

PHARMACEUTICAL AND ANALYTICAL STUDY OF AMLAPITTANTAKA CHOORNA (VATI) IN AMLAPITTA W.S.R. HYPERACIDITY

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ABSTRACT : Ayurveda is a time tested science. Ayurveda describes the disease condition very elaborately as imbalance or loss of equilibrium of natural harmony of body, mind and spirit. In the present era stress has taken a toll on human life. *Amlapitta* is a common disease which has its root cause in hurry, worry and curry. The disease is not mentioned in the *Charaka* or *Shusruta Samhita* but it is very well described in *Madhava Nidana*. Nowadays, man is also attracted towards fast food, junk food, instant & processed food which disturbs the GI physiology. For this humans used herbs, minerals for medicinal purpose since time immemorial. *Amlapittantaka choorna*² is one such drug which is very effective in *Amlapitta* condition. In the present study the above mentioned drug was selected for trial.

Keywords:- Ayurveda, Charaka Samhita, Madhava Nidana, Amlapitta, Amlapittantaka Choorna, Hyperacidity, Masi Kalpana etc.

INTRODUCTION : Ayurveda, Science of life is being narrated by Lord *Brahma* and given to human for their well-being. Ayurveda describes the disease condition very elaborately as imbalance or loss of equilibrium of natural harmony of body, mind and spirit. From stone-age to space age food pattern of people has undergone numerous changes. These changes have been always for the better aspect of life. Most of the *Vikara* are deeply rooted in underprivileged dietary habits like *Ajirna bhojana*, *Akale bhojana*, *Anshana*, *Virudhabhojana*, *Atimatrasy Amla*, *Lavana*, *Katu Rasa Sevanam* etc.; improper life style like *Vegvidharana*, *Divaswapan*, *Ratrijagrana* and *Mansikbhavas* like *Chinta*, *Shoka*, *Bhaya*, *Krodha* etc. *Amlapitta*¹ is one of them. In the present era stress has taken a toll on human life. *Amlapitta* is a common disease which has its root cause in hurry, worry and curry. It is one such worldwide disease born as a result of various ups and downs during human life span. In 21st century, man is unable to follow *Dinacharya* and *Ritucharya*; because fast-track life style has made man restless to achieve his unlimited desires in a very short period of time. These desires produce different types of anxiety, worry, anger, fear and depression which directly or indirectly lead to various types of gastro- intestinal tract disorders. Nowadays, man is also attracted towards fast food, junk food, instant & processed food which disturbs the GI physiology. Even in *Varsha Ritu* which aggravates the '*Pittadosha* naturally, he consumes aforesaid food which disturbs the balance of *Tridosha*. For this humans used herbs, minerals for medicinal purpose since time immemorial. *Amlapittantaka choorna*² is one such drug which is very effective in *Amlapitta* condition.

MATERIAL AND METHOD :

Aims and Objectives:-

- 1.To prepare the medicine with proper method and standards as per the classical text as per reference and accordingly to develop the SOP & SMP of the formulation.
- 2.To analyse organoleptic as well as physio-chemical parameters of the prepared formulation.

The required raw drugs were procured from the pharmacy NIA, Jaipur. The drug *Amlapittantaka choorna(Vati)* was prepared in the P.G. Department of *Rasashastra* and *Bhaishjya Kalpana* NIA, Jaipur as per

textual reference of *Rasatantrasara & Siddha Prayoga Sangrah*. In original form the drug was prepared in *choorna* form but in present study it was formed in *Vati* form, because of easy administration and to prevent the drug from loss.

Ingredients:-

Table No. I. Showing the contents of the drug and their ratio

S. No.	Name of Content	Latin name	Part used	Ratio mixed	Q. taken
1	<i>Agnimantha</i> ³	<i>Cleodendrum phlomidus</i> Linn.	Stem	1 part	1000gm
2	<i>Marich</i> ⁴	<i>Piper nigrum</i> Linn	Fruit	1 part	1000gm
3	Sugar ⁵	-	-	2 part	2000gm

Preparation of *Amlapittantaka choorna(Vati)*

- Cleaning of herbal drugs.
- Powdering⁶ of ingredients.
- Preparation of *Agnimantha Masi*⁷.
- Mixing of ingredients
- Making of Vati.

Table no. II showing changes before and after powdering of drugs.

S.no.	Drug	Initial weight(gm)	After powdering weight		
			Weight (gm)	Yield(%)	Loss (%)
1.	<i>Marich</i>	1500	1470	98	2.0
2.	Sugar	2500	2490	99.6	0.4

Preparation of *Agnimantha Masi*

Agnimantha Masi was prepared in two batches according to the reference of *Rasatantrasara & Siddhaprayoga Sangrah*. At first coarse powder or *Agnimantha* was done. It was put in a earthen pot and mouth sealing was done with the help of cloth wetted with Fuller's earth. Then the earthen pot was put in an electric furnace for 1 hour on 400°C. then the pot was taken out of electric furnace after it was self-cooled. The above process was repeated for 3 times. After this the material was powdered using mortar and pestle and fine powder was obtained after passing through it 120 no. sieve.

Table no. III showing observation during *Masi* preparation

Putra no.	Batch I			Batch II		
	Touch	Color	Weight	Touch	Color	Weight
1	Hard	Black	1250gm	Hard	Black	1228gm
2	Slight hard	Black	700gm	Slight hard	Black	718.12gm
3	soft	Black	699.3gm	soft	Black	718.2gm

- After this all the ingredients were weighed and taken as per the requirement.
- Fine powder was obtained after passing through sieve no. 85
- After sieving all the ingredients were mixed in a mass mixture to obtain a homogenous mixture.
- After obtaining homogeneous mixture with the help of Gum acacia 5% solution and Ghrit handmade vati of size 650 mg were prepared, dried and stored in a air tight container.

Observation and results:

- Initial weight of ingredients :2000gm
- Final weight of vati :2200gm
- Weight gain :10%

Analytical Study:

Organoleptic characters:-

Table no. IV showing organoleptic characteristics of *Amlapittantaka choorna(Vati)*

Sr.no.	Parameter	Observations
1	Color	Black
2	Texture/ Appearance	Round uncoated Vati
3	Smell/odour	Pleasant
4	Taste	<i>Madhur-Katu</i>
5	Touch	Smooth

Table no. V showing physio-chemical characters of *Amlapittantaka choorna(Vati)*

Sr. no.	Parameter	Result
1	Hardness	2.5kg/cm ³
2	Friability	0.2%
3	Disintegration time	22-23 min
4	pH ⁸	8.4
5	Loss on drying ⁹	4.2%
6	Total ash ¹⁰	3.99%
7	Acid insoluble ash ¹¹	1.5%
8	Water soluble ash ¹²	5.9%
9	Alcohol soluble extract ¹³	5.6%
10	Water soluble extract ¹⁴	60.88%

Table no.VI showing microbial analysis of *Amlapittantaka choorna(Vati)*

Sr.no.	Analysis	Result (cfu/gm)
1	Total bacterial count ¹⁵	45200
2	Total fungal count ¹⁶	450

Table no. VII showing the results of HPTLC of *Amlapittantaka choorna(Vati)*

Test parameter	Sample	Wavelength (nm) (No. of peaks)		
		254(nm)	366(nm)	510(nm)
HPTLC ¹⁷ fingerprint profile	APC(10)	11	10	12
	APC(15)	11	10	12
	APC(20)	10	14	16

Discussion : Though the drug was originally mentioned in powdered form but it was prepared in *Vati* form because of easy administration and to minimize the loss. The loss of drug during powdering is due to procedural loss. While the gain of weight in final product is due the mixture of binding agent and ghril. Organoleptic and pharmaceutical analysis was done at Drug Testing laboratory in P.G. dept of RS&BK NIA, Jaipur. While the microbial and HPTLC study was carried out at SR labs, Jaipur which is a AYUSH recognized laboratory.

Conclusion : During the study it was found that drugs used were easily and abundantly available and there is no controversy in selecting the drugs. The physio-chemical characteristics of the drug were studied under different parameters the analytical test were found within limits. The drug has shown significant efficacy in hyperacidity. But in present study the sample size was small and period of study was limited. In this context it is suggested that studies in future to be continued with a large sample size and longer duration of period.

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