

Standardisation of 'Lingha Chendooram' – Number 1, A Siddha Drug

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ABSTRACT: 'Lingha chendooram' number 1 is a single drug useful in Siddha system of medicine. This is prepared from Cinnabar, the chief ore of mercury. The standardization is carried out with respect to the presence of Mercury and Sulphur in the drug.

KEY WORDS : 'Lingha chendooram', Cinnabar, Siddha drug, Standardisation.

INTRODUCTION

'Lingha chendooram' is a single drug useful in Siddha system of medicine. It has been widely used in therapeutic management of delirious fevers, arthritis, anaemia etc^{1,2,3}. It is prepared from cinnbar ('Lingham'), the chief ore of mercury. Cinnabar is identified as Mercury (II) sulphide⁴. Generally there are two types of Lingha chendooram viz 'Lingha chendooram' number 1 and 'Lingha chendooram' number 2 based on the preparation methods^{2,3}. Both are very often useful in practice^{1,2,3}. 'Lingha chendooram' number 1 is prepared by titration process {'Churukku' process}⁵ and 'Lingha chendooram' number 2 is prepared by burning in cow-dung cakes {'Pudam' process}⁶. Pharmacological actions of 'Lingha chendooram' number 2 were done previously^{7,8}. But there was no work on the standardization and pharmacology of 'Lingha chendooram' number 1. The present investigation report the physical properties, qualitative and quantitative estimation of mercury and sulphur of 'Lingha chendooram' number 1 collected from the local markets, compared with the sample prepared in our laboratory.

MATERIALS AND METHODS

Four samples of 'Lingha chendooram' number 1 were collected from various pharmaceuticals. The samples from MPCOPS, Chennai; Gopalan assan, Nagercoil; TSS Hospital Sankaran Kovil; Raja Pharma, Madurai were denoted as Sample I, Sample II, Sample III, Sample IV respectively. Sample V was prepared in our laboratory following the standard procedures^{2,3,5}. Authentic samples of cinnabar was procured from local markets of Tirunelveli district. Herb used (Citrullus colocynthis Schard) was collected from Tirunelveli district and identified with local flora⁹. Samples of 'Lingha chendooram' number 1 collected and prepared were used for physical properties, qualitative analysis¹⁰ of mercury, sulphur, chloride, calcium, albumin and polyhydric phenols and quantitative estimation¹¹ for mercury, sulphur and free mercury.

RESULTS AND DISCUSSION

Physical properties

It appear as scarlet red, odourless and crystalline powder. It is insoluble in water and organic solvents like HCl, HNO₃, H₂SO₄, but soluble in Aqua regien. On heating in an open test tube in sublimes as a black coloured precipitate and produce furnes with suffocating and irritating smell. The furnes may be SO₂ and the precipitate may be mercury sulphide as reported earlier⁴.

CHEMICAL ANALYSIS

The qualitative analysis confirms the presence of mercury, sulphur, chloride, calcium, albumin and polyhydric phenols in all the five samples. Quantitative estimation of mercury and sulphur in five samples of 'Lingha chendooram' number 1 are tabulated in Table I. In the present observation it is estimated that mercury in all the five samples of 'Lingha chendooram' number 1 is 33.55% to 34.55% and sulphur is 6.78% to 7.61%, whereas the chief constituent of Cinnabar (Mercury (II) Sulphide) possesses 84 to 85.2% of mercury and 14.8 to 16% of sulphur⁴. The reduction in the percentage of mercury and sulphur in 'Lingha chendooram' number 1 may be due to the process of titration, in which heating

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may reduce the percentage of mercury and sulphur. The presence of chloride, calcium, albumin and polyhydric phenols in 'Lingha chendooram' number 1 may be due to the addition of the herbal extract used for titration. Quantitative estimation for free mercury in all the five samples reveals that it is completely absent. It may be in the complex amalgamation from as reported earlier¹².

Pharmacological studies are being carried out in our laboratory.

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Table – 1

Percentage of mercury and sulphur in 'Lingha Chendoorm' number 1.

Sl. No.	Drug	Percentage in 'Lingha Chendooram' number 1 (in %)	
		Mercury	Sulphur
1	Sample I	33.87	7.40
2	Sample II	34.21	6.99
3	Sample III	33.55	7.61
4	Sample IV	33.89	6.79
5	Sample V	33.97	7.20

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