



**AN AYURVEDA REVIEW ON HERBO-METALLIC FORMULATIONS AS
THERAPEUTIC MODALITY OF RASA-SHAJTRA**

Dr. Vandana N. Hirudkar*¹ and Dr. Kavita A. Khond²

¹Associate Professor & HOD, Rasashastra & B. Kalpana, Shri K. R. Pandav Ayurved College & Hospital, Nagpur, India.

²Professor & HOD, Rachanasharir, Shri K. R. Pandav Ayurved College & Hospital, Nagpur, India.

***Corresponding Author: Dr. Vandana N. Hirudkar**

Associate Professor & HOD, Rasashastra & B. Kalpana, Shri K. R. Pandav Ayurved College & Hospital, Nagpur, India.

Article Received on 08/11/2019

Article Revised on 28/11/2019

Article Accepted on 18/12/2019

ABSTRACT

Ayurveda the science of life encompasses several concepts related to the health management. Ayurveda principles provide helps to establish physical, mental and spiritual coordination of body. *Rasa-Shastra* is one of the important streams of ayurveda that deals with *Rasayana*, herbo-mineral and herbo-metallic preparations for the management of various health ailments. The common forms of herbo-metallic preparations is *Bhasma* that are prepared with herbs and metal using concept of *Putra*; herbal juices/ decoction treated with metal. The most of the herbo-metallic preparations considered as nanoparticles therefore produce significant biological response and used as classical medicine in different health issues. This article presented a review on therapeutic importance of herbo-metallic preparations as parts of *Rasa-Shastra*.

KEYWORDS: *Ayurveda, Rasa-Shastra, Herbo-Metallic, Bhasma, Rasayana.*

INTRODUCTION

Ayurveda system of natural medicine described some unique formulations for the management of healthy well being, in this regards classically ayurveda has mentioned use of Herbo-metallic formulations for various therapeutic purpose which comes under category of *Rasa-Shastra* medicine. These formulations possess smaller size, palatability, prerequisite shelf life, efficacy and minimal side effects therefore recommended for the management of health problems. Generally herbo-metallic formulations involve use of metal such as; mercury, iron, gold and arsenic, etc. Ayurveda classics emphasized some guideline regarding preparation, dosing, duration, supplement and uses of such herbo-metallic formulations.^[1-5] The proper preparation and logical application are two important aspects that need to be considering while using herbo-metallic preparation. These formulations offers beneficial effects in the management of gastritis, skin disease, renal disease, sex problems, improves strength, imparts revitalizing effects, purify blood, strengthening bones, treat mental illness such as; insomnia, depression and epilepsy, also help to prevent free radical damage of tissue.^[3-6]

The major procedures involved in the preparation of herbo-metallic formulations are detoxification, purification, particle size reduction and incineration, these all procedure retain or enhances therapeutic values

of chief ingredients, remove toxic materials, improves absorption and enhances drug like properties of ingredients. *Swarna basant maltiras, Shwaskuthar ras, Kamdudha ras, Kaharva pishti, Yogender rasa, Kumara kalyana rasa* and *Swasa kasa chintamani rasa*, etc. are some important herbo-metallic formulations.^[6-8]

General approaches to prepare herbo-metallic formulations

The general method to prepare such types of formulations involves use of *Putapaka* or *Kupipakwa* procedure. In *Putapaka* method herbo-metallic formulations prepared using *Shodhana*, *Bhavana* and *Marana* procedure. Metals or minerals first converted to coarse powder then heated and dipped in liquid media for some time then *Shodhita* materials mixed with drugs for *Marana* and finally *Bhavana* performed for specific time period. After *Bhavana*, *Chakrikas* prepared and subjected to *Sharava Samputa*, several *Putas* done for specific time period. The same procedures repeated for many times to obtain final product. *Jarana* is another intermediate step performed for metals like; lead and tin which having low melting point.

The other procedure is *Kupipakwa* method that involves *Shodhana*, *Kajjali Nirmana*, *Bhavana* and *Kupipakwa*. In this method the metals after *Shodhana* are subjected with mercury to form amalgam then mixed with purified sulphur to form smooth powder. This procedure make

Kajjali which further treated with liquid media for specific time period. The dry mixture filled in *Kachkupi* covered with cloth smeared by mud, then subjected to *Vaaluka Yantra* and after cooling the product is collected

and grounded to fine powder.^[7-10] **Figure 1** depicted general steps involved in the preparation of herbo-metallic formulations.



Figure 1: Steps involved in the preparation of herbo-metallic formulations.

The general health benefits of herbo-metallic formulations are as follows

- ❖ These formulation help in detoxification; cleanse kidneys and intestinal waste.
- ❖ Helps to strengthening bones and teeth.
- ❖ Suppress pathogenesis of mental illness such as; insomnia and depression.
- ❖ Improves digestive and metabolic activities.
- ❖ Prevent free radical induce damage of tissue.
- ❖ Enhances vitality, vigor and sexual strength.
- ❖ Helps to treat skin ailments and allergic problems.
- ❖ The metallic formulations boosts immune power therefore resist against infections and fever.

Role of herbo-metallic formulations in specific disease conditions

➤ **Heart Diseases**

These formulations helps to maintain blood flow, prevents myocardial ischemia, strengthening heart muscles.

➤ **Mental illness**

These drugs reduce brain inflammation, enhance mental strength, cure depression and improve concentration.

➤ **Cough and cold**

The preparation such as; *Swarna Bhasma* helps to reduce wheezing, remove sputum from lungs and make breathing easy.

➤ **Microbial infections**

The antimicrobial effect of herbo-metallic formulations reduces fever and control spread of infections. These drugs also boosts immune power thus prevent prevalence of microbial infections. The drugs also relief infections related to sense organs and help to reduces redness and irritation of eye.

➤ **Sexual Disorders**

The rejuvenating and revitalizing effects of herbo-metallic preparations help in sexual disorders such as;

erectile dysfunction, premature ejaculation, low sperm count and infertility. The purified metallic formulations act as an aphrodisiac thus boosts sexual stamina.

➤ **Skin disease**

The many *Bhasma* offers anti-aging properties, prevent wrinkles, relieve symptoms of psoriasis, and dermatitis. These drugs also help to make skin healthy and glowing thus enhances physical appearance.

➤ **Digestive problems**

The digestive problem can be cure with formulation such as; *Abhrak bhasma* which used for Indigestion. The *Deepan* and *Pachana* property of *Abhrak bhasma* improves digestive power and reduces severity of constipation and Indigestion.

Specific therapeutic role of some herbo-metallic formulations

✓ **Swarna Basant Malti Ras**

It contains gold, *Piper-Nigrum* and white pear powder, offers therapeutic response in fevers, cough, tonsillitis, bronchitis and common infections.

✓ **Kamdudha Ras**

It contains Ochre, *Tinospora cordifolia* and calcined mica. Offers beneficial effects in hyperacidity, fever, headache and problems related to circulatory system.

✓ **Shwaskuthar ras**

It made from sulfide of mercury, *aconitum ferox*, sodium bicarbonate and *Piper Nigrum*. It offers therapeutic benefits in cough, bronchitis and pneumonia.

✓ **Kaharva pishhti**

It is prepared from *Trinkantmani* and *Rosa Centifolia*, recommended to treat bleeding problems.

✓ **Bolbadh ras**

Prepared from mercury sulfide along with *Tinospora cordifolia* and *Commiphora mukul*, it offers beneficial effect in bleeding disorders.

✓ **Punarnavam andoor**

Prepared from ash of Iron ore, *Boerhavia diffusa*, *Picrorhiza Kurroa Embelia ribes*, used for anemia, joints swelling, liver cirrhosis and blood pressure.

✓ **Vriht vat chintamaniras**

Contains calcined mercury, purified sulfur and herbs, can be used for vitiated *Vata*, paralysis, epilepsy, joint pains and muscle stiffness.

✓ **Yogender Rasa**

It contains sulfide of mercury, calcined gold, magnetic iron, *Myristica Fragrans*, the formulation can be used for muscular weakness, paralysis, headache and insomnia.

6. Tripathi ID, Krishna Gopalbhatta's(2006) Rssendra Sara Samgraha, Chaukhamba Orientalia, Varanasi, 86.
7. Mishra LC, Adra T, Batchu SV, Bhatt HA. Scientific basis for ayurvedic therapies. LLC Boca Raton, Florida: CRC Press, 2004; 84-99.
8. Chopra A, Doiphode VV. Ayurvedic medicine: Core concept, therapeutic principles, and relevance. Med Clin North Am., 2002; 86: 75-89, vii.
9. Sarkar PK, Chaudhary AK. Ayurvedic Bhasma: The most ancient application of nanomedicine. J Sci Ind Res., 2010; 69: 901-5.
10. Gopal Krishna Bhatta, Rasendra Saar Sangraha, with savimarsha 'Rasavidyotini 'Hindi commentary by Dr. Indradev Tripathi, II edition, Chaukhamba Orientalia, Varanasi, Year-1998.

CONCLUSION

The herbo-metallic formulations are unique formulary of classical Ayurveda, possess high efficacy in minimal dose, good palatability and excellent biocompatibility. These formulations maintain alkalinity thus balances acidity, absorbed easily and offers desired therapeutic response quickly. Mainly metals, minerals, animal products and herbs are used to prepare such formulations and adaptation of correct manufacturing process is very important. These formulations can be prepared by using techniques such as; *Shodhana*, *Marana*, *Bhavana* and *Putra*. These steps reduce particle size thus facilitate absorption and assimilation of active component into the body. These drugs offer beneficial effects in tonsillitis, microbial infections, inflammation, heart problems, indigestion and sexual problems, etc. The article finally concluded that herbo-metallic formulations can be used to treat many illnesses and improving overall health.

REFERENCES

1. Tripathi I, editor. Vagbhatta, Rasaratna Samuchchaya, Adhyaya 28/1. 3rd ed. Varanasi: Chaukhambha Sanskrit Bhavana, 2006; 371.
2. Acharya YT, editor. Agnivesha, Charaka, Dradhbala, Charaka Samhita, Viman Sthan, Rasa Viman Adhyaya 1/21. Reprint. Varanasi: Chaukhamba Surbharti, 2011; 235.
3. Kasyapa M, Jivaka V, Vatsya, Samhita K, Sthan S, Adhyaya A. Sthana Sthana, Yonivyapad chikitsitiyam adhyaya. In: Tiwari PV, editor. Kashyap Samhita. 1st ed., 18/25. Varanasi: Chaukhamba Vishvabharti, 1997.
4. Singh P, Yadav RJ, Pandey A. Utilization of indigenous systems of medicine and homoeopathy in India. Indian J Med Res., 2005; 122: 137-42.
5. Shastri K N (2000) Sadanand Sharma's Rasataringini, Motilal Banarasidas Publications, New Delhi, 15: 228.