

ANALYTICAL STUDY OF AYURVEDIC YOGA - KSHIRAMANDURA

*¹Jadar P.G, ²Jagadeesh M.S.

¹K.L.E.University's Shri B.M.K. Ayurveda Mahavidyalaya Belgaum-590003

²Govt Ayurvedic College Bangalore, Karnataka

Received: 16-07-2010; Revised: 11-08-2010; Accepted: 09-09-2010

ABSTRACT

In Parinamashoola (Peptic ulcer) Acharya Chakradatta mentioned Kshira mandura yoga which is prepared by taking 8palas (384 gm) of Mandura bhasma, 1 Adhaka (3 Kg 73 gm) of Gomutra and 1 Prastha(768 gm) of Dugdha are boiled and used with dose of 4 ratti (500mg). To establish Physical and Chemical factors present in Mandura before shodhana, after shodhana, after marana and in Kshira mandura by adopting Quantitative and Qualitative methods. Mandura was heated in burning charcoal (600-800 C°). This is dipped in (5 liters of Cow's urine) sufficient quantity of Gomutra. It is repeated for 7times, till Mandura breaks properly. Purified Mandura was powdered then it is triturated with Triphala kashaya after wards Chakrikas were prepared and dried. To this 30 number of Gaja puta was given. Mandura Bhasma was prepared. To this Gomutra and Godugdha was added and Kshiramandura was prepared. When analyzed it containing 68.35% of Ferric oxide, 0.66% MgCO₃, 1.32% CaCO₃.

KEYWORDS: Mandura, Shodhana, Marana, Chakrika, Godugdha, Gomutra, Kshiramandura,

*Corresponding Author

Dr.P.G.Jadar MD (Ayu), (Ph.D)

Assistant Professor and P.G.Guide

KLE University's

Shri. B.M.K.Ayurveda Mahavidyalaya

Post Graduate Studies and Research Centre

Shahapur Nath pai circle-Belgaum-590003

Karnataka, India

Mobile: + 91-09448301308

Email: drjadar@yahoo.co.in

INTRODUCTION

Mandura is known by the names as lohkitta, malayas, ayomala etc⁰¹. Chemically it is ferrous ferric carbon dioxide and oxygen in which 2 atoms of iron are combined with 3 atoms of oxygen. It may also contain basic ferrous and ferric carbonates. However, for the practical purposes it may be considered as ferric oxide (Fe₂O₃)⁰². In Parinamashoola Acharya Chakradatta mentioned Kshira mandura yoga and used with dose of 4 ratti⁰³. No such analytical studies are not done on this drug.

Need for the study

- a. Preparation of Kshiramandura according to Chakradatta reference.
- b. Qualitative and Quantitative study of Kshiramandura^{04,05}

MATERIALS AND METHODS

Identification of the drug

The drug was identified on the basis of following characters like snigdha, guru, kathina, Krishna varna, devoid of hollows, more years standing.

Shodhana process (purification)

Mandura was heated in burning charcoal (at what temperature). This is dipped in sufficient quantity of Cow's urine. It is repeated for 7 times⁰⁶.

Marana process (incineration)

Purified Mandura was powdered then it is triturated with Triphala kashaya (1 part Triphala coarse powder and 16 parts of water is reduced to 1/8th residue)⁰⁷ after wards 183 number Chakrikas (5 rupees coin size) were prepared and shadow. These are closed in Sharava (10 kg of capacity) and samputa was made. To this 30 number of Gaja putas were given in Govt Taranath Ayurveda College P.G.Dept Puta section. Time required for each one Gaja puta is more than 48 hrs.

Preparation of Kshira mandura

Mandurabhasma of about 800 gms was taken and put in 8 litres of fresh gomutra (7,200 gms) and 2 litres of fresh godugdha (1,760 gms) was added to it in a large steel vessel and subjected to pachana on Mandagni (moderate temperature). The mixture is mixed nicely with lohadarvi continuously. It was heated up to mishrana attains ghanaswaroopa, pachana is stopped. It was left for swagasheetala (totally it takes more than two and half hours). The mixture was kept in shadow for complete drying. Then next day it was subjected to mardana until a fine powder was formed.

RESULTS & DISCUSSION

The present study is classified in to 2 parts

Mandura Shodhana and Marana

Mandura in crude form was collected on the basis of its physical characters described in classics. Lumps of Mandura is blackish in colour was powdered in a khalwayantra (mortar and pestel) to obtain a fine powder. When analysed found to contain Fe₂O₃ ie 70.28%, MgCO₃ ie 3.03%, CaCO₃ i.e.3.83%, acid soluble matter i.e.26.44%.

Fine powdered Mandura was heated red hot and dipped in Gomutra (alkaline media) as described in Rasatarangini. Mandura then purified, was appeared light blackish in colour and composed of Acid insoluble

matter was less (-14.16%), Fe₂O₃ less (-13.11%), MgCO₃ less (-1.99%) when compared to the percentage noted earlier. But there was increase in percentage of CaCO₃ (+2.07%).

Shodhita Mandura was subjected to Marana process, as described in Rasatarangini and 30 Gajaputa were given. Mandura bhasma then obtained appeared dark brown in colour and also was reduced to half of its original weight. When subjected to chemical analysis of Mandurabhasma, was found to contain Acid insoluble matter more than ShodhitabMandura i.e. (+4.16), more Fe₂O₃ (+19.8), less MgCO₃ (-0.41), less CaCO₃ (-5.17).

Preparation of Kshiramandura

Kshiramandura was prepared at Taranath Govt Ayurvedic Medical College P.G.Laboratory Bellary as per the description found in Chakradatta. Following observations were made during the process of preparing Kshiramandura

The quantity of mixture of Mandurabhasma + Gomutra + Godugdha i.e. 9760 gms reduced to 920 gms after the process of boiling.

The weight of Mandurabhasma (i.e.800 gms) was increased by 120 gms by weight at the end of Kshiramandura process which may be due to the residual substances present in Gomutra and Godugdha.

The dark brown colour of Mandurabhasma was changed to light brick red colour after the completion of Kshiramandura process.

Kshiramandura smelled the odour of Godugdha.

Kshiramandura taste was Kashaya and Madhura.

When subjected to chemical analysis Kshiramandura was found to contain less Acid insoluble matter than Maritamandura i.e. -02.28%, less Fe₂O₃ (-08.62%), more MgCO₃ (+0.03%) and CaCO₃ (+0.59%).

CONCLUSION

After quantitative analysis of Ferric oxide % in Raw Mandura was 70.28 %

Then this Mandura is subjected to Shodhana in Triphala kwatha, after this process the % of Ferric oxide was 57.17%

Then it is followed with Marana process by giving 30 number of Gaja puta and % Ferric oxide was 76.97%

At last when Ksheeramandura was prepared and analyzed it was containing 68.35% of Ferric oxide.

ACKNOWLEDGEMENT

Special thanks to Dr. Vishwamber, Principal of Taranath Govt Ayurvedic Medical College - Bellary Karnataka, Dr L.N.Nagireddy H.O.D.of P.G.dept in Rasashatra and Technical staff of I.T.A Laboratory-Bellary for their kind support and help.

REFERENCES

1. Amarasimha, Amarakosha, Hindi comentry by Vishwanath Jha : Motilal Banarasidas, Delhi,1996: pp 114.
2. Joshi D, Rasashastra, I edition: Publication division Ayurveda college, Trivendrum, 1997: pp 3
3. Chakrapanidatta, Chakradatta : Chaukhamba Sanskrit series,Varanasi, 1961: pp 184
4. Pharmacopoeia of India, III edition: Controller of publication,Delhi, 1985: pp 86
5. Gupta AK, Pharmaceutics-II, II edition: CBS Publishers and distributors, Delhi, 1991: pp 200
6. Sharma S, Rasatarangini, XI edition: Motilal Banarasidas, Delhi, 1994: pp 517

Table 1: Chemical composition of different types of Mandura in different stages

S.No	Drugs	Acid Insoluble	Fe ₂ O ₃	MgCO ₃	CaCO ₃
1	Mandura	26.44	70.28	3.03	3.83
2	Shodhita Mandura	12.28	57.17	1.04	5.90
3	Marita Mandura	16.44	76.97	0.63	0.73
4	Kshira Mandura	14.16	68.35	0.66	1.32

Source of support: Nil, Conflict of interest: None Declared