



## ANALYTIC STUDY OF MAHAUSHADHA SARPI ANJANA: AN AYURVEDIC FORMULATION

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### ABSTRACT

The *Ayurvedic* herbal medicines are widely used for various human ailments from the beginning of mankind. *Ayurvedic* medicines have become significantly more popular all over the globe because of the effective and curative nature for chronic disease with less toxicity. *Ayurveda* was preached by sears like *Atreya*, *Charaka*, *Sushruta*, *Madhav* and *Kashyapa*. These people has established various formulations for cure various diseases. So in present era there is need of making these formulations patent, standardization and scientific studies. An *Ayurvedic* formulation *Mahaushadha Sarpi Anjana* has mentioned by *Acharya Sushruta* in treatised of *Sushkakshipaka*.<sup>[1]</sup> **Materials and methods:** To standardization of preparation on physiochemical parameters, results were documented. **Result:** The result shows the organoleptic character, sterility. **Conclusion:** Formulation was prepared in form of ointment according to modified classical method. Analytic study shows uniformity in sample.

**KEYWORDS:** *Mahaushadha Sarpi Anjana* in ointment form is very beneficial for eyes.

### INTRODUCTION

*Mahaushadha Sarpi Anjana* in ointment form is very beneficial for eyes. Which is prepared by *Shunthi* powder, milk powder and pure *Goghrita* along with base of ointment like Light Liquid Paraffin, Petroleum Jelly and Bee Wax. It is very effective in Meibomian gland dysfunction, dry eye, itching and watering of eyes. According to *Acharya Bhavmishra* Contents like milk powder and *Goghrita* used in formulation of *Mahaushadha Sarpi Anjana* having *Cakshushya* property which is beneficial for eyes.<sup>[2,3]</sup> According to *Acharya Bhavmishra Shunthi* having *Srotoshodhana* and *Tridosh Shaman* property which is good for eye diseases.<sup>[4]</sup> This paper presents analytic study of this *Ayurvedic* formulation which is important for *Ayurvedic* researchers and *Ayurvedic* practitioner also.

### AIMS AND OBJECTIVES

- To analyze the physical or organoleptic character of drug.
- To find out the sterility test of *Mahaushadha Sarpi Anjana* formulation prepared by classical and modified method.

### MATERIALS AND METHODS

#### Collection of Raw Materials

The raw material (*Shunthi*) for the formulation was procured from the Hansa Pharmacy Premnagar Ashram, Haridwar Uttarakhand. *Goghrita* and milk powder were procured from the patanjali store, Haridwar Uttarakhand. Base materials for preparation of ointment were procured from Hansa Pharmacy Premnagar Ashram, Haridwar Uttarakhand. The final product i.e. *Mahaushadha Sarpi Anjana* was prepared in the Hansa Pharmacy Premnagar Ashram, Haridwar Uttarakhand. Figure 1-6.

#### Method of Preparation of *Mahaushadha Sarpi Anjana*

*Mahaushadha Sarpi Anjana* was first prepared by classical method of *Churna Kalpna* from the raw drug *Shunthi*.<sup>[5]</sup> *Mahaushadha Sarpi Anjana* in ointment form was prepared by modern method in which all component of the formulation were taken in unequal amount (the contents of *Mahaushadha Sarpi Anjana* and there proportion in mentioned in table 1). Firstly petroleum jelly and bee wax were taken in a glass container and waited for melt it on 30<sup>0</sup> temperture. Then light liquid

paraffin was poured in it. Thereafter fine *Shunthi* powder and milk powder were pored in it. At last *Goghrita* in liquid form was poured in it. After that all mixture in

container were mixed very well with the help of spatula. Then passed it through UV rays in UV rays chamber and filled it 5gm eye ointment container (figure 8).

**Table 1: Content of Mahaushadha Sarpi Anjana.**

Drug	Latin name	Family	Part use	Ratio
<i>Shunthi</i>	<i>Zingiber Officinale</i>	<i>Zingiberaceae</i>	Rhizome	15 gm
<i>Goghrita</i>	-	-	-	08 gm
Milk Powder	-	-	-	02 gm
Petroleum Jelly	-	-	-	35 gm
Light Liquid Paraffin	-	-	-	35gm
Bee Wax	-	-	-	05 gm

#### Analytic Study

Prepared final product *Mahaushadha Sarpi Anjana* was analyzed by employing various analytic parameters.

#### Physical Characterization Description or Organoleptic study

Organoleptic characteristics for various sensory character like appearance, colour, taste, odor etc were carefully noted down (table 2).

**Table 2: Organoleptic Parameters of Mahaushadha Sarpi Anjana.**

Parameters	Mahaushadha Sarpi Anjana
Appearance	Semi solid
Colour	Light brown
Odour	Characteristic, ginger like
Taste	Characteristic

#### pH Value

pH was determined by using Digital Ph meter and the measurement of Ph was 5.2 *Mahaushadha Sarpi Anjana* was further subjected to thin layer chromatography (TLC) study.

#### TLC profile

Instrument used was silica plate. The stationary phase used was silica gel G60F254 and mobile phase was Cyclohexane, Ethyleacetate, Water (6:3:1). The plate was visualized under Anisaldehyde, Sulphuric acid, Rf value were recorded 0.41, 0.61, 0.68, 0.83.

#### Physiochemical analysis

Physiochemical analysis such as loss on drying at 110 degree C and Rancidity test were carried out. Loss on drying is in normal range and no Rancidity was found in final product (table- 3). Along these Microbial Limit Tests and Test for Aflatoxins were carried out. Results of these tests were obtained within the normal range (table.4).

**Table 3: Physiochemical analysis of Mahaushadha Sarpi Anjana.**

Parameters	Mahaushadha Sarpi Anjana
Loss on drying	8.65%
Rancidity	Absent

**Table 4: Aflatoxins and Microbial Limit Tests.**

Parameters	Mahaushadha Sarpi Anjana
Aflatoxins B1	Not detected
Aflatoxins G1	Not detected
Aflatoxins B2	Not detected
Aflatoxins G2	Not detected
Total Aerobic Microbial Count	10 <sup>4</sup> /gm
Total Yeast and Mould Count	10 <sup>2</sup> /gm

#### RESULTS AND DISSCUSSION

Pharmacognostical Analysis Organoleptic evaluation was performed at finished product (observations of organoleptic analysis are tabulated in figure no 7). Thin layer chromatography (TLC), Chromatographic study (TLC) was carried out under 254 and 366 nm UV to established finger printing profile. It showed Rf values 0.41, 0.61, 0.68, 0.83, which may be responsible for expression of its pharmacological and clinical actions. The obtained value of loss on drying and Rancidity test were found within normal limit in *Mahaushadha Sarpi Anjana*, which indicate good quality of product. Microbials limit test results were found in normal range and test for Aflatoxins was absent.



Figure 1: Shunthi powder.



Figure 2: Milk powder.



Figure 3: Goghrita.



Figure 4: Petroleum Jelly.



Figure 5: Light Liquid Paraffin.



Figure 6: Bee Wax.



Figure 7: Organoleptic analysis.



Figure 8: Final Product.

## CONCLUSION

Pharmacognostical and physicochemical evaluation of *Mahaushadha Sarpi Anjana* illustrated the specific characters of this *Ayurvedic* formulation. For the first time, pharmaceutical and analytic profile of *Mahaushadha Sarpi Anjana* was established. Physicochemical profile, TLC fingerprint, Microbials limit tests are essential parameter for the quality of formulation, all parameters in this preparation were found within normal limits, on that basis, the present study on *Mahaushadha Sarpi Anjana* may be used for standardization and quality evaluation of this preparation.

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