Research Article

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PHARMACEUTICAL VALIDATION OF PARADA-HARATALA MARITA VANGA BHASMA

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ABSTRACT

Lacking in pharmaceutical and analytical validation in Ayurvedic products, quality of these product variate batch to batch. These both achieved only after evaluation and standardization by using Ayurvedic and modern available parameters for standardization. Formulation, Standard operating procedures, Application; theses all plays important role for the Quality of drug. If drug is perfectly prepared then it gives miraculous effect in clinical aspects. For the genuinity of drug it is very essential to fix some parameters. These are important for all ayurvedic drugs especially the Bhasma. To prove these facts, The Bhasma was prepared in present study according to text and analyzed through both ancient and modern parameter of standardization.in which Organoleptic and Bhasma pariksha were conducted as ancient method and physico-chemical and Quantitative analysis were done as per modern parameters. In this study vanga bhasma was synthesized after samanya shodhana, Vishesha shodhana there after jarana process was performed through shodhita haritala and hingulottha parada. By adding parada into vanga it become more potentiate for action.

Keywords: *Vanga bhasma, Bhasma pariksha, jarana*

INTRODUCTION

Rasashastra stands for proper identification, collection, preservations & standardization of the drugs. Shodhana and Marana process of the substances are done with some special procedure and can be used therapeutically. But the therapeutic efficacies of Ayurvedic medicines specially, mineral or metallic preparations are always questioned now a days. These questions are raised due to present trend of commercialization, improper methods of preparations, Ignorance of scientific fundamentals behind these processing, as well as therapeutic effects of drugs. According to Ayurvedic Rasa literature, extensive uses of vanga in management of Prameha, Klaibya[1] etc. It comes under putilauha. In Rasa text Internal and external both uses of vanga has mentioned[2] but for internal use,Vanga must undergo Shodhana, Jarana, Marana process to make proper bhasma so that it is easily bio available for body. Apart from this, it is also described that, administration of ashuddha vanga leads to many problem[3].That's why to know proper process validation of Vanga Bhasma preparation and obtained authentic, genuine bhasma, this study is taken.

MATERIAL AND METHODS

Procurement of Raw material

88.9% of tin containing raw vanga was procured from market of Delhi.

Preparation of Vanga Bhasma

It was done after 3 main procedures-

1). Vanga Shodhana –

Samanya Shodhana of Vanga[4]- This process was done according to AFI, in which raw ashuddha vanga was kept on long handled iron ladle and heated on angardhanika for melting. Just after complete melting that was quenched into mentioned liquid media (Tail, Takra, Gomutra, Kanji, Kullatha kwatha) which was kept in pithara yantra. There after Vanga was collected from pithara yantra and washed through warm water and dried properly. This same procedure was repeated for 3 times. Each time fresh liquid media was used and weight of vanga and amount of liquid media was noted after completion of process. **Vishesha Shodhana of Vanga[5]-** Haridrayukta Nirgundi swarasa was taken as media for vishesha shodhana.

2). Vanga Jarana[6]

Shodhita Vanga was put in an Iron vessel & heated over flame until melting properly. Then 1/16th quantity of hingulottha parada was added then rubbed vigorously with sprinkled some shuddha haratala on it and rubbed till it turned into powder form.

3). Vanga Marana

Jarita vanga and kumari swarasa was laevigated in stone mortar and pestle until it formed a thick paste and suitable for making pellets. Small amount of laevigated doughy mass was made into round, flat pellets. The prepared pellets were kept on plastic sheet for drying. Measurement of one Chakrika was- Diameter: 2 – 2.5 cm, Thickness: 0.3 cm to 0.5 cm. After proper drying of chakrika it was weighed and kept in an earthen saucer, this saucer was covered by another saucer and then junction was sealed by clay smeared cloth in three consecutive layers and again allowed for complete drying. There after Sharavasamputa kept on Puta and Temperature was recorded by a digital pyrometer from beginning. After self cooling the sharava samputa was taken out and opened. The vanga bhasma was collected and weighted. This procedure was repeated again for ten times.

OBSERVATION AND RESULTS

During Samanaya Shodhana of Vanga

Table 1: Changes in Volume of required media

S.N.	Liquid media used	Processing stage (1st, 2nd , 3rd process) in ml					
		Before shodhana liquid media(ml)			After shodhana liquid media(ml)		
		1st	2nd	3rd	1st	2nd	3rd
1.	Tila taila	1500	1500	1500	1380	1370	1370
		total	4500			4120	
2.	Takra	1500	1500	1500	1460	1450	1450
		total	4500			4360	
3.	Go mutra	1500	1500	1500	1430	1420	1430
		Total	4500			4280	
4.	Kanji	1500	1500	1500	1420	1410	1420
		total	4500			4250	
5.	Kulattha kwatha	1500	1500	1500	1410	1400	1420
		total	4500			4230	

Table 2: Changes in Weight of Vanga

S.N.	Liquid media	Weight of Vanga (gm)		Avg. Loss of Vanga (%)
		Before Shodhana	After Shodhana	
1.	Tila taila	2000	1990	1%
2.	Takra	1990	1980	1%
3.	Gomutra	1980	1960	2%
4.	Kanji	1960	1930	3%
5.	Kulattha kwatha	1930	1900	3%
				Total – 10%

During Vishesha Shodhana of Vanga

Table 3: Changes in weight of Vanga

Nirgundi patra swarasa + haridra churna	Process stage	Weight of vanga (gm)	Average loss of vanga (%)
7.3 litre +25gm	Before shodhana	1900gm	2%
	After shodhana	1880gm	

During Jarana Process

Colour of Jarita vanga was blackish and Time taken for process was less as compare to Apamarga panchanga.

Table 4: Observation in Jarana process

Weight of Sh.vanga (gm)	Weight of shuddha parada and haritala	Weight of jarita vanga (gm)	Loss in %	Colour of jarita vanga
1880gm	120 gm + 40 gm	1740gm	7.5%	Blackish

During Marana process

Table 5: Observation in 11 Puta

Puta (no.)	Vanga (gm)	Kumari swarasa (ml)	Weight of chakrika after bhavana (gm)	Weight of used cow dung cakes (kg)	Wt. of chakrika After Puta	Loss of avg. wt. of vanga in %
1	1740	2180	1900	2.5	1732	0.45%
2	1732	2160	1760	3	1730	0.11%
3	1730	2050	1750	3.5	1724	0.34%
4	1724	1850	1750	4.5	1720	0.22%
5	1720	1610	1740	5	1720	0%
6	1720	1550	1735	6	1715	0.29%
7	1715	1520	1730	7.5	1710	0.29%
8	1710	1500	1730	8.5	1708	0.15%
9	1708	1480	1720	11	1705	0.17%
10	1705	1200	1720	13	1703	0.15%
11	1703	1130	1730	17	1690	0.74%

Total weight loss of vanga after 11 puta in % is = 3%

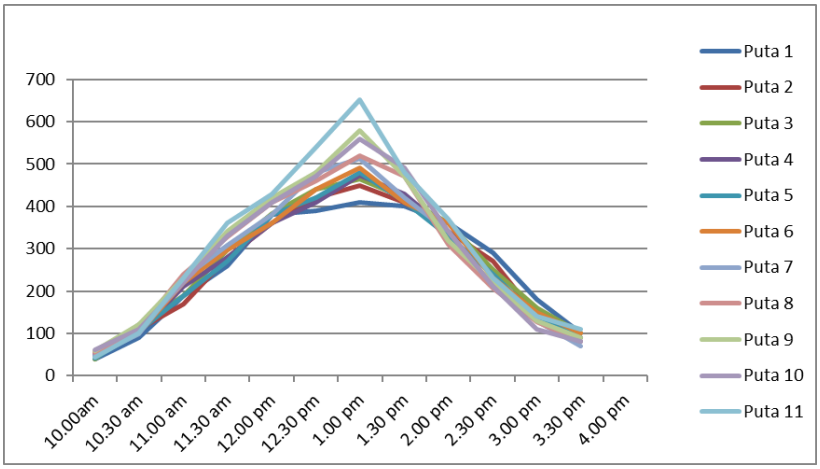

Figure 1: Temperature pattern of puta at 30 minutes interval in ºC

Table 7: Properties of Marana

Putas	Rekhapurnatva	Colour	Sukshma	softness	slakshna	Varitara	Unnama
1	-	Blackish	+	+	+	-	-
2	-	Blackish	+	+	+	-	-
3	+	Blackish	++	++	+	-	-
4	+	Slight blackish	++	++	+	-	-
5	+	Dark grey	+++	++	+	-	-
6	++	Dark grey	+++	+++	+	-	-
7	+++	Grey	+++	+++	++	-	-
8	+++	Greyish	+++	+++	+++	+	-
9	++++	Greyish	++++	++++	+++	+	-
10	++++++	Light grey	++++	++++	++++	++	-
11	++++++++	Greyish white	++++++	+++++	+++++	++++	++

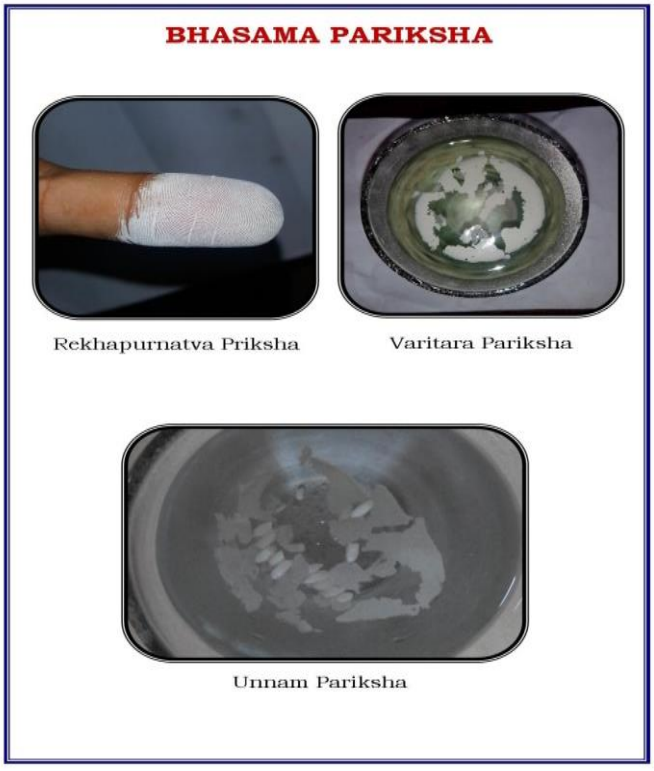

Figure 2: Bhasma pariksha according to classical parameter

DISCUSSION

Considering the hardness and agni ashatvata of Vanga, Jarana process is performed. After observing the Table (results), it is clearly indicate that By using this process of jarana of shuddha Vanga is found much easier, temperature used is reduced and duration of jarana process was also less than Apamarga panchanga. As Parada marita bhasma is best among all types[7] and Haratala is mentioned as arilauha of vanga which causes easy disintegration of Vanga, which may facilitate for powder form more easily way in short duration with blackish in colour. In Marana process, coarse nature of vanga disappeared after 3rd puta and till 7th puta it was turned into fine powder form then gradually at 8th to 11th puta fine is turn into very fine powder greyish white in colour. Vanga passes rekhapurnatva completely at 9th puta but varitara pariksha was not positive completely, so again it was subjected to two more puta for varitara pariksha and unnama pariksha. There was using of cow dunk cakes in increasing manner because due to jarana agents (Hingulottha Parada and Shodhita Haratala), just because of, to enhance agnisthayitva property in vanga. For this process Hingulottha parada nishkashana by nada yantra after Hingula shodhana and Shodhana process of Haratala was also done.

CONCLUSION

After analyzing the study on the basis of pharmaceutical and analytical study; it could be concluded that –After Samanya Shodhana of Vanga 10% loss while after Vishesha Shodhana 2% loss was found. After Jarana process total loss was 7.5% while after Marana process loss was 3%.

REFERENCES

1. Mishra G.S., Ayurveda prakasha, Choukhamba Bharti Academy Varanasi, Reprint-2014, Chapter-3/15, page no.349
2. Shastri R.D., Charaka Samhita, Choukhamba Bharti Academy Varanasi, Reprint-2007, Chikitsa Sthana, Chapter-7/88, page no.263 and Mishra S.N., Rasendra chudamani, Choukhamba Orientalia Varanasi, 3rd edi. 2004, chapter-14/135,136, page no.265-266
3. Mishra G.S., Ayurveda prakasha, Choukhamba Bharti Academy Varanasi, Reprint-2014, Chapter-3/154, page no.375
4. Tripathi B.N., Sharangadhara Samhita, Choukhamba Surbharti Prakashana Varanasi, Reprint-2015, Madhayam Khanda, Chapter-11/2-3, page no.173
5. Kulkarni D.A.,Rasa Ratna Samucchaya, Meharchand Lakshman Das Publication New Delhi, Reprint-2010,Chapter-5/13, page no.93
6. Mukharjee B., Rasa Jala Nidhi, Choukhamba Orientalia New Delhi, 3volume, Reprint 2004,Chapter-2/34,page no.106.
7. Kulkarni D.A., Rasa Ratna Samucchaya, Meharchand Lakshman Das Publication New Delhi, Reprint-2010,Chapter-5/14, page no.94

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