



STANDARD PROTOCOL OF KAJJALI MAKING WHILE BHASMA PREPARATION

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ABSTRACT

Kajjali making is very easy and basic step while making Bhasmas. But considering it a easy process, kept it unfocused and this is the reason behind failure while achieving siddhi lakshanas of bhasma in given number of puta. It is observed that various Rasa Vaidyas gives more putas than mentioned in original texts or sometimes gives more Agni to achieve siddhi lakshana but it is totally unexpected. Also it increases cost and duration of production. The solution is in making kajjali properly as mentioned in original texts. In the present Article an attempt is made to focus and discuss about basics of standard protocol of kajjali making which will reduce cost and duration of Bhasma preparation with same efficacy.

KEYWORDS: Kajjali, Bhasma, Siddhi Lakshana, Puta, Standard protocol.

INTRODUCTION

Ayurvedic system of medicine is existing since Vedic period. This system advocates Holistic approach to the human health care. This system of medicine involves the use of plant parts, animal products, minerals and metals. Ayurvedic system of medicine is the only system where importance of metal for curing ailments was firstly recognized and "Ayaskruti" is one of the best examples of establishment of it.

Further Rasashastra got developed and starts dealing with Pharmacology and pharmaceuticals of Ayurveda. From centuries this well-established branch of Ayurveda serves Indian community with its unique heritage of drugs of mineral and metallic origin; along with their occurrence, varieties, organoleptic characters and physical properties.

The importance of Rasaoushadhis are stated as.

अल्पमात्रोपयोगित्वाद्दरुचेप्रसंगतः।

क्षिप्रमारोग्यदायित्वाद्दौषधेभ्योऽधिको रसः।।

-र.सा.सं. 1/4

Rasaoushadhis are supposed to be superior to other herbal drugs on account of their effectiveness in low dose, efficacy, palatability and quick action without causing any untoward effects. But these properties can be

achieved only if the drug is prepared as prescribed manner in ancient Ayurvedic texts.

In the word Rasashastra, "Rasa" stands for mercury (*Parada*) and hence it considered to be highly auspicious material followed by sulfur (*Gandhaka*), which is essential to potentiate the therapeutic properties of former in many ways. *Kajjali* is the name given to a compound obtained by either combination of mercury and sulfur in different ratios or even combination of these two along with some other metals or minerals.

धातुभिर्गन्धकाद्यैश्च निद्रवैर्मदितो रसः।

सुश्लक्ष्णः कज्जलाभासौ कज्जलीत्यभिधीयते।।

-र.सं.तरं.

In fact, Kajjali is one of the basic preparation in of The Rasashastra. It is considered to be first *Murchana* of *Parada*. Kajjali is itself a drug, also used as raw drug for various preparations, Rasa Parpati, Pottli are nothing but the processed forms of Kajjali. Also Kajjali is a vehicle drug, there are thousands of uses of Kajjali and one of them is use of Kajjali for Dhatu marana.

In the process of Dhatu Marana following aims are taken into consideration:

1. To remove harmful & toxic effects of metals
2. Modification in unwanted physical properties
3. To convert into easily absorbable form for human

body

4. Promotion of efficacy.

MATERIAL AND METHODS

The process of Dhatu marana includes following steps:

1. Preparation of Kajjali: Parad + Gandhak + Shodhit Dhatu
2. Giving Bhavana of specific Dravya
3. Making of Chakrika
4. Preparing Sharavsampat
5. Giving Agni in Puta

Above whole procedure is considered as one "puta" and to make proper bhasma, there are specific number of putas are expected to given. But most of the times it is observed that more number of putas needed to give for achieving Siddhi Lakshanas of bhasma and almost all the time, the reason behind this, is not making kajjali in proper manner.

Generally we follow 2 methods of kajjali making for marana of any dhatu

1. Shuddha parad + Shuddha gandhak = Triturate = Kajjali Then, Kajjali + Shuddha dhatu = Again triturate = Kajjali
2. Shuddha parad + Shuddha gandhak + Shuddha dhatu = Triturate all together = Kajjali

A thing to notice here is,

धातुभिर्गन्धकाद्यैश्च निद्र्वैर्मदितो रसः।

मुश्लक्षणः कज्जलाभासौ कज्जलीत्यभिधीयते।।

-रस.तरं.

In the definition of Kajjali it is clearly mentioned that, Shuddha dhatu should be triturated with Parada to form amalgam and then Gandhak should be added while making Kajjali especially for Dhatu Maran.

METHODOLOGY

In this study Tamra Marana was carried out in two batches i.e. Batch A and Batch B. For batch A kajjali was prepared with popular method as follows.

- 20gm Shuddha parad
+ 20gm Shuddha gandhak = Triturated for 72 hrs = Kajjali Then,
40gm Kajjali
+ 20gm Shuddha Tamra = Again triturated for 8 hrs = 60 gm Dhatu Kajjali

For the batch B kajjali prepared as per its definition:

- 20gm Shuddha parad
+ 20gm Shuddha Tamra = Triturated for 72 hrs = Amalgam Then,
40gm Amalgam

+ 20gm Shuddha Gandhak = Again triturated for 8 hrs = 60gm Dhatu Kajjali Total three Putas were given to either batches and observations were noted.

OBSERVATIONS

Observations in process kajjali: **Batch A**

- When shuddha parad and shuddha gandhak triturated together, Parada loses its cohesive force and occurring of micro droplets of mercury begin within 30mins.
- On continuation of trituration, mixture converted in to homogenous dark black color within next 30mins.
- Became fine dust like dark powder on triturating for 12 hrs
- Shining of powder completely lost and became Nishchandrata on triturating for 30 hrs
- Dusty nature of powder disappeared and became Shlakshana on triturating for 56 hrs
- After that mixture triturated till completion of 72 hrs but no any change observed.
- Shuddha Tamra then added to the kajjali.
- Mixture became homogenous on triturating for 8 hrs.

Observation after 3 Puta of **Batch A**.

- Even after 3 puta shining macro particles of copper observed in the dark black colored Bhasma.
- Bhasma was partially floated and remaining sinked down while performing Varitara test.
- Taste of bhasma was very Astringent.
- This Bhasma passed only rekhapurnatwa test of basic bhasma pariksha.

Observations in process kajjali: **Batch B**

- When shuddha parad and shuddha Tamra triturated together, no change observed for first 40 hrs. Mercury and copper can be observed separately.
- Parada loses its cohesive force and micro droplets of mercury begin to form after 40 hrs.
- It is observed that, micro depletes of mercury began to became spindle shaped for a while and again getting its spherical shape on continuation of trituration till 60 hrs.
- After 60 hrs of trituration mixture began to become grayish brown in color.
- Till 66 hrs of trituration mercury suddenly got disappeared.
- After that mixture triturated till completion of 72 hrs and grayish brown colored powder formed.
- Shuddha Gandhak then added to this Amalgam.
- Mixture became dark black colored, shlakshana and homogenous on triturating for more 8 hrs.

Observation after 3 Puta of **Batch B**.

- After 3 puta shining of mixture completely disappeared and dark black colored Bhasma

obtained.

- Bhasma was perfectly floating and remained floating even after putting couple of rice grains over it while performing Varitara & Anapsumajjanam test.
- There was no taste of bhasma observed.
- This Bhasma passed all of basic bhasma pariksha including rekhapurnatwa test.

DISCUSSIONS

- No any variable changed other than making kajjali but vast differences were observed in the given 3 puta.
- Increased numbers of puta consume much more time as well as money because, for single puta whole process has to repeat.
- Ayurvedic texts are proven perfect and very scientific on the calculation of required number puta for achieving desirable Siddhi lakshana.
- There isn't any scope for chemical reaction between copper and mercury; hence no spontaneous changes occurred while preparing Kajjali for batch B.
- Due to constant and rhythmic motion of Khalwa

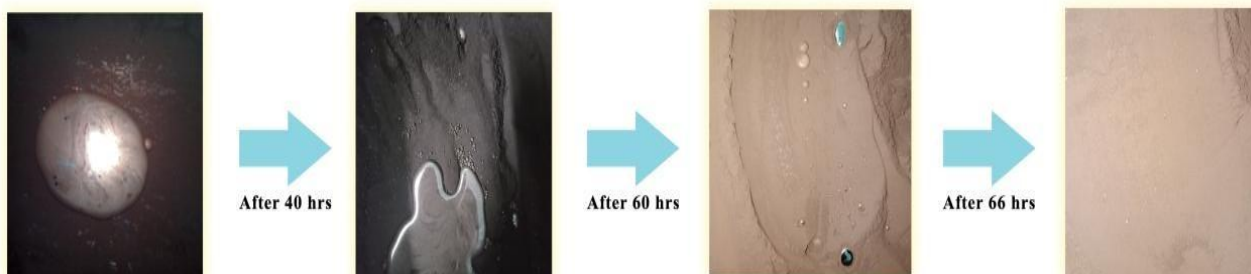
Yantra, temporary magnetism may get developed in the mercury.

- According to The Domain Theory, within a domain, the alignment of the magnetic direction of atoms is the same and hence amalgam of mercury and copper forms only when the quantum particles gets charged due to continuous friction between the metals.
- Charged quantum particles at its electron level allow losing cohesive force and forms amalgam.

CONCLUSION

It is concluded that, Kajjali must be made by triturating shuddha Dhatu and Parada first and when it forms amalgam then only Gandhak should be added, especially while making it for Dhatu marana. This process is more accurate, economic and less time consuming. The process takes not less than 6 hrs each day for approximately 10 to 12 days of constant Mardana to make Amalgum of Parada & Dhatu and the miraculous thing is one couldn't observe a little change till the last day. Hence it is the work of Patience & Faith.

Changes Observed while Process of making Amalgam of Mercury and Copper



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