



Volume – 2, Issue-1 (JAN-FEB)

Review Articles

STANDARDISATION OF VRISCHIKAGAD

Dr. Shreyas S. Joshi Associate Professor, Department of Agadtantra MES Ayurved Mahavdiayalaya, Ghanekhunt – Lote, Tal – Khed, Dist – Ratnagiri 415722

ABSTRACT-

Authentication and Standardization are the two basic needs of any research. While doing research in *Ayurved* every one has to authentify and standardize the raw material as well as the final product also. As there are many controversies amongst drugs. So, to overcome this issue Government of India has formulated the Ayurvedic Pharmacopoeia of India (API) stating standards for each drug and Ayurvedic Formulary of India (AFI) stating standards for final product formulations. But *Agad*(Antidotal/Anti Poisonous) formulations are not included in the AFI and still some addition of drugs are needed in the API also. In this study I have obtained values for such drugs which are not mentioned in the API as well as AFI. Based on the nature of the product or material the relevant tests were used and the values are obtained for *Matulung Phal Swaras*, *Paravat Shakrit* and the final product called *Vrischikagad*. Addition in the API and AFI is a continuous process and in the near future *Agad* will also get included in the Ayurvedic formulary of India.

KEYWORDS:*Ayurved, Agadtantra*, Standardization, Ayurvedic Pharmacopoeia of India, Ayurvedic Formulary of India, *Vrischikagad*

INTRODUCTION:

In order to ensure the quality of the final product as well as raw materials used; it is necessary it should comply as per the parameters prescribed quality bv government time to time. In Ayurvedic texts many formulations are described for various disease conditions. In Agadtantra (Branch of Ayurved which mainly deals with the treatment of poisoning); its special medication i.e. formulations of various Agad(Antidotal formulations) aredescribed. Now day before a administering such medicines to human beings it is mandatory to state its authenticity. So, Government of India has prepared the Ayurvedic Pharmacopoeia of India (API) and Ayurvedic Formulary of India (AFI); in which standard quality parameters are stated for each drug and for each formulation. Each raw drug and prepared medicine should comply with standard given in API and AFI accordingly.

While going through Ayurvedic Formulary of India (AFI); it has covered the routine formulations which are in the main stream of ayurvedic treatment. *Agad* are not mentioned in the AFI. So there is need to work on the *Agad* formulations to state its parameters and if possible to include the same in the AFI also.

Ingredients mentioned for Vrischikagad(Antidotal formulation used in scorpion envenomation) are easily available and it is easy to prepare also. So, I have chosen the drug named Vrischikagad mentioned in the Ashtang Hridaya(Ayurvedic Treatise) Treatise for standardization attempt.

MATERIALS & METHODS: Materials:-For Preparation of *Vrischikagad* (Ingredients)

- 1) Paravat Shakrit
- 2) Pathya Phala(Fruit)
- 3) Tagar Moola(Root)
- 4) Vishwabheshaj –Kanda(Rhizome)
- 5) Matulunga Phala Swaras(Extract/Juice)

Method:-

1. Vrischikagad (A. H. U. 37/34)ⁱ

 $\Box\Box/\Box\Box$

Drug name	Synonyms	Botanical name	English name ⁱⁱ
Paravat shakrit	-	Columbia lilia	Excreta of Pigeon
Pathya	Haritaki, Vijaya, Abhaya	Terminalia chebula	Chebulic Myrobalans
Tagar	Kutil, Nata, Nahush	Valeriana wallichii	Indian Varerian Rhiome
Vishwabheshaj	Shunthi, Vishwa, Nagar	Zingiber officinale	Dry Zingiber
Beejapoor	Matulung, Ruchak	Citrus medica	Citron

Preparation of the Vrischikagad:

As the quantity is not mentioned for the preparation of *vrischikagad* so the

basic principle as said in the *Sharangdhar Samhita* (Ayurvedic Treatise)is appliedⁱⁱⁱ. All the above said ingredients except *Beejapoor*(Citron) taken into equal quantity (10 gramseach). Each drug is triturated in khalva yantra(Mortar & Pestle) and filtered through the fresh and clean cotton cloth to obtain the fine powder. Thus obtained fine powder of each drug is again triturated into the khalvayantraand mixed thoroughly. The ripe Matulung phal (Citron) made into small pieces and grinded in a mixer and mashed material shifted to a piece of cotton and squeezed to obtain the swaras (Squash).

Then the mixture of fine powder is soaked with the *Matulung swaras* and trituration is started till it becomes dry, in this way the one *bhavana* (Assimilation of liquid portion with solids) is given to that compound mixture and the brown coloured *Vrischikagad* is prepared. Dried powder form of *Vrischikagad* is stored in air tight glass container.

Standardization of Drug:

To ensure the quality of drug it is necessary to standardize that drug before using in experiment.

This standardization study was done in the standard Laboratory of the Yashwant Pharmacy College, Kodoli, Kolhapur.

Tests	Paravat shakrit	Matulung	Vrischikagad	
Foreign matter in %	0.56	0.63	0.89	
Total Ash in %	26.2	9.65	11.13	
Acid Insoluble Ash in %	9.53	0.53	1.2	
Alcohol Soluble Extractives in %	12.91	30.0	25.12	
Water Soluble Extractives in %	7.5	46.5	36	

Table No. 2:Standardization of Drug -

DISCUSSION:

The raw drugs *Paravat shakrit, Haritaki, Tagar, Shunthi* in the powder form from the marketof*Kolhapurc*ity of Maharashtra and *Matulung phala*is brought from Dr. *Koparkar's* Nursery at *Dapoli,* Maharashtra. Thus collected raw drugs identified from the *Dravyaguna* experts from Department of Dravyaguna, Yashwant Ayurved College, P.G.T.& R.C. Kodoli, Kolhapur.Standard values for *Shunthi, Tagar* and *Haritaki* are already mentioned in Ayurvedic Pharmacopoeia of India (API)^{iv}. Each of them is subjected to the standardization procedures like Foreign matter, Acid insoluble ash, Total ash, Alcohol soluble extractives and Water soluble extractives. Values checked in our college Research lab of Yashwant Ayurved College, Kodoli, Kolhapur and from Department of Chemistry, Shivaji University, Kolhapurand correlated with the Ayurvedic Pharmacopoeia of India standard values; they came within the normal limits.

Test	Observed Values		As per Ayurvedic Pharmacopoeia of India (API) standards	
	Haritaki	Tagar	Haritaki	Tagar
Foreign matter in %	0.56	0.89	Not more than 1 %	Not more than 2 %

Table No. 3:Standard values of Haritaki&Tagar

Total Ash in %		3.2	11.13	Not more than 5 %	Not more than 12 %
Acid Insoluble Ash in %		2.7	4.3	Not more than 5 %	Not more than 10 %
Alcohol	Soluble	54.4	25.12	Not less than 40 %	Not more than 30 %
Extractives in %					
Water	Soluble	68.3	36	Not less than 60 %	Not less than 19 %
Extractives in %					

Tests	Observed Value	As per Ayurvedic Pharmacopoeia of India
	Shunthi	Shunthi
Foreign matter in %	0.56	Not more than 1 %
Total Ash in %	4.65	Not more than 6 %
Water soluble Ash in %	9.53	Not less than 1.5 %
Alcohol Soluble Extractives in	8.91	Not less than 3 %
%		
Water Soluble Extractives in	11.5	Not less than 10 %
%		

Table No. 4:Standard values of Shunthi

Ingredients like *Paravat shakrit* and *Matulung Phal Swaras* of which standard values according to Ayurvedic Pharmacopoeia of India are not available in any of the volume, so the values for *Paravat shakrit* and *Matulung Phal Swaras*obtained with the standardization procedures.

All the drugs were cloth filtered first mixed in a fine powder form and triturated by adding the Matulunga swaras. Before adding Matulung swaras the weight of mixture was 40 gms after triturating the weight increased upto 45 gms. This increase in weight is due to the Bhavana sanskar (Procedure of assimilating liquids with solids by trituration).

After preparing the *Vrischikagad* the standardization is done for the final product and the values are obtained.

This *Vrischikagad* is prepared in the Yashwant Ayurved College Teaching Pharmacy, Kodoli, Kolhapurwhich is as per Good Manufacturing Practices(GMP).

CONCLUSION:

Vrischikagad is the drug of choice as the ingredients mentioned are easily available. Ayurvedic Pharmacopoeia of India already describes Quality parameters for *Shunthi*, *Tagar* and *Haritaki*. From this study we are successful in determining the values for *Matulung* and *Paravat Shakrit*.

There are no any mentions of any *Agad* formulation in Ayurvedic Formulary of India. So from this study we are also successful in obtaining the values for *Vrischikagad*. There is need of more additions of Ayurvedic drugs especially *Agadas* (Antidotal formulations) in API and as well as AFI.

REFERENCES:

ⁱDr. Tripathi B. Ashtanga Hridayam. 1st Ed. Delhi; Chaukhamba Sanskrit Pratishthan, 2003, Uttarsthan, Chapter 37; p.1169 (DDDDDDDDDDDDDDDDDDDDDDDDDDDDD)

ⁱⁱChunekar K, Pandey G. Bhavprakash Nighantu. 1st Ed. Varanasi; Chaukhamba Bharati Academy, 1999, p.7, 13, 199, 593

ⁱⁱⁱ Srivastava S. Sharangdhar SamhitaPurv Khand. 4th Ed. Varanasi, Chaukhambha Orientalia, 2005, Chapter 1; p.11 (DDDDDD DDDDDD, DDDDDD D/DD)

^{iv}The Ayurvedic Pharmacopoeia of India. 1st Ed. Vol. 1. New Delhi: Govt. of India, Ministry of Health and Family Welfare, Dept. of ISM & H.; 1989; p.47-48, 103-104, 109-110