**INTRODUCTION**

Ayurveda is most ancient medical system of India known to human being since time immemorial. It is as old as Indian civilization. It is science of life. In ayurvedic literature, diseased condition is defined as imbalance or loss of equilibrium of natural harmony of body, mind and spirit. Ayurveda not only guide to maintain this harmony but also recommend the various ways to normalize the deranged harmony among body mind and spirit.

Medicines of Ayurveda can be divided into two groups: *Kasthaushdhies* and *Rasaushdhies*. *Rasaushdhies* are mainly prepared from metlas and minerals. These are more famous among the vaidyas because of their certain qualities like quick action, low doses, tastelessness, long shelf life e.t.c. *Ras Shastra* is an important branch of Ayurveda in which materials obtained from earth are processed and changed into therapeutically useful medicaments. These medicines are known as *Rasaushdhies*. Development of *Ras Shastra* was started in 600 B.C. Materials of *Ras Shastra* were divided in different groups like *Maharasa*, *Uparasa*, *Sadharan Ras*, *Dhatu*, *Updhatu*, *Ratna*, *Upratna*, *Visha*, *Upvisha*, *Sudha* and *Sikta varga* e.t.c. *Samanya shodhan*, *vishesh shodhana*, *Marana*, *Jarana*, *Murchchna*, *Amritikaran*, *Lohitikaran* like specialized mineral processing techniques. These are used in various dosage forms like *shuddha dravya*, *bhasma*, *druti*, *satva*, *parpati* and *pottali*.

*Rajata* is a metal kept in *Dhatu Varga*. Since vaidic period people were known to its properties of increasing immunity power, body strength, mind and satva. To achieve long life people used silver pot to drink water and eat food. In *samhita kala* metals were being used in *churna* form in different formulations. Later processing technology of *Rajata* developed and *Rajata Bhasms* was being prepared with the help of different drugs. Thus use of *Rajata bhasma* started in pure *bhasma*

**ABSTRACT**

Metals and minerals are known to human beings since pre-vaidic period. Earlier they were used for domestic purposes as to make household things like knife, utensils, hunting tools e.t.c. Later on their use was started to procure health. After that therapeutic properties of metals were also recognized and their use was started to treat the diseases. *Rajata* is also well known metal used in ayurvedic therapeutics since *samhita kala*. With the development of *Ras Shastra* processing technologies of metals developed. Various methods of *shodhan* and *marana* were introduced and use of *Rajata bhasma* in many formulations was started to treat severe diseases. In this paper effort have been made to compile ayurvedic formulations indicated in many acute and chronic diseases in which *Rajata* is an important ingredient.

Key words: Rajata, Ayurveda.
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**Table 1:**
Lauha, Tankada, Shankha Bhasma,

5. Piyushvallī rasa B.R.-
   8/334-335
Shuddha Parada, Shuddha Gandhaka, Abhraka Bhasma,
   Rajata Bhasma, Lauha Bhasma, Tankada, ,
   Swarnamakshik,

   Lavanga, Swetachandana, Bhringaraja
   Patha, Swetajeeeraka, swarasa (blue)
   Varahakranta, Ateesh, Indrayava, Jaiphal,
   Lodhra, Kutaja, Sunthi Bilva, Dhattura,
   Dadima, Manjistha, Dhataki, Kustha,
   Rasanjana

Atiser, Jwar,
   Raktatisar, Pichchasrava,
   Sangrahi, Trishna, Sarvanga
   Daha, Hrillus,
   Aruchi, Vaman,
   Gudabhrinisa,
   Pleehavridhi, Prama, Raktapradar,
   Kamala, Pandu, Amadosha yuksa
   Atiser, Arsha, Rajakshma,
   Shotha, Kamala,
   Pandu, Pleehavridhi, Kustha, Pramha,
   Daruna jwar, Rajakshma, Jwar,
   Gulma, Vidradhi, Mandagni,
   Swabheda, Kasa,
   Aruchi, Vaman e.t.c.

6. Vijaya parpati B.R.-
   8/461-484
Awalasar Gandhak, Shuddha Parada, Rajata, Swarna,
   Vaira, Mukta,

7. Mahamraganka rasa B.R.-
   14/162-169
Swarna Bhasma, Parada Bhasma, Ras Sindura, Mukta Bhasma,
   Shuddha Gandhaka, Rajata Bhasma, Pravala Bhasma,
   Heeraka bhasma

   Binjaura Nimbu swarasa
   Gulma, Vidradhi, Mandagni,
   Swabheda, Kasa,
   Aruchi, Vaman e.t.c.

8. Laxmivilas rasa B.R.-
   14/222-225
Swarna Bhasma, Rajata Bhasma, Abhraka Bhasma,
   Tamra Bhasma, Vanga Bhasma, Lauha bhasama,
   Naga bhasma, Mukta bhasma, Parada bhasma

   Shuddha Vatsanabha Madhu, chitrak kwath
   Kshaya, Tridoshaja Pandu, Kamla,
   Vatata rog Shopha, Pratishtyaya, Arsha,
   Shoola, Swasha, Kasa,
   Swabheda, Kasa,

9. Kinnarkanth rasa B.R.-
   17/15-20
Shuddha Parada, Shuddha Gandhaka, Abhraka bhasma,
   Swarnamakshika Bhasma,

   Swarasa of Vasa, Bhringaraj,
   Vraht, Adraka
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<td>Parade, gandhkaa, vanga, rajata, kharpaha, varatika, lauha bhasma</td>
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<td>No.</td>
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<td>Makardhwaj rasayan B.R.-73/75-77</td>
<td>Swarna mukta pisti, vanga, kanta lauha, rajata bhasma, kansya bhasma, rasa sindura, pravala, abhraka</td>
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<td>Parade, gandhka, lauha, abhraka, rajata, swarna, swarnamakshika,</td>
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28. **Raj vallabh rasa**

   - Tankana, Lauha bhasma, Abhraka bhasma, Tamra bhasma, Parada, Gandhaka, Rajata bhasma
   - Jatiphala churna, Lavanga churna, Mustaka churna, Twaka, Vradaela, Hinga, Jeeraka, Tejpatra, Yavani, Shunthi, Saindha
   - Dhatri swarasa, Shoola, Anaha, Krami, Kushtha, Dadru, Vata raka, Bhagandar, Updansh, Atisar, Grahnhi, Arsha, Pravahika

   - R.S.S.  2/5/136-140

29. **Raj mriganka rasa**

   - Rasa Sindura, Swarna bhasma, Rajata bhasma, Manahashila, Gandhaka, Hartala, Varatika, Tankana
   - Ajadugdha
   - R.S.S.  2/11/3-7

30. **Ratna garbha potali rasa**

   - Rasa-sindura, Vajra bhasma, Swarna bhasma, Rajata bhasma, Naga bhasma, Lauha bhasma, Tamra bhasma, Mukta, Swarnamakshika, Shanka bhasma, Shuddha Tuttha, Kaparda, Tankana
   - Maricha, Vidruma, Chitraka kwatha, Arkadugdha, Nirgundi swarasa, Ardra swarasa
   - R.S.S.  2/11/14-19

31. **Sarvanga sunder ras**

   - Parada, Tamra bhasma, Shuddha Manahshila, Swarnamakshika, Shuddha Hartala, Rajata bhasma, Swarna bhasma, Vanga Bhasma, Lauha bhasma, Abhraka bhasma, shuddha Gandhaka
   - Shunthi churna, Pancha lavana, Shunthi, Jayanti, Vijaya, Maharastrika, Dhattru
   - R.S.S.  2/29/42-46

32. **Vrahat poorna**

   - Parada, Gandhaka, Lauha bhasama, Abhraka bhasama, Rajata bhasama, Vanga bhasama, Swarna bhasama, Tamra bhasama, Kansa bhasama, Gangara, Jeeraka, Priyangu, Karpoor, Triphala kswaras, Ghrirtumari kswarasa, Triphala kswarasa, Triphala kwath, Erandamula kwath, Kasa, Swasa, Vriddhiroga, Aruchi, Amadosha, Shoola, Katisloola, Hhritasoshoola, Kamla, Pandu, Prameha

   - Chandra rasa- R.S.S.  5/52-66
33. **Sarveshwar rasa**  
R.P.S.8/150-151  
Shuddha parada, Shuddha Ganthaka, Abhraka bhasama, Tamra bhasama, Lauha bhasama, Hingula, Swarna bhasama, Swarnamakshika bhasama, Rajata bhasama, Vajra bhasama, Hartala, Vatsanabha visha churna, badi pippali
Nimbu swarasa, Vasa swarasa, Dhattura, Vatsanabha kwath, Aarbakshere, Jambiri nimbu swarasa, Snuki ksheer, Kanera dugdha
Asadhya kustha, Switra, Mandala kustha

34. **Agni kumar rasa**  
R.P.S.-8/182-188  
Shuddha Parada, Shuddha Gandhaka, Abhraka bhasama, Tamra bhasama, Lauha bhasama, Swarna bhasama, Raupymakshika, Rajata bhasama, Vajra bhasama,  
Choti Ela, Tejpatra, Dalchini, Lavanga, Agaru, Vanslochana, Nagaramotha, Danti, Kasturi, Karpoora
Mundi, Sariva, Kakamachi, Aswagandha, Nirgundi, Bhringraj, Badi Pippali, Ardraka, Surmuki, Chitraka, Aswagandha, Dhatki, Draksha, Gorochana, Yastimadhu, Nagabala, Mahabala, Kaseru, Gangeruki
Kasa, Swasa, Mutakrichcha, Grahi, Ashra, Shotha, Ashmari, Vatavikara, Shoola, Apasmar, Vajkarana

35. **Kandarpa sundar rasa**  
R.P.S.-8/243-247  
Rasa sindura, Vajra bhasama, Naga bhasama, Mukta pisti, Rajata bhasama, Swarna, Abhraka, Teekshnalauha, Vanga bhasama,  
Choti Ela, Tejpatra, Dalchini, Lavanga, Agaru, Vanslochana, Nagaramotha, Danti, Kasturi, Karpoora
Napunshakata,  
Asadhya kustha, Switra, Mandala kustha

36. **Vrahat gagan sunder rasa**  
R.S.S.2/4/8-12  
Shuddha parada, Shuddha Gandhak, Lauha bhasama, Varatica bhasama, Rajata bhasama,  
Ativisha churna,  
Dhanyo kwath, Shunthi kwatha, Atisar, Darun jwar, Grahi, Aruchi, Shoola, Raktatisar, Bhrama

B.R.-Bhaishhya Ratnavali, R.S.-Rasendra Sar Samgraha, R.P.-Ras Prakash Sudhakar
form and in formulations too.

**Brief description of Rajata**

**Mythological origin**¹
- **Rajata** is generated from the tears of third eye of lord shiva.
- When Tin is processed with the help of mercury then it changes into silver.

**Varieties**²
- 3 types - Sahaja, Khanija, Kratrim
- 2 Types- Tarshukla and Tarkrisna.
- 3 Types- Khanija, Vangaja & Vedhaja

**Properties of grahya and agrahya Rajata**³
- Rajata which is heavy, smooth, soft, white in colour like Shankha or moon, unaffected from intense heat is said to be taken for preparation of Rajata bhasma and which is thick, becomes yellowish red, rough and light on heating, breaks with cracks, looks hard on hammering should not be taken for pharmaceutical work.

**Shodhan drugs**⁴
- Agastya patra Swarasa, Malkangni Taila, Nimbu Swarasa, Changeri Swarasa, Naga, Kshara, Amla, tankana

**Marana drugs**⁵
- Parad, Hartal, Gandhak, Swarnamakshik, and Hingula

**Pharmacological properties**⁶
- **Rasa** - Madhur, Kasaya, Amla
- **Guna** - Snigdha, Guru, Sara
- **Virya** - Sheta
- **Vipaka-Madhur**

Effect on **doshas** - Vata Kapha nashak

**Dose**⁷
- 1/4-1 Ratti (31-125mg)

**Chemical properties**⁸
- **Chemical name** - silver
- **Symbol** - Ag
- **Atomic number** - 47
- **Atomic weight** - 107.868
- **Melting point** - 961.93 °C
- **Boiling point** - 2212.6 °C
- **Specific heat** - 0.056 cal/gm/c at 20 c
- **Thermal conductivity** - 1.00(C.G.S.units)

**Valency** - 1
- **Density** - 10.5
- **Hardness** - 2.3

**Therapeutic uses of Rajata**⁹

Since Vaidic period Rajata was used as an agent which maintains health of healthy individuals and increases life. Acharya charak has described Indroka rasayan which increases bal, buddhi, satwa and agni. **Rajata** is one important ingredient of this. He has also narrated that if a pregnant lady takes milk kept in silver pot then child born will have qualities like strong mind and vigour. Sushruta has told that silver acts as preventive agent against water born infections. When silver pot filled with hot water is kept over affected part, it relieves abdominal colic. A silver containing collyrium is mentioned for the treatment of Shukti

Acharya vagbhatta has said that a silver retard aging process and it has qualities of lekhan and trsidosa shahan. It is an ingredient of churmanjana.

Kashyap has told use of rajata in making varanabantha which prevents abortions. Besides these silver was also being used in making surgical instruments, vastinetra, pots for containing different things.

After development of Ras Shastra use of Rajata Bhasma started in Ayurvedic compounds. Different Acharyas used silver bhasma in formulations of different diseases. Some of these formulations are summarized below-

**DISCUSSION**

Metals are known to us since long back. They were used in routine life in many ways. In Ayurvedic therapeutics they are being used since the period of Charaka Samhita. From 6th century onwards their use has been started in bhasma form along with different Anupanas. In combination with other drugs of Ras Shastra and Bhaishjiya Kalpana, Rajata is being used in diseases of all the body system. Mainly it affects the nervous system. It increases the memory power and gives strength to neurons. Thus it affects every system of our body and works in many acute and chronic diseases.
CONCLUSION

- Rajata is very important metal of Ras Shastra, which is being used for therapeutic purposes since samhita kala.
- It increases strength of body and mind along with immunity power. Thus it has potent Rasayan property.
- Rajata acts as disinfectant, so it was used to protect water born infections. In the modern era it was successfully used for wound dressing.
- Along with different herbal and mineral drugs it is used to treat many severe diseases.

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