

Research Article

# Pharmaceutical Study of the Shadbindu Ghritha

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## INFO

# A B S T R A C T

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#### How to cite this article:

Nanda, Shruthi N. Pharmaceutical Study of the Shadbindu Ghritha. *J Adv Res Pharm Sci Pharmacol Interv* 2022; 5(1): 1-4.

Date of Submission: 2022-05-10 Date of Acceptance: 2022-06-20 Sneha kalpana is one of the secondary derivative of panchavida kashaya kalpana. Sneha kalpana etc. were pharmaceutically developed by our Acharyas in order to increase the shelf life of the medicine as well as to extract the active principles of the dravyas in different medias. Sneha dravyas are best because of the power to assimilate effectively the properties of substances with which it is processed, without losing its own properties. Shadbindu ghritha is one among the sneha kalpana contains Bhringaraja, Yashtimadhu, Kushta, Lavanga, Shunti and Murchitha ghritha are the ingredients.

**Keywords:** Sneha Kalpana, Shadbindu Ghritha, Yashtimadhu, Lavanga

#### Introduction

Sneha kalpana is composed of two words: Sneha and kalpana. Root word of Sneha is "Snih Preetau".

Sneha is fatty or oily fraction extracted from 'sthavara' or 'jangama' source.

The root word of Kalpa is "Krup samarthye" kalpayate vidhiyate asav vidihi (Shabdhakalpadruma)

- Prakalpam samskaranam iti (Chakrapani)
- Kalpanam yojanamityarthaha (Arunadutta)

Kalpana is a process or kind of modification or plan of preparation of medicines using either a single drug or several drugs.

Thus the word Sneha kalpana means a pharmaceutical process where water and lipid soluble extracts of a drug are transferred into the Sneha.

There are two references available regarding shadbindu ghritha in the classics.

# **Method of Preparation**

All the above ingredients were taken and kalka is prepared. This kalka is added to 4parts of Moorchitha ghritha and heated on mandagni till Sneha siddhi lakshana appears.

# Objectives of the Study

- Preparation of Ghritha murchana
- Preparation of Shadbindu Ghritha

# Preparation of Murchitha Ghritha

#### Ghritha Murchana<sup>3</sup>

#### **Drugs**

- Haritaki churna-145g
- Amalaki churna-145g
- Vibhitaki churna-145g
- Musta churna-145g
- Haridra churna-145g
- Matulunga swarasa-145ml
- Ghrita-2000ml

J. Adv. Res. in Pharmaceutical Sciences and Pharmacology Interventions

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#### **Equipments**

Steel vessel, weighing machine, measuring cylinder.

Samskara: Murchana.

#### **Procedure**

- 2000 ml of Ghrita was taken in a steel vessel and heated slightly over mandagni till up to evaporation of moisture content, disappearance of foam and sound coming from Ghritha
- Then the vessel was kept out of the fire and allowed to cool for sometimes. The kalka was added in small quantity with constant stirring. Then 8000 ml of water was added and mixed well. Started to heat on mandagni till Sneha siddhi lakshanas appear. Then filtered and used for further preparation

#### **Observations**

- On heating bubbles were started to seen on the surface of the vessel
- After 20minutes the bubbles disappeared and sound also stopped.Smell of haridra was appreciated
- When Ghritha was moisture free, the colour of Ghritha changed to light yellow from dark yellow
- Froath was appeared when kalka was added
- Vartivatkalkalakshana- ++
- Shabdaheenoagninikshipta-++
- Phena shanti-++
- Fumes and sound was coming at that time, specific smell of Goghrita was smelt
- Colour of Goghritha was converted into dark yellow, after 9 hrs heating
- Bubble and sound appears during Snehapaka
- A layer of Ghritha remains at the upper portion of the vessel after completion of Snehapaka
- At final stage sound disappeared and Phena shanti was observed
- Quantity of Ghrita after murchana-1950 ml
- Loss- 50 ml (6.03%)

Table I.Showing Sneha Siddhi Lakshanas during Ghritha Murchana

S. No.	Sneha Siddhi Lakshana	Kalka	Ghrita
1.	Vartivat sneha kalkasyat	+	-
2.	Madhye Darvi Vimunchati	+	-
3.	Shabda Hino Agni Nikshipta	-	+
4.	Phenashanti	-	+
5.	Gandha Varna Rasotpatti	-	+

#### **Precautions**

- Mandagni was maintained
- Continuous stirring was done in order to avoid the sticking of kalka dravyas at the base of the vessel

- As the hot Ghritha started to spill out of the vessel, care taken to avoid the contact of body surface
- Fire was reduced after reaching samyak snehapaka lakshanas
- The vessel was taken out from the fire immediately after observing Samyak paka lakshanas

## **Filtration and Storage**

The hot murchita Ghritha was filtered by using cotton cloth and the kalka was remained after filtration. The maximum quantity of Murchita Ghritha was extracted and stored in air tight container.

#### **Precautions**

• Care was taken to press the hot kalka itself in order to

Table 2. Showing the Ingredients of Shadbindu Ghritha

Bhringaraja	90 g
Kushta	90 g
Yashtimadhu	90 g
Shunthi	90 g
Lavanga	90 g
Murchithaghritha	1800 ml
Jala	7200 ml

get maximum Ghritha out of it

 The filtered Murchita Ghritha was kept open for some time and then covered

# Preparation of Shadbindu Ghrita<sup>4</sup>

# **Procedure**

Whole procedure of Shadbindu ghritha Kalpana has been divided under 3 headings as follows:

#### Purva Karma

- Preparation of kalka of shadbindu ghritha
- Ghritha murchana

#### Pradhana Karma

- Mixing of the kalka dravya ,jala and murchitha ghritha
- Uniform Heating Pattern
- Observation and Recording of Temperature
- Observing Ghritha for siddhi Lakshanas
- Allowing it for self-Cooling

**Pradhana Karma:** Murchita Ghritha was taken in clean and dry steel vessel.

Kalka, jala and Murchitha ghritha was added carefully and heated on moderate heat, by adjusting the time of heating such that the process of Ghrithapaka will be completed in 12hrs with continuous and gentle stirring up to the appearance of Ghrithapaka siddha laksana ( Madhyama Paka). It was filtered in the warm stage itself with a clean

and dry cloth.

- The Day 1 Sneha paka done for 5 hours
- Day 2 snehapaka done for 12hours(Sneha Siddhi lakshanas were appeared )
- Total duration of snehapaka 17 hours

Table 3. Showing Observations during Snehapaka of Shadbindu Ghritha

Snaddindu Gnritna						
Day	Time	Observations				
Day 1	11:30 am	Froath was seen during boiling process				
	01:30 pm	kalka became thick during boiling process				
	02:30 pm	Kalka- sticky on touch				
	03:30 pm	Characteristic smell of Ghrita was appreciated				
	11:00 am	Colour of the Ghritha was turned to greenish yellow				
	12:00 pm	Dense fumes were observed.				
	01:00 pm	Smell of Ghritha was appreciated				
	02:00 pm	Lump formation of kalka was seen				
	03:00 pm	Kalka was sticky on touch Kalka when pressed in between the fingers, it yields large quantity of sneha (mridupaka)				
	04:00 pm	Lump of kalka started settling down in the vessel				
D2		Incomplete formation of varti was seen when pressed in- between two fingers				
Day 2	5.00 pm	Kalka produced crackling sound when kept on fire.				
		Partial formation of varti was seen when rolled between two fingers				
		The kalka could be rolled into varti. Liquid portion of Kwatha was reduced				
		Complete formation of varti was seen when rolled between two fingers				
		Kalka remained soft in consistency Kalka was non-sticky When kalka put on fire burns without any crackling sound Disappearance of froath was seen (Madhyamapaka)				

Table 4. Showing Observations of Shadbindu Ghritha

Characters	Observations
Colour	Yellow
Smell	Specific
Consistency	Granular viscous
Taste	Acrid

# **Completion Test**

Ghritha: Put in fire, burns without any cracking sound.

Kalka: Fire test, no sound.

Consistency: Soft in nature Made in to varthi form Finger

print seen.

Colour: Blackish green.

Observations: Quantity of Shadbindu ghritha obtained

-1500 ml.

# Preparation of Shad Bindu Ghritha



Figure I.Murchana Drugs, Matulunga Matulunga, Swarasa



Figure 2.Murchana Kalka, Goghritha Preparation of Ghritha Murchana



Figure 3. Murchitha Ghritha



Figure 4.Bringaraja, Shunthi, Kushtha



Figure 5.Yashtimadhu Lavanga, Preparation of Shadbindu Ghritha



Figure 6.Shadbindu Ghritha

#### Discussion

During Ghrita murchana Phenashanti lakshana it might be due to hydrolysis of saturated fatty acids.

# Conclusion

There are two references available regarding shadbindu ghritha in the classics. Yoga ratnakara reference has been taken for the present study. It contains Bhringaraja, Yashtimadhu, Kushta, Shunti, Lavanga churna and Murchitha ghritha.Indicated in Nasika Roga, Pinasa, shiroroga.

Ghrita murchana was carried out by using Haritaki, amalaki, vibhitaki, musta, haridra and matulunga swarasa according to B.R and AFI. The yield was 1950 ml (97.5%), out of 2000 ml.

Shadbindu ghritha total quantity obtained 1500 ml. It was prepared by-Bhringaraja, Yashtimadhu, Vidanga,

Shunti, Lavanga churna-90g each, Jala-7200 ml, Murchita Ghrita-1800 ml.

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