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# Comparative Pharmaceutical Study of Rasna Saptakam Kashaya and Rasana Saptakam Kashaya Tablet

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#### ABSTRACT

Kashaya preparations are the most prescribed Kalpana among the panchavidha kashaya Kalpana. In ancient days the Kashaya's were prepared only as per need and it was either prepared by physician or by the patient himself. The necessity for longer shelf life was not required. As the commercialization and free enterprise began, itled to large scale manufacturing and kashaya are now prepared in bulk and to prolong its shelf life, preservatives are added to it, as it is highly prone to contamination once exposed to moisture. If the kashaya is prepared in tablet form more benefits are there compared to the bottled kashaya with preservatives .Hence present study entitled a pharmaceutical comparison of Rasnasaptaka kashaya and Rasnasaptaka tablet was conducted.

#### **KEYWORDS**

Saptakam Kashayam, Rasna Saptakam Kashaya Tablet



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# INTRODUCTION

The branch, Rasa Sastra and Bhaishajya Kalpana of Ayurveda always experiments to bring out the most cost effective and innovative products in the market. Eachday innovative method an preparation is applied and a new product is released. Oneamong the new trends in markets is the conversion of kashaya in to kashaya tablet. Unlike the Kashaya, kashaya tablet offer many advantages. Only if the preparation is validated a quality product can be released. So, a comparative study on the pharmaceutical preparation of Rasnasaptakamkashya<sup>1</sup> and Rasnasaptakamkashya tablet<sup>2</sup> was carried out.

# AIMS AND OBJECTIVES

- Pilot study preparation of Rasnasaptakamkashayam and its ghanavati as per Sarangdharasamhitha
- Preparation of Rasnasaptaka Kashaya churna as per AFI
- Preparation of Rasnasaptakakashaya in tablet form according to theory and practice of industrial pharmacy by leon-lachman, (chapter 12).

# MATERIALS AND METHODS

The study was carried out in two steps

#### A. PILOT SUDY

- 1.Rasna saptakakashaya
- 2.Rasna sapthakaghanavati

#### **B. MAIN STUDY**

- 1)Rasnasaptakakashya tablet
- 2)Rasnasaptaka kashya choorna

# **Drug review**

- Rasna-( Guru, Ushna)
- Aragavadha (Guru, Ushna)
- Eranda (Guru, Snighda, Ushna)
- Gokshura (Guru, Snigdha, Sita)
- Punarnava (Ruksha, Ushna)
- Guduchi (Laghu, Ushna)
- Devadharu (Laghu, Snigdha, Ushna

# Pilot study of kashya

A pilot study of Rasnasaptakakashaya and its Ghanavati was done to assess the analytical parameter with more clarity before doing the Kashaya choorna and Kashaya tablet.

1	Rasna	Rhizome	150gms
2	Amrita	Stem	150 gms
3	Aragvadha	Stem bark	150gms
4	Eranda	Root	150gms
5	Gokshura	Fruit	150gms
6	Devadaru	Heart wood	150gms
7	Punarnava	Whole plant	150gms
8	water		17 litre

#### PRACTICAL 1

Name of the practical: Preparation of 2 batches of Rasnasaptakamkashaya

**Reference:** SarangdharaSamhitha

**Equipments:** Hammer mill, stainless steel vessel,LPG cylinder for heating,gas stove, weighingmachine, measuringscale, pyrometer



Kashaya Churna Qty.	1050gms	1050gms
Total qty. of water	17ltrs	17ltrs
Temperature given	80∘c to	80∘c to
	90∘c	90∘c
Time taken for the	6hrs	6.20hrs
reduction		
Total qty of kashaya	2ltrs.	2.1ltrs.
obtained		

#### **Procedure**

- The raw drugs were collected from SDM pharmacy
- Raw drugs were cleaned and dried properly
- The raw drugs were made into coarse powder
- The coarse powder so obtained was put in a stainless steel vessel bearing a capacity of 30lt and 16 times water was added to it. It was then heated.
- After 1/5<sup>th</sup> reduction the water is filtered with a cotton cloth and the filtered kashya was taken in a separate vessel and the residue got in the cloth was discarded Observations
- The mixture was seen getting dark brown in color as the evaporation progressed
- The decoction possessed the smell of drugs boiled in it

#### **Results**

Among thesetwo batches, Batch a was taken and bottled for analytical study Batch b was taken for preparing Ghana Vati

#### PRACTICAL 2

Name of the practical preparation of Rasnasaptakamghanavati

Reference: SharngdharaSamhitha

Equipment -heating pan, stirrer, khalvayantra,pill cutting machine

Ingredients

No	Ingredients	Quantity	
1	Rasnasaptakamkashya	2.1litres	
2	Shuntichoorna	20g	

#### Procedure

The previously prepared RasnaSaptaka Kashaya (batch B) was poured in a heating pan and subjected to mild heat

It was stirred well till liquid portion got evaporated once it becomes semi solid and sticky in nature, it was scrapped out of the pan and kept in a stainless steel pan drying in sunlight and late in drier

The solid slightly sticky Ghana is now pounded and 20 gm of Shuntichoorna is added to *it and made in to* a homogenous mixture

This semisolid Ghana is put inside the tube forming instrument to eject the kalka in to a uniform tube-like paste

This semi solid paste is put on pill cutting machine and rolled as it drops in to pills in uniform shapes

It is then rolled in hands smeared with ghee and it is made in to Vati

#### **Observations**

• The color of Kashaya became dark brownish as it became semisolid in nature



- The odor of Kashaya became very mild after the procedure
- It became very sticky in nature after the evaporation

#### **Precaution**

- stirring has to be does continuously as it was highly prone to get burnt on the heating pan
- While rolling the vati ghee has to be smeared to avoid stickiness

#### Result

Result	
Parameters	Observation
Time taken for total	2hours
evaporation	
Temperature of heat given	80°c to 90°c
Total weight of ghana	246g
obtained	
Temperature of heat in drier	45°c
Total weight ofghana after	115g
drying	
Loss of weight after dring	131g
Total duration of drying	2 days
Total number of Ghana vati	110
made	
Total weight of Ghana vati	107 g

# Main study

#### PRACTICAL 1

Name of the practical: preparation of Rasnasaptaka Kashaya choorna'

Reference-SharangdharaSamhitha

Equipment-hammer mill,

weighingmachine, sieve mesh No. 8

S.	Ingredients	Parts Used	Qty
No.			
1	Rasna	Rhizome	3 kgs
2	Amrita	Stem	3 kgs
3	Aragwadha	Stem bark	3 kgs
4	Eranda	Root	3 kgs
5	Gokshura	Fruit	3 kgs
6	Devadaru	Heartwood	3 kgs
7	Punarnava	Whole plant	3 kgs

#### **Procedure**

The raw drugs were collected from SDM pharmacy, cleansed and dried and made into coarse powder by usinggrinding mill and then passed through a mesh no 8

The collected coarse powder was put in a sachet each of 30 gm Kashayachoorna

Parameters	Observations
Total Qty of raw material	21 kgs
taken	
Total Qty of coarse powder	19.5 kgs
obtained	
Total loss	1.5 kgs
Total time taken	7 hours

#### PRACTICAL 2

Preparation of Rasnasaptakam Kashaya tablet was made in two stages

Preparation of kashaya tablet

- Stage 1 Preparation of Kashaya
- Stage 2 Preparation of Tablet

### Stage 1

Name of the practical -preparation of Rasnasaptaka Kashaya

Reference - Sharangdhara Samhitha

Equipment-hammer mill, drugboiler, thermic fluid for heating, weighting machine, measuring

S.	Ingredients	Parts Used	Qty
No.			
1	Rasna	Rhizome	3 kgs
2	Amrita	Stem	3 kgs
3	Aragwadha	Stem bark	3 kgs
4	Eranda	Root	3 kgs
5	Gokshura	Fruit	3 kgs
6	Devadaru	Heartwood	3 kgs
7	Punarnava	Whole plant	3 kgs
8	Water		340 lts

#### **Procedure**

The raw drugs were collected from SDM pharmacy and were cleaned and dried in sunlight.



They were made into coarse powder by using grinding mill and it was passed through a mesh no 8

The coarse powder was introduced inside the drug boiler with a capacity of 1000litres and 16 times water is added to it and heat was given with thermic fluid circulation around the drug boiler, which was heated by fire wood boiler

After 1/8<sup>th</sup> reduction, checked by a measuring scale, thewater was filtered with a cotton cloth underneath the drug boiler and filtered kashya was taken in a separate vessel and the residue was discarded

#### **Observations**

The boiled liquid became brownish color It attained the odor of kashaya dravyas It became slightly thicker in consistency

#### **Precaution**

Raw drugs used for boiling should be coarse in nature to benefit maximum aqueous extraction

Mandagni should be given

The lid of the drug boiler should be open so as to benefit evaporation

#### Result

Itobuit	
Parameters	Reading
Kashyachurna quantity	21000gms
Total quantity of water	340ltrs
Temperature	80°c to90°c
Time taken	5hrs
Total quantity	40ltrs

#### Stage 2

Name of the practical -preparation of Rasnasaptaka Kashaya tablet

Reference -SharangdharaSamhitha

Equipment-heating, pan, stirrer, drier, granulator, tablet compression machine

Method adopted-wet granulation

S.No	Ingredients	Qty
1	Rasnasaptaka Kashaya	40 ltrs
2	Starch	100 gms
3	Shunthi Kashaya	200 gms

#### Procedure

The previously obtained RasnaSapataka Kashaya was put on a stainless-steel vessel and it is further subjected to mild heat till the entire liquid portion was evaporated Continuous stirring was done to make sure it does not get burnt

Once the liquid portion was evaporated the residue were scrapped out and kept in drier It was made in to granules by putting it in granulator with a 2mm sieve and rotating it in forward direction

These obtained granules were punched in to tablet in 16 stations rotatory tablet compression machine

#### **Observations**

The color of Kashaya became dark brownish as it became semi solid in nature The odor of kashaya became very mild after the procedure

It became very sticky in nature after the evaporation

After adding shuntichurna and starch the stickiness of the powder reduced and the preparation of granules were easier

#### Result

Parameters	Reading
Total quantity of Kashaya taken	40litres
Total quantity of Ghana obtained	4257 gms



Temperature of heat given	80°cto90°c
Total time taken for reduction	3.40 hrs.
Total quantity of Ghana obtained	2352
after drying	
Temperature of the heat drier	45°c
Total time taken for drying	2 days
Loss on drying	1905gms
Total number tablet punched	2130tablets
Total weight of tablet	2189

Source of Support: Nil

Conflict of Interest: None declared



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