

AYURVEDA REVIEW ON SHODHAN, PREPARATION AND THERAPEUTIC  
INDICATIONS OF SATVA AND DRUTIDr. Jyotsna Gulhane<sup>1\*</sup>, Dr. Rakhi Ram Kulkarni<sup>2</sup> and Dr. Aruna V Shelke<sup>3</sup><sup>1</sup>Professor and HOD, Rasashastra and BK Dept., SRC Ayurved College, Chikhali, Maharashtra, India.<sup>2</sup>Professor and HOD, Rachana Sharir Dept., SRC Ayurved College, Chikhali, Maharashtra, India.<sup>3</sup>HOD and Associate Professor, Agadanttra and VA Dept., SRC Ayurved College, Chikhali, Maharashtra, India.

\*Corresponding Author: Dr. Jyotsna Gulhane

Professor and HOD, Rasashastra and BK Dept., SRC Ayurved College, Chikhali, Maharashtra, India.

Article Received on 17/10/2022

Article Revised on 06/11/2022

Article Accepted on 27/11/2022

## ABSTRACT

Rasashastra is branch of alchemy which deals with the drugs obtained from metals and minerals origin. Shodhana, Marana and Amrutikarana are major processes involves in Rasashastra. The specific processes of heating, boiling, grinding and triturating play important role toward the particular formulations of Rasashastra. These Ayurveda preparation used for various therapeutic purposes and imparts pharmacokinetic benefits over other formulations. Satva and Druti are important concept of Ayurveda Rasashastra which utilizes for specific purposes. Satva indicates extraction of essence from mineral ores and Druti means liquefying of metal & mineral. The Satva of drugs may be different colours and types depending upon the process and method. Ayurveda described various approaches for extracting Satva from the different minerals based drugs. Satvas used in various processes of mercury and also utilizes for various therapeutic purposes. Present article explained Ayurveda view on various aspects of Satva and Druti.

**KEYWORDS:** Ayurveda, Rasashastra, Druti, Satva, Shodhana.

## INTRODUCTION

Ayurvedic pharmaceuticals described various types of formulation for different therapeutic purposes and some specific formulations mean for diversified pharmacokinetic and pharmacodynamic properties. The formulations prepared from the basic preparative principles and theories of *Rasashastra* play vital role in Ayurveda therapeutics. These Ayurveda drugs belong from *Rasa* category imparts unique qualities and utilizes for different therapeutic purposes. The *Rasa* drugs absorbed and assimilated easily and impart quick action.<sup>[1-3]</sup>

**SATVA (SATVAPATANA)**

*Rasashastra* involves formulations of drugs using various procedures like extraction, incineration and purification, etc. These various *Samskaras* used for different pharmaceuticals and therapeutic purposes, amongst them *Satvapatana* is important process of *Rasashastra* in which mineral ores mixed with other substances and heated to obtain *Satva* (essence) of mineral. Mineral mixed with *Kshara*, *Amla* and *Dravaka varga* then heated in *Koshti* to produces *Satva*.

*Satvapatana* is important aspect of *Rasashastra*, *Satvas* extracted from ores utilizes in the processing of mercury

and also used for various therapeutic purposes. The heat used for the extraction of *Satvas* varies depending upon the hardness of drug. However it is clearly mentioned in Ayurveda classics that *Satvas* should be used after purification.<sup>[2-4]</sup>

Mineral mixed with *Guda*, *Tankana* and *Guggulu* then triturated with goat's milk which results formation of bolus, further subjected to heat for obtaining *Satva*. *Rasa Ratna Samuchchaya* described that *Satva* can be obtained by giving *Bhavana* of juices of drugs like *Suryavarta*, *Kadali*, *Vandhyakarkoti*, *Koshataki*, *Suradali*, *Shigru*, *Vajrakanda*, *Jalapipali* and *Kakamachi*, etc.

**Equipments used for Satvapatana**

*Andha musha* and *Angar Koshti*, however uses of *Chhidra musha* and *Patal Koshti* were also found in ancient texts. *Andha musha* and *Satvapatana Koshti* recommended for *Satvapatana* where strong heating is required. Coal of wood of *Madhuka* and *Khadira*, *Vanknaala* can also be used for extracting *Satva* of mineral/metal. The *Amla Varga*, *Dravak Varga* and *Kshar Varga*, etc. are major materials mostly used for *Satvapatana*.

### Purification of Satvas

Satvas is purified by triturating with *Nimbu rasa* and *Ardhaka rasa* for three days. The purified *Satvas* used with other drugs for further processing.

### Consideration of heat for specific Satvas

The strength of heat given to the *Satvas* varies depending upon the hardness and amount of ores or minerals. *Tivragni* is used for *Abhraka*, *Makshika* and *Vaikranta*, heat with six *Prastha* of *Kokila* used for *Vimala*, *Drudagni* recommended for *Tuttha* and heat in *Baluka yantrapaka* used for *Talaka* while *Khadirangara* (heat of coals of *Khadira* plant) advises for *Rajavarta*. Depending upon the intensity of heat the *Mridu* and *Khara Satva* can be obtained as follows.

*Mridu Satva* prepared from the drug which releases *Satva* at low temperature, this types of *Satva* can be prepared below 1000°C i.e.; *Tuttha Satva*.

*Khara Satva* prepared from the drug which releases their *Satva* at high temperature (above 1300°C) and need more attempts for the extraction of *Satva* e.g. *Bhunaga Piccha*.<sup>[3-5]</sup>

### Application of Satva

- ✚ *Abhraka satva* is used for *Pakshachinna* of mercury.
- ✚ *Makshika satva* used for *Dehavada*; improves immunity in old age.
- ✚ *Vimala satva* acts as rejuvenating agent along with *Parada*.
- ✚ *Satva* of *Tuvari* used for the *Bandhana* of *Rasa* and *Uparasa*
- ✚ *Tuttha satva* and *Bhunaga satva* helps to relieve *Shula*.
- ✚ *Satva* is useful for curing *Visha* and helps to heal wound.

### DRUTI

*Druti* means liquification, it is important processes of *Rasashastra* in which metals/ minerals are transformed into a stable liquid form. Generally when metal heats then they melt and liquefy, but after sometime when temperature drops down, the molted metal solidifies again. Occasionally the liquid state of metal is temporary, but the process of *Druti* not only melts metal but also maintain their molten state permanently. When metal/mineral melted by *Druti* process then they remain in liquid state with desired characteristic features and employed for various purposes.<sup>[6-8]</sup>

*Druti Kalpana* involves liquification of hard and dense metals/minerals after processing with herbs and heat. The specific characteristics features of *Druti* are depicted in **Figure 1**. *Druti* should possess property of non-stickiness (*Nirlepatvam*), should remain in liquified state, should be lustrous and light, etc. Properly formed *Druti* mixes quickly with mercury.

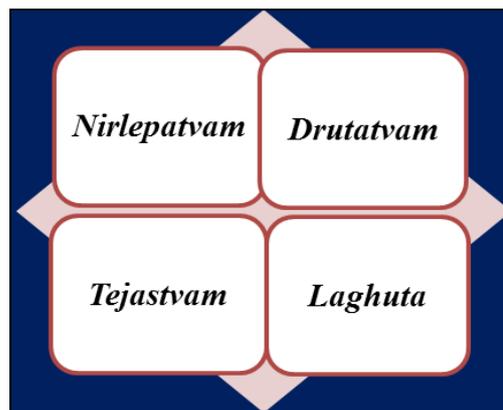


Figure 1: Characteristics Features of *Druti Kalpana*.

### Types of Druti

- **Maharasa Varga:** *Vaikranta Druti*, *Svarnamakshika Satva Druti* and *Abhraka Druti*.
- **Uparasa Varga:** *Haritala Druti* and *Gandhaka Druti*, etc.
- **Dhatu Varga:** *Rajata Druti*, *Loha Druti* and *Svarna Druti*, etc.
- **Ratna Varga:** *Moti Druti* and *Vajra Druti*, etc.
- **Sudha Varga:** *Shankha Druti*.

*Druti* also classified into different category based on the material used i.e.; *Loha druti*, *Ratna druti*, *Gandhak druti* and *Abhrak druti*, etc. *Druti* should be stored in glass containers; however *Ratnadi Drutis* should be kept in *Kusumbha Taila*.

### Different method of preparation

*Garbha Druti* prepared from internal liquification, in this method material used as a *Grasa* liquefied within mercury.

*Bahya Druti* prepared by external liquification, in which *Abhrakadi satva* are melted outside before processing of *Jarana* with mercury.

*Svedana* process used as steaming technique in which *Ratnas* put in bolus as a paste of drugs and covered with *Betula utilis* leaf and subjected for *Svedana* for 3 nights at high temperature in a *Dolayantra*.

*Avapa* method means sprinkling, this method used for the preparation of *Teekshna Loha Druti* and *Roupya Druti*, etc.

*Putra* method means utilization of incineration process, this technique employed for the preparation of *Mukta Druti*.<sup>[8-10]</sup>

### Various sources of heat for Druti preparation

- ❖ Coal of *Madhuka* or *Khadeera* wood.
- ❖ Coal of *Vansha* for hard/dense metal or mineral.
- ❖ *Badara* coal for *Swedan* purpose.

**Application of Druti Kalpana**

- *Swarna Druti* and *Abhraka Druti*, etc. used for mercurial process.
- *Tamra Druti* used for treating diseases.
- *Ratna Druti* is useful as *Deha kara* (immunomodulator)
- *Druti bandha* is one of the *Parad bandhas*, in this way *Parad* get stabilized for various procedures.

**CONCLUSION**

The *Rasashastra* utilizes various approaches for the preparations of drugs based on the metal or mineral origin. Some specific techniques employed in Ayurveda *Rasashastra* for the preparation of particular formulations. *Satva* and *Druti* are important *Kalpanas* of *Rasashastra* which utilizes for specific pharmacokinetic and pharmacodynamic purposes. *Satva* means extraction of essence from the mineral ores and *Druti* indicates liquefying state of metal & mineral. *Satvapatana* used for therapeutic purpose and also employed for the processing of mercury (for example *Kankshi satva* used for the *Kraamana* of mercury). Similarly concept of *Druti* plays unique role in Ayurveda *Rasashastra*, *Druti* means liquefying a metal/ mineral permanently with desirable features, *Druti* used for mercurial processes and also used in the treatment of diseases.

**REFERENCES**

1. Vagbhata, Rasa Ratna Samucchaya with Suratnojvala commentary of Ambikadatta shastri, 8th Ed. Varanasi: Chaukhamba Amarabharati Prakashan, 2011; p.138.
2. Vagbhata, Rasa Ratna Samucchaya with Suratnojvala commentary of Ambikadatta shastri, 8th Ed. Varanasi: Chaukhamba Amarabharati Prakashan, 2011; p.79.
3. Vagbhata, Rasa Ratna Samucchaya with Suratnojvala commentary of Ambikadatta shastri, 8th Ed. Varanasi: Chaukhamba Amarabharati Prakashan, 2011; p.49.
4. Vagbhata, Rasa Ratna Samucchaya with Suratnojvala commentary of Ambikadatta shastri, 8th Ed. Varanasi: Chaukhamba Amarabharati Prakashan, 2011; p.73.
5. Vagbhata, Rasa Ratna Samucchaya with Suratnojvala commentary of Ambikadatta shastri, 8th Ed. Varanasi: Chaukhamba Amarabharati Prakashan, 2011; p.55.
6. Acharya Somadev, Dr. Siddhinandan Mishra, translator. Rasendra Chudamani , 3rd ed. Varanasi: Choukhamba Orientalia, 2004.
7. Prof. Savarika S S, translator. Rasa Chandanshu, 1st ed. New Delhi: Kendriya Ayurved Vignan Anusandhan Parishad, 2011.
8. Shri Acharya Chaturbhujamishra, Rasa Hridaya Tantram. 2nd ed. KaledaKrishnagopal: Krishna-Gopal Ayurveda Bhavan, 2002.
9. Dr. Indradeo Tripathi, Pt. Taradatta Panta Ayurvedacharya, Editors. Rasarnava Naam

Rasatantram, 4th ed. Varanasi: Choukhamba Sanskrit Series Office, 2001.

10. Dr. Damodar Joshi. Rasashastra, 1st ed. Varanasi: Choukhamba Orientalia: Reprint, 2010.