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PHARMACEUTICAL STANDARDIZATION OF CHINCHA KSHARA

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ABSTRACT

Kshara is an important preparation mentioned in Ayurvedic classics. Different methods have been described in Ayurvedic texts for the preparation of Kshara. The main aim of this study is to fix a Standard Procedure and to find out best method in the preparation of Chincha Kshara. Chincha Kshara has been prepared by the reference mentioned in Sarangadhara Samhitha 11/102-104. Three methods have been adopted in this study to know the difference in the amount of yield. The yield of Kshara depends on the number of washings. Highest yield was obtained from the sample in which repeated washings of the residue was done.

KEYWORDS: Chincha Kshara, Standard Procedure, Washings.

INTRODUCTION

Ksharas are alkaline substances obtained from the water soluble ashes of herbal drugs. Kshara kalpana is an important kalpana mentioned in Ayurvedic classics. Acharya Charaka[1], Sushrutha[2] and Vagbhata[3] have described about the importance of Kshara. They have considered it to be superior amongst Sastras and Anusastras because of its Chedana, Bhedana etc actions. There are various Ksharas mentioned in Ayurvedic texts and Chincha Kshara is one among them. Chincha Kshara possesses rich medicinal values and is used as an important ingredient in various formulations. These are used in the management of various disorders like Shula, Agnimandya[4] etc. Various methods have been described for the preparation of Kshara in Sushruta Samhita[2], Sarangadhara Samhita[5], Rasatarangini[4], Dravyaguna Vigyana[6] and Ayurveda Sara Samgraha.[7] In the present study, the reference mentioned in Sarangadhara Samhitha has been selected with little variation in the number of washings.

None of the Ayurvedic classics have mentioned about the repetition of washings. Hence an effort is made to throw adequate light on the standardization of Chincha Kshara.

MATERIALS AND METHODS

COLLECTION OF RAW MATERIAL

Dried Chincha phala twak was collected during March – April month from Adilabad district of Telangana. Authentication was done on the basis of pharmacognostical characters.

METHOD OF PREPARATION

- The preparation of Chincha Kshara has been carried out on the basis of method explained by Acharya Sarangadhara.
- Dried Chincha Phala Twak was taken. It was placed over an iron mesh.
- Then it was placed over the hearth and subjected to fire till it gets converted into ash.
- The ash was collected and allowed for self-cooling
- In this study three methods have been selected to explore the changes in the yield of Chincha Kshara.

First Method

One part of ash was taken and four parts of water was added, kept overnight. Next day morning the supernatant water was collected and heated to obtain the Kshara.

Second Method

In this method the same procedure was repeated every day till the water becomes tasteless. Every day the supernatant water collected was heated and Kshara was collected.

Third Method

In this method instead of keeping the sample overnight, it was allowed to settle completely and the supernatant water was collected. It took almost one hour for the sample to settle completely. In this way the procedure was repeated again and again till the water becomes tasteless. The supernatant water collected was heated to obtain the Kshara.

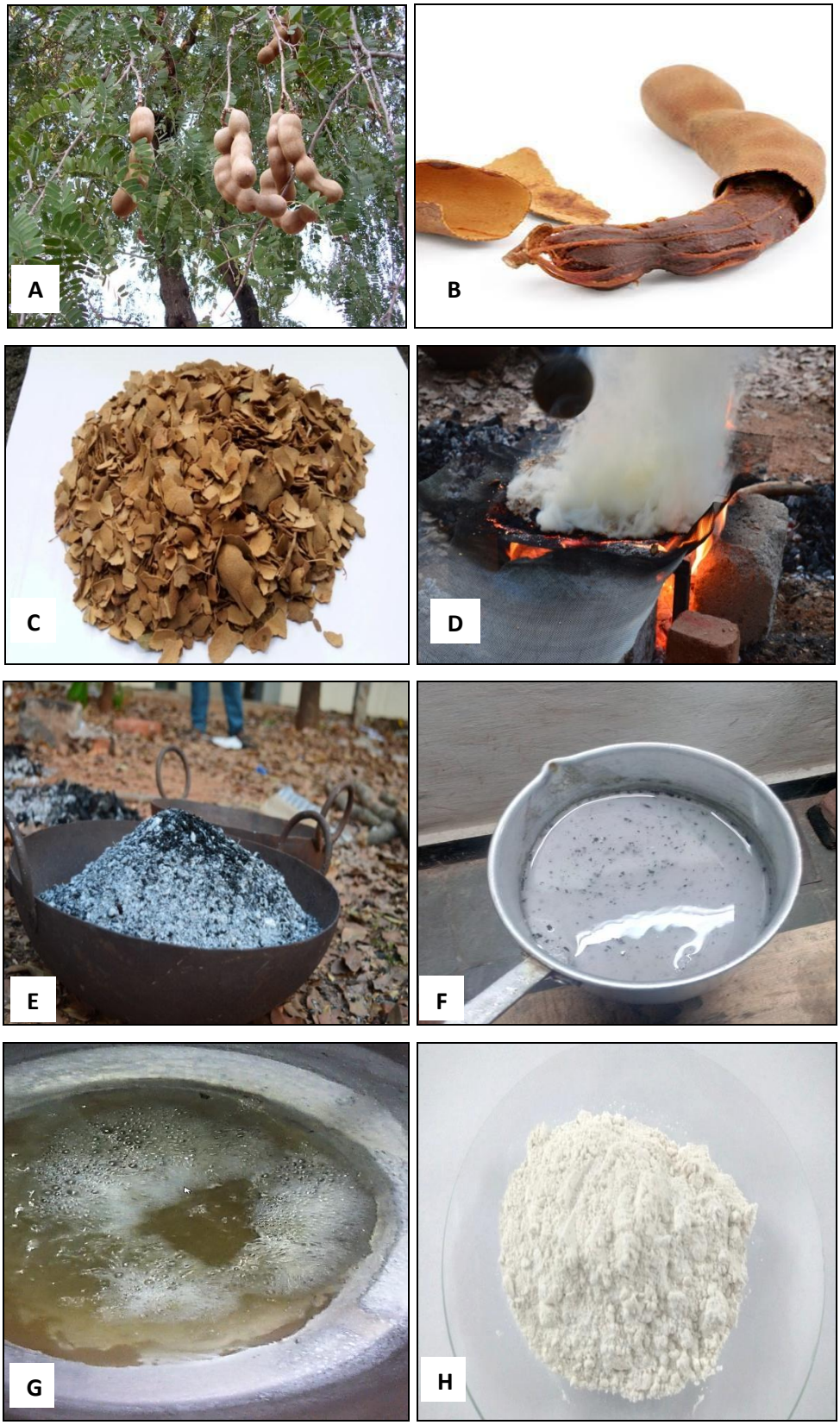

Figure: A- Tamarind (Chincha) Tree; B - Chincha fruit with Twak; C – Dried Chincha Phala Twak; D – Burning of Phala twak; E – Collected Ash; F – Addition of water to Ash; G – Heating Supernatant water H – Chincha Kshara

RESULTS

Table No: 1 Showing the quantity of ash obtained from Chincha Phala Twak.

	Batch 1	Batch 2	Batch 3
Dried Chincha Phala Twak	10 kg	10 kg	10 kg
Ash obtained	426 g	424 g	420 g

The ash obtained was divided into 9 parts (100 g each) to conduct the three methods to obtain Standard Procedure.

Table No.2: Showing the quantity of Kshara obtained from First method.

	Batch 1	Batch 2	Batch 3
Ash taken	100 g	100 g	100 g
Water added	400 ml	400 ml	400 ml
Kshara obtained	11.07 g	11.27 g	11.10 g

Table No.3: Showing the quantity of Kshara obtained from Second method.

	Batch 1	Batch 2	Batch 3
Ash taken	100 g	100 g	100 g
Water added each time	400 ml	400 ml	400 ml
Kshara after 1st wash	11.07 g	11.27 g	11.10 g
Kshara after 2nd wash	9 g	9.74 g	9.25 g
Kshara after 3rd wash	5.25 g	5.92 g	5.40 g
Kshara after 4th wash	2.10 g	2.23 g	2.03 g
Kshara after 5th wash	0.50 g	0.83 g	0.71 g
Total Kshara obtained	27.92 g	29.99 g	28.49 g

Table No.4: Showing the quantity of Kshara obtained from Third method.

	Batch 1	Batch 2	Batch 3
Ash taken	100 g	100 g	100 g
Water added each time	400 ml	400 ml	400 ml
Total Kshara obtained	29 g	28.66 g	28.25 g

DISCUSSION

Chincha Kshara is considered one among the Kshara Ashtaka.[8] The chief objective of this study is to find out and understand the difference in the yield of Chincha Kshara by three different methods.

Dried Chincha phala twak was taken; it was burnt completely. White coloured ash was obtained. Then ash and water was taken as per the mentioned quantity. The supernatant water was collected only when it was very clear and after complete settlement of the ash. The supernatant water was collected by filtering through the thick clean cloth; care was taken to avoid the entry of sediments. Stainless Steel Vessel was used to avoid any chemical reactions.

Then it was heated in moderate fire to obtain the Kshara. In the initial stage after few minutes of heating, the water appears cloudy white. Finally, white coloured Chincha Kshara was obtained.

Repeated washings have been carried out to find out the best method in obtaining highest amount of yield. In the first method the procedure was performed as it is explained by Acharya Sarangadhara and the yield obtained was noted [Table No.2]. In the second method the same procedure was followed, but to find out the presence of Kshara in the residue, repeated washings have been carried out. In the first wash the amount of Kshara obtained was significant. There was a gradual reduction in the yield of Kshara in the second, third and fourth wash, whereas in the fifth wash the yield of Kshara obtained was very negligible [Table No.3] and the water became tasteless. Hence further washings were not continued.

In the second method the sample was allowed to settle overnight, whereas in the third method the sample was allowed to settle till the supernatant water becomes clear. Water became tasteless after the sixth wash in the third method. There was no significant difference in the amount of yield in the second and third method. The tastelessness of the water can be taken as a criterion to stop the further washings. Once the water becomes tasteless the procedure can be stopped.[9]

On comparing all these three methods, third method can be considered as the best in terms of yield obtained and time taken for the procedure.

CONCLUSION

From the present study it can be modestly concluded that the yield of Kshara depends on number of washings. The residue should never be discarded after the first wash. The residue should be subjected to further washings to obtain better yield. More the number of washings more the yield of Kshara.

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