Separation of Ghrita: As the Heating is Continue, the Separation of Ghrita from the mixture (of Kalka) is observed in the inner edges of the container. The Ghrita will be usually light Green in color.

Stage of Boiling of Ghrita: In this stage Ghrita starts boiling with bigger bubbles, which gradually subsides and forms smaller bubbles.

Stage of completion of Paka: In this stage, the classical sign of Ghrita Paka Siddhi Laksana are observed. The temperature will be in between 105^o to 108^oC very careful observation of this stage is required so as to get good quantity of Madhyama Paka Ghrita. Difference of Kalka in ratio of 1:4 and 1:6 was done in practical batch 1 and 2 respectively. The observations and results of these two samples were not differ to much with each other on several parameters, but total yield was found more in 1:6 ratio in comparison of 1:4. It may be due to loss quantity of Kalka which showed less amount of Panchatikta Ghrita.

The ratio of Kalka is less i.e. 1:6 because Kwatha of same material (of Kalka) has been used as liquid media. It may be one reason why Kalka proportion is less. The presence of Kalka and Kwatha of same substance may show synergetic action.

Color and Consistency: The Murchhita Ghrita was dark yellow. As the succeeding Avartana was carried one after the other. It changed gradually into dark green color and consistency in 10th Avartana. This may be because of the concentration ingredient of the bio-constituents of Panchatikta drugs in successive Avartana.

CONCLUSION

- Panchatikta Ghrita was first time used by Chakradatta in Kustha Roga in later part of 11th century A.D.
- Though, Avartana like process are found, mentioned in Charaka Samhita but, Avartana term is given by Sahastra Yoga.
- Sneha Murchhana process is described by Govindadassen in his classic i.e. Bhaishajya Ratnavli (18th Century A.D.) to find better color, odor and smell/remove the Ama Dosha.
- 60^oC to 104^oC temperature ranges and the duration of 4 days may be considered suitable for preparation of Panchatikta Ghrita.
- Panchatikta Ghrita was prepared as per guideline of Sharangadhara Samhita which shows desired therapeutic efficacy.
- The concentration of the bio-constituents of Panchatikta drugs get increased in each Avartana which leads the change in color in successive Avartana.

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