

International Research Journal of Ayurveda & Yoga

Vol. 5 (1),53-59, January, 2022

ISSN: 2581-785X;<https://irjay.com/>

DOI: <https://doi.org/10.47223/IRJAY.2022.5108>



Pharmaceutical Study of *Amavatari Rasa* and *Rasnadi Guggulu*- Ayurvedic Formulations.

D.K. Sharma¹, Sandeep Charak², Karunanidhi Sharma³, Parimi Suresh⁴

1.PG Rasashastra & Bhaishajya Kalpana, Medical Officer Ayush, J&K Govt.

2. PG Agadtantra, Medical Officer Ayush, J&K Govt.

3. Ph.D.Scholar RSBK NIA Jaipur, ⁴ Professor

4. P.G Dept. of Rasashastra & Bhaishajya Kalpana, NIA Jaipur.

Article Info

Article history:

Received on: 18-12-2021

Accepted on: 22-01-2022

Available online: 31-01-2022

Corresponding author-

D.K.Sharma, PG Rasashastra & Bhaishajya Kalpana, Medical Officer Ayush, J&K Govt.

Email-drdrksmd2009@gmail.com

ABSTRACT:

Ayurveda is one of the ancient and holistic system of Medicine. It is a system where principles of living and treatment are described in codified form. *Rasashastra* and *Bhaishajya kalpana* is a branch of Indian Alchemy and Iatrochemistry. In this branch number of herbo-mineral and purely herbal formulations are mentioned with wide range of dosage forms. It is not only a science of drug manufacturing but also the science of selection, identification, prevention and standardization. A good quality of products assures the anticipated results. The pharmaceutical preparations when prepared with proper scientific approach it can prove to be a boon for patients. *Amavatari rasa* and *Rasnadi guggulu* are amongst the important preparations, which have been mentioned in well-known rasa text Brihat yog tarangini and Bhaishajya ratnavali. Pharmaceutical study involves preparation of *Amavatari Rasa and Rasnadi Gugglu* according to classical method. All the raw materials were procured from the Pharmacy of N.I.A, Jaipur and Pharmaceutical procedures were carried out in the department of Rasa Shastra and Bhaishajya Kalpana, NIA Jaipur.

Key word- *Amavatari Rasa, Rasnadi Gugglu*, Iatrochemistry, Alchemy, Pharmaceutical procedures.

INTRODUCTION

Pharmaceutical chemistry is the study of drugs, and it involves drug development. This includes drug discovery, delivery, absorption, metabolism, and more. There are elements of biomedical analysis, pharmacology, pharmacokinetics, and pharmacodynamics.¹An immense valuable and powerful medicine in the form of metals, minerals & plants are found in the nature. But, most of the

drugs as such are not absorbable into the biological systems until and unless they have certain modifications. The specialized techniques/procedures to make these drugs absorbable therapeutically or clinically viable are called pharmaceutical processes. Even a small dose of drug may give powerful action, by carrying out these pharmaceutical processes. A full conception of the science will never be



attained by the knowledge of only a part of science². For describing the qualities of a perfect physician *Acharya Charaka* indicates towards the pharmaceutical proficiency of physician³. Regarding the professional skills *Acharya Sushruta* has also opined the same thing. Preparation of drug requires a great attention as the use of it, is related with someone's life. It is a clear fact that theoretical and practical perspectives are two essential aspects of knowledge. One cannot become perfect with the theoretical or practical knowledge alone. Physicians can fight against the diseases with the weapon of drug. But imagine battling in the battlefield without proper armoury will end up with a deleterious outcome. Ultimately results of drugs always depend upon its preparation. Thus, in nutshell, it can be stated that pharmaceuticals especially in the field of *Ayurveda* has one of the supreme importance. The present study was planned to see the *Amavatari Rasa*⁴ and *Rasnadi Guggulu*⁵ physicochemical parameters results after preparation by standard operative procedure as per *Ayurvedic pharmacopoeia* of India.

OBJECTIVES OF THE STUDY

The present pharmaceutical study is planned with the following aims & objectives –

- 1) To validate the standard method of preparation of *Amavatari Rasa* and *Rasadi Guggulu*
- 2) To Identify the problems encountered in the preparation.

MATERIALS AND METHODS

- 1) Collection, identification and authentication of raw drugs.
- 2) Preparation of *Amavatari Rasa* and *Rasadi Guggulu*

Place Of Manufacturing: –

The study samples were prepared in the Teaching Pharmacy of Department of *Rasa Shashtra* and *Bhaishajya Kalpana*, NIA, Jaipur. Details of Pharmaceutical Study are mentioned below-

Stages During Preparation Of *Amavatari Rasa*:

- 1) Purification (*Shodhana*) of raw materials *Parad* and *Gandhak*
- 2) *Kajjali Nirmana*
- 3) Preparation of *Triphala Kwatha*.
- 4) *Guggulu Shodhan*.
- 5) Preparation of fine powders of crude drugs.
- 6) Mixing of powders and *Kajjali*.

7) *Bhavana* with Erand Tail.

8) Preparation of *Amavatari Rasa* with *kuttan* method.

Preparation Of *Amavatari Rasa (Vati)* Table No.1

1. **Date of commencement** : 24/07/2017
2. **Date of completion** : 04/08/2017
3. **Reference** : B.R.29/69-70.
4. **Equipment's** : *Khalva yantra*, spatula, steel tray, weighing Machine

Procedure:

Preparation of *Vati*

1. All the ingredients were weighed as mentioned in table.
2. Fine powder obtained above after passing through sieve no.85 were mixed using a mass mixer to get a homogeneous mixture.
3. The non-herbal ingredient *Kajjali*, was added to above mixture and mixed well in the *khalva yantra* and later in a mixer grinder.
4. Then measured quantity of *bhavana dravya* (castor oil) was poured and levigated well till it attains the stage of *kalka*.
5. The entire mixture was then transferred to mortar and pestle.
6. Then handmade pills of size 125 mg were prepared, dried in shadow and stored in airtight container.

OBSERVATION AND RESULTS:

- Initial weight of ingredients : 750 g
- *Bhavana dravya* used : 240 g
- Final weight of *vati* : 922 g
- Weight gain : 22.93 %

Precaution:

1. Care has to be taken during preparation of *vati* so as to maintain the uniformity of the weight of each tablet uniformly.
 2. Castor oil should be added in very small quantity as excess quantity will lead to stickiness and will make it difficult for *vati* making while rolling in between fingers.
- Table 2: Showing Organoleptic characters of *Amavatari Rasa*:

Preparation Of *Rasnadi Guggulu*:

Steps followed during preparation of *Rasnadi Guggulu* can be summarised as here under:

1. Powdering of crude drugs.
2. *Guggulu Shodhana*.

3. Mixing herbal powders in *Guggulu*.
4. *Raskriya*
5. Making *Vati* (pills.)
6. Drying and Storage.

Powdering of crude drugs of *Rasnadi Guggulu*

- ❖ **Date of Commencement** : 14/08/2017
- ❖ **Date of Completion** : 21/08/2017
- ❖ **Equipment** : *Ulukhala yantra*,
mixer grinder, lab pulveriser, spatula,
Vessel, sieve
(mesh no 85)

Procedure- Cleaned raw drugs were pounded separately in the *Ulukhala yantra*. Then they were powdered using the mixer grinder, lab pulveriser and sieved through 85 no mesh size. The fine powders thus obtained were weighed separately and stored in air tight plastic bags. **Table No.3**

Mixing of herbal Powders- All the herbal powders were measured as mentioned in the text and mixed in mixer Grinder a to get a homogeneous mixture.

Preparation of *Vati*:-

1. All the ingredients were weighed as mentioned in the table.
2. Fine powders of above materials were mixed using a mixer grinder and mini pulveriser to get a homogeneous mixture.
3. Purified *Guggulu* was taken in a steel vessel and allowed to melt using *mridu agni* after adding small quantity of water.
4. The above mixture was added to the steel vessel and mixed well.
5. *Rasakriya* using *Mridu agni* was continued and the mixture stirred continuously
6. When the ingredients became thick and suitable for making pills heat was discontinued.
7. Then handmade pills of size 250 mg were prepared, dried and stored in airtight container.

Observation and results:

- Initial weight of ingredients : 780 g
- Final weight of *vati* : 820 g
- Weight gain : 5.38 %

Precaution:

1. Care should be taken during preparation of *vati* so as to maintain the weight of each tablet uniformly.
2. Contents should continuously stir so that they do not

stick to the vessel.

3. Low flame should be used during *Rasakriya*.

Table 4: Showing Organoleptic characters of *Rasnadi Guggulu*-

DISCUSSION

An idea to formulate a herbo-mineral compound drug containing all the ingredients easily available, described in the classics and scientifically proved to be effective in *Amavata*⁶. Although different formulations having same name but different ingredients have been mentioned in the text the formulation used in the present study is already being used widely in clinical practice. All the materials were procured from the Pharmacy of National Institute of Ayurveda, Jaipur, Rajasthan and got them authenticated. Thus, obtained raw materials were passed through micro pulveriser and sieved through 85 no. mesh size. The percentage of loss observed during powdering of the raw material was minimal. The fine powders thus obtained were weighed separately and stored in airtight Food grade plastic containers to avoid the absorption moisture from the atmosphere. *Rasna*, *Giloy*, *Erandmula*, *Devdaru* and *Shunthi*, were powdered. The net loss while powdering was 8%, 14 %, 10 %, 14 %, 17% respectively. Since the *Amavatari rasa* contains *kajjali* etc denser ingredients hence the herbal drug powders were blended to form a powder mix and this powder mix was incorporated into the *kajjali*. Since the *kuttan* method has been adopted the *Guggulu* was taken into the *imam dusta* and pounded by adding the *eranda tail* gradually to attain the soft mass. To this soft mass the powder mix was incorporated following the geometrical dilution, pounded along with *eranda taila till* a homogenous mass was obtained. The pills were prepared using this mass. desiccated and stored in an air tight container. *Rasnadi Guggulu* was prepared using *paak* method since the *kuttan* method found not suitable for manufacturing. *Gau Ghrita* was added to prevent sticking to the vessel walls, prepared the pills, dried in shade and stored in an air tight container.

CONCLUSION

Amavatari Rasa and *Rasnadi Guggulu* are the most important herbo-mineral formulations for the management of *Amavata* (Rheumatoid arthritis). Standard operative procedure according to Ayurvedic Pharmacopeia of India is important during manufacture of various preparations to get optimum therapeutic efficacy. This herbo-mineral formulation was convenient in pharmaceutical process.

Acknowledgements: - Nil

Conflict of Interest – None

Source of Finance & Support - Nil

REFERENCES

1. https://www.researchgate.net/publication/235650873_Ayurvedic_Pharmaceutics_and_Insights_on_Personalized_Medicine, downloaded on 11/10/2017.
2. Acharya YT Agnivesha: Charaka samhita, revised by charaka and Dridhabal, with commentary of chakrapanidatta, , *Viman Stahan*. 7/4. chaukhambha Sanskrit sansthana,Varanasi, 5th Edi.2001 .
3. Acharya YT Agnivesha: Charaka samhita, revised by charaka and Dridhabal, with commentary of

chakrapanidatta, , *Sutra Stahan*. 9/6. chaukhambha Sanskrit sansthana,Varanasi, 5th Edi.2001 .

4. Acharya YT Bhaishjyarnavali of Shri Govind Das. Chaukhambha Prakashan, Varanasi. edn. Reprint, 2013.pg.no.619
5. Bhatt T Yog tarangini, Chaukhambha Prakashan,Varanasi, Reprint, 2018.
6. https://www.researchgate.net/publication/235650873_Ayurvedic_Pharmaceutics_and_Insights_on_Personalized_Medicine, downloaded on 11/10/2017.

How to cite this article: Sharma DK, Charak S, et al “A Study On The Role Of Asraya-Asrayee Bhava Sambandha In The Genesis Of Sandhivata W.S.R Shleshaka Kapha” IRJAY.[online]2022;5(1);53-59
.Available from: <https://irjay.com>;
Doi: : <https://doi.org/10.47223/IRJAY.2022.5108>

Table No.1: Showing ingredients of *Amavatari Rasa* and their proportion.

SI No .	Ingredients	Latin name	Proportion	Quantity taken.
1.	<i>Parada</i>	Hydragyrum(Hg)	1 Part	50 g
2.	<i>Gandhak</i>	Sulphur	2 Parts	100 g
3.	<i>Triphala</i>	<i>Embelica officinalis</i> - 1part <i>Terminalia chebula</i> -1 part <i>Terminalia bellirica Roxb</i> 1part	3 Parts (1 part each)	150 g (50 g each)
4.	<i>Chitraka</i>	<i>Plumbago zeylinica</i> Linn.	4 Parts	200 g
5.	<i>Guggulu</i>	<i>Commiphora mukul. Resin</i>	5 parts	250 g
6.	<i>Eranda Tail</i>	(Castor oil)	For <i>bhavana</i>	Q.S.

Table 2: Showing Organoleptic characters of *Amavatari Rasa*:

Colour	Taste	Odour	Touch
Krishna	<i>Tikta</i>	<i>Nirgandha</i>	Mridu

PHARMACEUTICAL PROCESS :(pictures)



Kajjali Preparation



***Amvatari Rasa* Preparation**

Table No.3: Showing observations during the powdering of crude drugs.

Sl. No.	Ingredient	Initial wt. of drug	Weight of raw drug after cleaning	Fine powder obtained (85 mesh)	Loss Of Weight	Cleaning loss %
1.	<i>Rasna</i>	100 g	88 g	74 g	26 g	26
2.	<i>Giloy</i>	100 g	90 g	72 g	28 g	28
3.	<i>Erandmula</i>	100 g	92 g	74 g	26 g	26
4.	<i>Devdaru</i>	100 g	100 g	76 g	24 g	24
5.	<i>Sunthi</i>	100 g	96 g	82 g	18 g	18
6.	<i>Guggulu shuddh</i>	350 g	---	---	---	
7.	<i>Ghrita</i>	Q.S.				



Table 4: Showing Organoleptic characters of *Rasnadi Guggulu*-

Colour	Taste	Odour	Touch
<i>Krishna</i>	<i>Tikta</i>	<i>Triphala gandhi</i>	<i>Mridu</i>



Fig.3. Photographs of *Rasnadi Guggulu* (finished product)