

ON THE TECHNIQUE OF SODHANA

ANJANA CHAUBE, P.K PRAJAPATI and S.K DIXIT

Department of Rasashastra, I.M.S., B.H.U., Varanasi – 221 005

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ABSTRACT: *Sodhana is a particular aspect to be followed meticulously in ayurvedic pharmaceuticals. Failure to subject certain ingredients to this process of “purification” can have a negative effect on the efficacy of the preparations(s). This aspect is detail in this article.*

INTRODUCTION

Ayurveda –the science of life is known to the mankind since time immemorial. It prolongs life span, maintains positive health and cures diseases. With a view to achieve these aims and objectives different types of drugs, found in nature from the natural resources whether these may be herbal animal or minerals have been in use. The drugs of herbal origin come first in the series because of their easy availability and easy processing but after sometime, in addition to the herbal drugs, mani (precious stones or gems) *mantra* (hymns), *shastra* (surgical instruments), *agni* (fire) and *kshara* (Alkali) etc. were also adopted and included in therapeutics the use of metals and minerals comes still later in series. This mineral therapy is known as “Rasa Chikitsa” It is said to be more of Rasayana in nature which in practice prevents jara (old age or aging process) and Vyadhies (diseases) Besides this is a fast acting therapy and has been found effective in smaller doses while others are not; hence considered highly superior. Thus due to its high effectiveness, popularity and the socioeconomic status it was recognised as an independent branch of learning in therapy in about 8th/9th cent A.D and has been known as “Rasa Shastra” and “Rasa chikitsa” in the field of Ayurveda It is important to mention that perhaps Indian

were the pioneer to use the metals for medicinal purposes as prehistoric texts like “Rigveda” and Atharvaveda: have mentioned the medicinal values of the noble metals like gold and silver.

After the development of rasa Shastra it was made possible for the minerals and metals, precious and semiprecious stones to pass through various pharmaceutical processes like shodhana, Jarana Marana etc for several times so as to convert these in to a form or compound which may suit to the human body and could be observed and assimilated easily into the system without exhibiting any toxic symptom. This suitable form of minerals can be well understood by the following verse.

“Mritani lohani rasi bhavanti, Nighnanti yuktani mahamayanshcha Abhyasa yogat dridha deha siddhim, Kurvanti ruk janma jara vinasham”. (R.R.S – 5/139).

It means that if metals are properly incinerated in to ash form, on internal use they may be observed and assimilated in to the blood very easily within a very short period. Their proper use may eradicate all types of chronic ailments and their prolonged use in proper dose provides good strength and immunity power to the body with delayed aging process.

In the above verse (R.R.S- 5/139) the term “Rasi Bhavan”, in the Rasa texts and specially in the context of Mrita Lohas, is highly important, It indicates the state of finally produced mineral products, the limit of their conversion and processing techniques which a mineral or metal requires before being subjected to internal use, In other words “Rasi Bhavan” is a state in which is very similar to the colloidal form or modern science and essential for their absorption as without reaching to this state no drug of mineral origin could be observed in to the system properly. So this indicates that how much our ancient scholar of Ayurveda were aware regarding the absorption of drugs. They have described so many pharmaceutical techniques which play an important role in altering the form or similar to “Rasa” form. Out of such all techniques shodhana technique which comes first to take place and there are so many examples of recent researches regarding shodhana technique which prove and establish the important of shodhana as following –

1. Singh et al. (1980) reported that the Vatsanabha (root of Semicarpous anacardium) shodhita (purified) with Gomutra (Cow’s urine) is converted in to cardiac stimulant where as crude Vatsanabha is claimed as cardiac depressant.
2. Chaturvedi et al, (1982) reported that the Anjana shodhita with juice of Eclipta alba is proved non-toxic to eyes in experimental animals.
3. Katiyar et al. (1983) reported that the seeds of Strychnous nux vomica shodhita with Godugdha (Cow’s milk) showed C.N.S depressant activity, pentobarbitone hypnosis

potentiation, inhibited morphine induced catalepsy and least toxicity in mice, albino rats and chicks.

4. Paul et al (1988) reported that Kajjali prepared with shodhita parade and shodhita Gandhaka is less toxic than Kajjali prepared with Ashodhita parade and Gandhaka.
5. Chaube (1994) reported that the guggulu Pills processed with Gomutra shodhita Guggulu are the best regarding their disintegration time.

Concept of shodhana (Purification)

Shodhana technique is in existence since samhita period. In charaka samhita it has been indicated by “Shuddha” and “Shaucha” words.

Shodhana is an important technique necessary for almost all kinds of drugs to remove their Doshas (impurities or toxic contents).

Objectives of Shodhana

There are certain objectives behind shodhana technique as following, which may be applicable separately or collectively depending upon the need and nature of the drug material

1. Elimination of impurities
2. Conversion of hard material into soft and brittle so as to proceed for further pharmaceutical techniques such as marana, satwapatana etc.
3. Minimisation of toxicity of the drug material.

4. Impregnation of sendriya (organic) qualities in to the drug material.
5. Potentiation of therapeutic efficacy of the drug material.

PROCEDURES FOR SHODHANA

1. **Prakshalana (Washing):** The material is washed with prescribed liquid to remove its physical impurities e.g.- Godanti
2. **Nirvapa (Heating and Quenching):** The red hot material is dipped into the prescribed liquid e.g – Dhatu shodhana.
3. **Bhavana (Wet trituration):** The material is completely submerged in prescribed liquid and triturated till its dryness e.g Hingula.
4. **Swedana (Boiling under liquid bath):** The material is boiled in prescribed liquid through Dola Yantra method e.g- Sudha Varga Dravyas.
5. **Mardana (Grinding):** The material is ground properly without or with prescribed liquid for specific period e.g – Parada.
6. **Bharjana (Frying or Roasting):** The material is fried with or without Ghrita on mandagani (mild head) e.g – Gairika and tankana.
7. **Patana (Sublimation):** Through patina yantra the material is heated to convert in to vapour form which is then passed through a condenser so that it may be condensed again e.g- Parada.
8. **Atapa/ Agni Shoshana (Drying):** The material is kept on fire or exposed to sunrays till its dryness e.g Vatsanabha and shilajatu.
9. **Nirjalikarana (Evaporation of water):** Whole water content of the material is evaporated by heating e.g – Sphatika.
10. **Galana (Filtering):** The solid material is melted first by heating or dissolved in suitable liquid and then filtered through a cloth e.g – Gandhaka and Navasagara.
11. **Dhalana :** At first the metal is melted by intense heat and then poured into a liquid e.g – Naga.
12. **Achushana (Absorption):** Oily content of certain toxic materials is minimized through different absorption means e.g – Bhallataka.
13. **Prithakkarana (Separation):** Physical impurities are removed e.g – Abhraka.
14. **Nimajjana (Dipping):** The material is kept immersed in the prescribed liquid for specific period e.g – Vatsanabha.
15. **Prithakkarana (Separation):** Soluble material is separated from insoluble impurities through filtration e.g – Guggulu.
16. **Vilayana (Elutriation):** The material is first dissolved in prescribed liquid and left as such for some time. Then the upper part of the liquid containing the soluble drug material is decanted into another pot

leaving behind the impurities in the bottom of the first pot e.g – shilajatu.

Types of shodhana:

Shodhana technique has been broadly subdivided into two major types as following-

1. Samanya shodhana (General purification).
2. Vishesha shodhana (Specific purification)

Samanya shodhana is used in general for purification of all drugs of a group or in other words those drugs may be purified individually through the same shodhana procedure.

Metals like gold, silver, copper, iron etc, may be purified by quenching their red hot sheets in to several liquids one by one for several times. The liquids which are used for this purpose are Taila (oil), takra (butter milk), gomutra (cow's urine), Kanji (a type of acidic liquid prepared through special technique and Kulattha Kwatha (decoction of Dolichos biflorus).

While Vishesha shodhana is a specific technique which is used only for particular drug material individually, not for a group and it is applied always after purifying that particular drug material through samanya shodhana technique. After samanya shodhana gold is purified through vishesha shodhana technique.

Role of Kala (time Factor): Rasa texts have emphasized the role of Kala duration in the phenomenon of shodhana, as it has been observed that if the shodhana procedures are employed for lesser duration may not show desired effect and when employed for longer duration may cause desired destruction or disintegration of the metal of mineral drug, hence their application for proper length of time is also very essential for making the proper length of time is also very essential for making the products easily observable highly effective and less toxic thus a change in their properties (physical / chemical therapeutic) and form is brought about by the combined effect of these procedures and the time factor.

CONCLUSION

From the above discussion it may be concluded that shodhana is an important and inevitable technique in the field of Indian pharmaceuticals which causes-

1. Purification of the drug.
2. Detoxication of the toxic drug.
3. Potentiation of properties of the drug.
4. Alteration of properties of the drug.
5. Induction of brittleness in the drug.
6. Disintegration of the drug to provide its finer particles so that the drug may be made suitable for further procedures of other special techniques viz Jarana, Marana and satwapatana etc. to obtain product suitable for internal use.

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