



# Pharmacognostical And Phytochemical Standardisation Of Vishaghna Yonivarti -An Ayurvedic Polyherbal Formulation

Dr. Divyani A. Chaudhari<sup>1</sup>, Dr. Varsha R. Solanki<sup>2</sup>, Dr. Hetal P. Baraiya<sup>3</sup>

1. M.D Scholar Department of Agada tantra, Institute for Post Graduate Teaching and Research in Ayurveda, Jamnagar - 361008, Gujarat, India
2. H.O.D, Department of Agada tantra, Institute for Post Graduate Teaching and Research in Ayurveda, Jamnagar - 361008, Gujarat, India
3. Associate professor, Dept. of Streeroga and Prasootitantra, Institute for Post Graduate Teaching and Research in Ayurveda, Jamnagar - 361008, Gujarat, India

## ABSTRACT

The present study was aimed at setting up a standard profile of *Vishaghna Yonivarti* which was prepared using Pharmacognostically authenticated raw drugs followed by subjecting it to detailed Pharmacognostical and Physicochemical analysis as per standard protocol. The observations were systematically recorded. Pharmacognostical findings (crystals, epicarp cells, trichom, etc.) confirm the ingredients present in the finished product. *Vishaghna Yonivarti* made from *Vishaghna Mahakashaya Drvayas* is selected for the study in *Swetapradara*. The ingredients of *Vishaghna Mahakashaya Dravyas* are *Haridra*, *Manjishtha*, *Suvaha*, *Sukshma ela*, *Krishna Sariva*, *Chandan*, *Katak*, *Shirisha*, *Sindhuvara* and *Shleshmataka*. This paper seeks to present a review on Pharmacognostical and Physiochemical evaluation of *Vishaghna Yonivarti* ingredients.

**Keywords:** *Vishaghna Yonivarti*, Pharmacognosy, Phytochemistry, *Swetapradara*.

## INTRODUCTION

Vaginal discharge is often regarded either as a general health concern or as a symptom of an underlying gynaecological issue. It can be caused by various physiological factors, such as menstruation and different life stages like puberty, pregnancy, lactation, and menopause. In these cases, discharge is produced by the vagina and cervix to provide lubrication and protection. When vaginal discharge appears as white, creamy, yellowish, or greenish, it may indicate an abnormal or pathological process within the genital tract. This

type of discharge is often associated with other symptoms and can be caused by fungal, parasitic, bacterial, or sexually transmitted infections, such as trichomoniasis. The psychological factors like shame, hesitation to get a doctor's appointment, individual errors like self-negligence, hygiene etc can also be the cause of excessive vaginal discharge.

Similarly in Ayurveda, while describing the General etiological factors, *Mithya Ahara Vihara* is mentioned one of the main causes of *Yonivyapad* which is also a known cause of *Dushivisha*<sup>1</sup>. Abnormal vaginal discharge is known as *Swetapradara* in Ayurvedic classics. *Swetapradara* can be a symptom of many diseases as well as an independent entity. Even though there is no separate chapter given for *Swetapradara* in Brihatrayees it is explained in term of *Yonirava* as a symptom in many *Yonirogas*. Commentator Chakrapani<sup>2</sup> has explained the word *Pandura Asrigdara* as *Swetapradara* in his commentary. The signs and symptoms of *Shleshmala Yonivyapada* can be correlated with the term *Swetapradara* which is commonly seen in practice. The *Yonivarti* made from *Vishaghna Mahakashaya Drvayas*<sup>3</sup> is selected for the study in *Swetapradara*. This *Agad* is not used till date for the treatment of vaginal infection causing abnormal vaginal discharge, hence the need of the study. Each ingredient of *Vishaghna Yonivarti* is very easily available in sufficient quantity, non – controversial and also economical. Easily available in sufficient quality noncontroversial and also economical. Dose maintenance is to be perfect in *Varti* form and it does not need any special precautionary measures during its administration. Even patient can administer this form of drug herself without the aid of anyone. In condition of abnormal vaginal discharge, local route is to be better as compare to oral because the high concentrations are attained at the desire site without exposing the rest of body. They have been reported as *Stambhaka*, *Krimighna*, *Kandughna*, *Vedanasthapana*, *Raktavikarhara*, *Krimighna*, and *Dahaprashamana*<sup>4</sup>. They have Pharmacological activities like analgesic, anti-toxic, anti-inflammatory, antimicrobial, antiprotozoal, hypoglycaemic, antiviral and antifungal properties which leads to *Samprapti Vighatana* & also prevention of recurrence. So, use of topical route for the treatment of abnormal vaginal discharge is safe and efficacious.

## MATERIALS AND METHOD

### Collection of Raw Drugs

Most of the raw drugs of *Vishaghna Yonivarti* were collected from the Pharmacy, ITRA, Jamnagar, Gujarat. *Katak Beeja*, *Sleshmatak phala* and *Nirgundi patra* samples were collected from the Narayan Aushadha Bhandar, Jamnagar, Gujarat.

### Preparation of *Vishaghna Yonivarti*

*Vishaghna Yonivarti* was prepared in the Agadtantra Dept. ITRA Jamnagar. Ingredients, part used and their required quantity for each *Vishaghna Yonivarti* of 3 gm are given in Table-1.

### Method of preparation

The drugs were taken in quantities as mentioned in table. Madhu was added to the *Churna* in adequate quantity and, after preparing a homogenous mixture, a *Varti* (pessary) of 3gm weight and having thickness of index finger, is prepared manually.



**Table 1: Showing contents of *Vishaghna Yonivarti***

Sr no.	Drug	Latin name	Part used	Quantity
1)	<i>Haridra</i>	<i>Curcuma longa</i> Linn.	Rhizome	1 part
2)	<i>Manjishtha</i>	<i>Rubia cordifolia</i> Linn.	Stem	1 part
3)	<i>Suvaha</i>	<i>Pluchea lanceolata</i> Oliver & Hiem.	Leaves	1 part
4)	<i>Sukshma ela</i>	<i>Elettaria cardamomum</i> Maton	Seed	1/4 part
5)	<i>Krishna Sariva</i>	<i>Ichnocarpus Fruitescens</i> R.Br.	Root	1 part
6)	<i>Chandan</i>	<i>Pterocarpus santalinus</i> Linn.f.	Heartwood	1 part
7)	<i>Katak</i>	<i>Strychnos potatorum</i> Linn.f	Seed	1 part
8)	<i>Shirisha</i>	<i>Albizia lebbeck</i> Benth.	Bark	1 part
9)	<i>Sindhuvara</i>	<i>Vitex negundo</i> Linn	Leaves	1 part
10)	<i>Shleshmataka</i>	<i>Cordia dichotoma</i> Forst.f.	fruit	1 part
11)	<i>Madhu</i>	Q.S		

**Pharmacognostical Evaluation** <sup>5,6,7</sup>

As per API drugs which are used in the finished product of *Vishaghna Yonivarti* were identified and authenticated by the Pharmacognosy Laboratory. The identification was carried out based on the Morphological, Organoleptic features and Microscopy of the prepared drug.

**Pharmaceutical Evaluation****Physico-chemical Parameters** <sup>8</sup>

Following parameters were analysed for different Physico-chemical parameters by today's routine methods at the pharmaceutical chemistry lab, ITRA, Jamnagar.

**Physico-chemical Parameters for *Vishaghna Yonivarti***

- a. Uniformity of Weight
- b. Loss on drying
- c. Total ash
- d. Water soluble extract
- e. Methanol soluble extract
- f. PH
- g. TLC

## RESULTS AND DISCUSSION

### Pharmacognostical study

The initial purpose of the study was to confirm the authenticity of the drugs used in the preparation of *Vishaghna Yonivarti*. For that Finished product microscopy of the drugs was studied microscopically and microscopic characters of them were drawn. Results matched with the API and thus confirmed the genuineness of all the drugs used in the finished product.

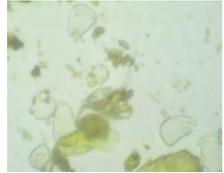
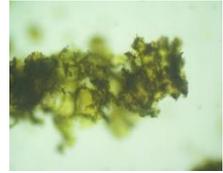
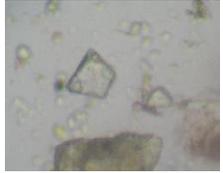
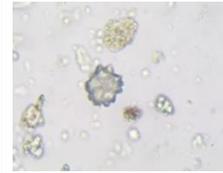
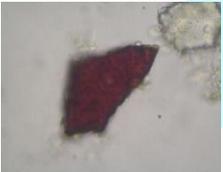
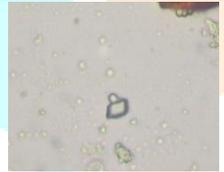
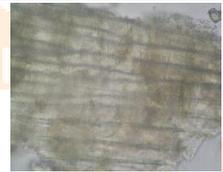
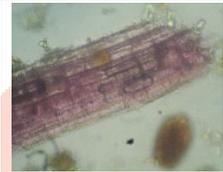
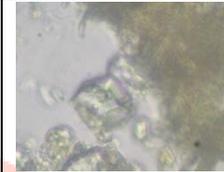
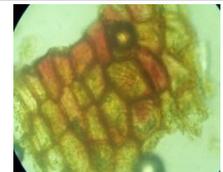
### Finished product microscopy (Plate-1)

NO	Drug	Microscopic characters
1	<i>Haridra</i>	Cork in surface, Simple fibres, Simple starch grains
2	<i>Manjista</i>	Acicular crystals, Border pitted vessels, Prismatic crystals
3	<i>Rasna</i>	Rosette crystal, Vessels
4	<i>Sukshma Ela</i>	Brown content, Prismatic crystal, Stratified fibres
5	<i>Krishna Sariva</i>	Fibres passing through medullary rays, Lignified fibres, Rhomboidal Crystal
6	<i>Chandan</i>	Lig Fib+Oil,, Pitted vessel=Lig fib, Prismatic crystal
7	<i>Katak</i>	Oil globule, Simple fibre,
8	<i>Sirisha</i>	Cork cells, Rhomboidal crystal, Stone cells
9	<i>Sindhuvar</i>	Calcium oxalate crystal, Pitted stone cells, Crystal fibre, Stone cells
10	<i>Sleshmataka</i>	Epicarp cells,

### Organoleptic findings

Organoleptic Characters	
Colour	Dark Brown
Odour	Characteristic aromatic
Taste	Sweet Astringent
Touch	Hard on touch

**Plate 1: Microphotographs of *Vishaghna Yonivarti***

				
Simple fibres of <i>Haridra</i>	Simple starch grains of <i>Haridra</i>	Cork in surface view of <i>Haridra</i>	Acicular crystals of <i>Manjista</i>	Border pitted vessels of <i>Manjista</i>
				
Prismatic crystals of <i>Manjista</i>	Fibres passing through medullary rays of <i>Sariva</i>	Simple starch grains of <i>Rasna</i>	Rosette crystal of <i>Rasna</i>	Vessels of <i>Rasna</i>
				
Brown content of <i>Ela</i>	Prismatic crystal of <i>Ela</i>	Stratified fibres of <i>Ela</i>	Lignified fibres of <i>Sariva</i>	Rhomboidal Crystal of <i>Sariva</i>
				
Lig Fib+Oil of <i>Chandan</i>	Prismatic crystal of <i>Chandan</i>	Pitted vessel=Lig fibre of <i>Chandan</i>	Simple fibre of <i>Ktaka</i>	Oil globule of <i>Katak</i>
				
Stone cells of <i>Shirisha</i>	Rhomboidal crystal of <i>Shirisha</i>	Cork cells of <i>Shirisha</i>	Calcium oxalate crystal of <i>Nirgundi</i>	Pitted stone cells of <i>Nirgundi</i>
				
Crystal fibre of <i>Nirgundi</i>	Epicarp cells of <i>Sleshmantak</i>	Stone cells of <i>Sleshmantak</i>		

## Pharmaceutical Evaluation

Physico-Chemical parameters of *Vishaghna Yonivarti* like pH, Loss on drying, water soluble extract, and methanol soluble extract all were found to be within the normal range. Details are given in Table 2. TLC profile of methanolic extract of *Nimbadi Ghanavati* was done and details of number of spots and Rf value are given in Table 3.

**Table 2: Physico-Chemical parameters of *Vishaghna Yonivarti*.**

	Parameters	<i>Vishaghna Yonivarti</i>
1	Uniformity of weight (gm) Maximum weight Minimum weight Average weight	4.5 gm 4.0 gm 3.68 gm
2	Loss on drying (%)	39.51%
3	Ash value (%)	3.81%
4	Water soluble extract % w/w	54.73 %
5	Methanol soluble extract %	38.78 %
6	pH Value	6

**Table 2: TLC of *Vishaghna Yonivarti***

Extract	Solvent System	Wave Length	No Of spots	Maximum Rf Value
<i>Vishaghna Yonivarti</i>				
Methanol Extract	Toluene:Ethyl acetate:Acetic acid (14:4:2)	At 254 nm	09	0.038,0.09,0.142,0.220, 0.506,0.584,0.675,0.766
Methanol Extract	Toluene:Ethyl acetate:Acetic acid (14:4:2)	At 366 nm	03	0.233,0.298,0.3506

## CONCLUSION

*Vishaghna Yonivarti* was subjected to Pharmacognostical and Pharmaceutical analysis. Pharmacognostical findings confirmed the ingredients of *Vishaghna Yonivarti*. Physiochemical studies confirmed that ingredients of drug formulation meet the good quality standards at primary level. This finding could be helpful in identification, authentication and standardization of this formulation. Generated results are specific and may consider for the further research works

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