



Pharmaceutico-analytical Study of Heingule shwara Rasa

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ABSTRACT

Hinguleswara rasa one of the rasoushadhi which contains Hingulaas chief ingredient. It is type of khalveeyarasayana which is indicated mainly in jwaravyadhi. Hinguleswara rasa was prepared according to Rasatarangini and subjected to analytical tests to evaluate its quality. Quality control tests like organoleptic characters, Physical constants & pharmaceutical standard analysis tests as per Indian Pharmacopeial parameters. Complete pharmaceutical & analytical studies study was carried out in practical pharmacy and analytical lab of Rasashastra & bhaishajya Kalpana department BLDEA's AVS Ayurveda Mahavidyalaya. Organoleptic characters Hinguleswara rasa prepared colour was dark red ingredient Odour, Amla in Taste, smooth in touch. After preparation of tablets subjected to Physical constants like PH, ash value etc. Pharmaceutical standards uniformity in weight, size, friability etc were tested results noted.

Keywords: Hinguleswara rasa, quality control tests

Received 03.11.2022

Revised 21.01.2023

Accepted 28.01.2023

INTRODUCTION

Ayurveda, "science of life and longevity" in ancient Sanskrit, is the one of the oldest healing system, based on lifestyle, diet and herbs [1]. Nowadays there is huge increase in trend towards use of herbal medications. Because various adverse effects of modern medicines which are becoming known each day [2]. Hence, it is the responsibility of the regulatory authorities to guarantee availability of pure, safe, potent and effective herbal medicines to the consumer. There are lots of challenges in the standardization of a polyherbal formulation since the raw material collection has a batch to batch variations in their standards in terms of identification, storage, processing, lack of reference standards. This leads to the variations in the final products standards [3].

To overcome these shortcomings of herbal medicines, various quality standards as laid down in formularies, pharmacopeia's or manufacturing operation are followed through statutory imposed good manufacturing practices by regulatory authorities. Since there is a major portion of herbal drugs in the global market it is important to adopt quality control guidelines in the manufacturing of herbal drugs which are acceptable internationally [4]. In Ayurveda many Herbo-mineral formulation was mentioned in texts of Rasashastra. Hinguleswara rasa is a herbomineral solid dosage form of medicine mentioned in Rasatarangini which comprises purified Hingula, purified Vatsanabha, and Pippalias ingredient. Where it is administered as both in churna form as well as vati form. Vati is prepared by bhavana with nimbuswarasa [5]. Based on these pharmaceutical procedures are followed in preparation of Hinguleswara rasawere subjected to quality analysis as per pharmaceutical standards. To evaluate changes in standards hence study is undertaken with title "Pharmaceutico - Analytical Study of Hinguleswara rasa".

MATERIAL AND METHODS

Materials

Pharmaceutical study - Materials required for the preparation of Hinguleswara rasa according to Rasatarangini reference were collected from practical pharmacy of BLDEA's AVS Ayurveda Mahavidyalaya Vijayapur.

Table 1: Showing the list of ingredients and their proportion of Hinguleswara rasa

Sr. no	Ingredients	Latin name	Quantity
1	Hingula	Hydrogen sulphide (cinnabar)	1 part
2	Vatsanabha	<i>Aconitum ferrox Linn.</i>	1 part
3	Pippali	<i>Piper longum</i>	1 part

Analytical study - Materials required for analytical study were collected from analytical lab Dept of Rasashastra & Bhaishajakalpana of BLDEA's AVS Ayurveda Mahavidyalaya Vijayapur.

Methods

Pharmaceutical study

Hinguleshwara rasa was prepared as per the Rasatarangini 24th taranga, shloka 78-79 [6].

Table 2: Showing the list of ingredients of Hinguleshwara rasa, their proportion & quantity used.

Sr.no	Ingredients	Latin name	Quantity	Quantity used
1	Hingula	Hydrogen sulphide (cinnabar)	1part	100 gm
2	Vatsanabha	Aconitum ferrox	1part	100 gm
3	Pippali	Piper longun	1part	100 gm

Preparation of Hinguleshwara rasa

- Hingulashodana was carried out by adopting bhavana method using nimbuswarasa as bhanadravaya for 7 times. Afterword's fine powder of shodhitahingula was utilized [7].
- Vatsanabhashodhana was done by immersing it in gomutra for 3days, then outer layer was peeled and powder was prepared. Thus, prepared powder was utilized [8].
- Pippali churna is prepared & utilized.
- All these powders were taken in khalwa yantra in equal quantity. Uniform mixture was prepared.
- Then nimbuswa rasa was added to carry out the mardana process to hinguleshwara rasa.
- When mixture attains sticky pill mass consistency, pills were prepared.
- These pills were dried under shade and stored in airtight glass container.

Analytical study

Final product was initially subjected to organoleptic characters analysis then physical constants [9] & pharmaceutical standard tests were tested [10] Moisture content, specific gravity, pH, ash value was tested and uniformity in size, weight, friability, hardness, dissolution, disintegration tested under pharmaceutical quality analysis tests.

RESULTS AND DISCUSSION

Table 3: Showing the organoleptic constituents Hinguleshwara rasa

Sr. no	Organoleptic character	Hinguleshwara rasa
1	Colour	Brick red
2	Odour	Amlagandhi
3	Touch	Amarphous powder
4	Taste	Amla
5	Appearance	Powder

Table 4: Showing physical constant values of Hinguleshwara rasa

Sr. no	Physical Constants	Results
1	pH value	4.0
2	Specific gravity	1.01
3	Ash value	78.8 %
4.	Moisture content	0.4%

Table 5: Showing pharmaceutical standards test values of Hinguleshwara rasa

Sr. no	Pharmaceutical standards	Results
1	Uniformity of size	8.42 mm
2	Uniformity of weight	403mg
3	Hardness	3.8kg
4	Friability	0.25 %
5	Disintegration	60 min
6	Dissolution	72 min

Table 6: Showing solubility of Hinguleshwara rasa in different chemicals

Sr. no	Chemicals	Solubility
1	Methanol	Sparingly soluble
2	Butenol	Sparingly soluble
3	Carbon tetrachloride	Sparingly soluble
4	Petroleum ether	Sparingly soluble
5	Xylene	Sparingly soluble
6	Chloroform	Sparingly soluble
7	Distilled water	Sparingly soluble

Hinguleshwara rasa one of the khalveeyarasayana, which categorized under solid dosage form of medicine i.e tablets are prepared with the help of khalva yantra. It is one in which Anagnisiddha method to prepare tablets. Hinguleshwara rasa was prepared and subjected to quality analysis to rule out its quality. Hinguleshwara rasa contains Shodhita Hingula, shodhitavatsanabha and Pippali churna. Uniform mixture of ingredients subjected to bhavana procedure with nimbuswarasa later vati was prepared. To prepare Hinguleshwara rasa 100 gms of shodita Hingula, shoditavatsanabha, pippali churna. Used and after procedure 300gm of final product obtained which indicates no loss of ingredients during pharmaceutical procedure was noted[1-5]. Thus, prepared Hinguleshwara rasa were stored in airtight container and further used for analytical study. In organoleptic study color of hinguleshwara rasa was dark red ingredient Odour, Amla in Taste, smooth in touch. In Physical constants P^H was 4, ash value was 78.8%, Specific gravity was 1.01 & moisture content was 0.4%. Pharmaceutical standards like Uniformity in size was 8.22 mm, uniformity in weight 403 mg, hardness was 3.8 kg, friability value was 0.25%, disintegration value in 4.0 pH solution was 60 minutes and dissolution value in 4.0pH was 72 minutes. Values of disintegration & dissolution were may be due manual preparation of tablets which crossed the time period 60 min rest other test values were in normal limit[6-10].

CONCLUSIONS

Hinguleshwara rasa is a poly herbo mineral formulation and it is prepared anagnisiddha method. In this method shodita hingula, shoditavatsanabha, pippali churna were ingredients. Analytical test values were in normal limit except disintegration & dissolution which may be due to manual method of preparation of tablets.

Scope

Study has given scope to evaluate effect of pharmaceutical procedure on therapeutical efficacy of the vati.

Acknowledgements

We sincerely thanks to Dr Sanjay Kadlimatti Principal BLDEA's AVS Ayurveda Mahavidyalaya Vijayapur for encouragement & kind support during study & RGUHS for encouraging carry research project & providing financial support for the study.

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CITATION OF THIS ARTICLE

Kruthika Obalshetty, Kashinath Hadimur, Kasturi A Patil. Pharmaceuticoanalytical Study of Heinguleshwara Rasa. *Bull. Env. Pharmacol. Life Sci.*, Vol 12[3] Feb 2023 : 160-162.