**ABSTRACT**

*Rasashastra* evolved based on concepts of *Dhatuvada & Dehavada*. There are various textbooks which describes on these concepts and *Rasadhyaya* is one among them. *Rasashastra*/iatrochemistry is mainly dealing with the processing and therapeutic utilization of mercury, other metals and minerals. The present article highlights framework of the book, its author, time period, chapters with detail critical analysis and peculiarities. This article even describes about the contribution of the text towards *Ayurveda*.

**KEYWORDS:** Rasashastra, Rasadhyaaya, Dhatuvada, Dehavada

**INTRODUCTION:**

*Rasashastra* is an integral part of *Ayurveda* that deals with mercury, metals and minerals having therapeutic and alchemical importance. The present article highlights about review of the text *Rasadhyaya* authored by Pandit Rama Krishna Sharma, all the pharmaceutical procedures are explained in detail as well as different methods have been explained like *Shodhana, Marana, preparation of Kupipakwa Rasayana* etc. Since this book emphasizes on *Rasashastra* hence called as ‘Rasadhyaya’. Such books are need of hour to study in detail.

**About the Author and Period:**
- The *Kashi Sanskrit* Series 79, *Shri Kankalaya Shishya Yogi Virachita*
- Time period: 14th century AD.

**Editor, Publisher and Commentaries:**
The text book edited by Pandit Rama Krishna Sharma, with Rasaprabha Hindi commentary by Dr. Indradeva Tripathi, Published by Chaukambha Sanskrit Samsthan, Varanasi. Champaka has written Sanskrit commentary. In 1386 1st *Teeka on Rasadhyaaya* by Merutunga Jain.

**Contents of texts:**
Author has named the Chapters of text as Adhikara. Subject matter of the text contains total 481 verses and is divided into 21 chapters (As mentioned the preface of the book).

Mentioned five types of Rasa Pooja: Rasabhakshana, Rasasparshana, Rasadan, Rasadhyaana, Rasapooja.

**Peculiarities in Prathama Adhikara:**
*Rasadhyaya Vishayaka Pratidnya:*
Firstly, author has explained about the Parada Dosha, Dosha Nirdesha, Parada Shuddhi or Parada Samskaras, after that Lohasiddhi, Dehasiddhi and Rasayana are being explained.

*Saptakanchuka Doshas of Parada* found mentioned different than other authors; 1. Mruttikamaya Kanchuka, 2. Pashanamaya Kanchuka, 3. Jalajata Kanchuka, 4 & 5.
Nagaja Dwidosha & i.e Kapali & Kalka (Krushna Varna), 6 & 7. Vangaj Dwidosha i.e Shyama (having Panchavarna) & Kalika. Rasasya Pancha Dosha:
These Doshas are commonly present in Parada 1-Mala dosha, 2-Vanhi dosha, 3-Visha dosha, 4-Darpadosha, 5-Unmattha dosha.


Doshamukta Parada Prayogasya Phalama: Vaidyas who are practicing the Ashtadasha Samskarita Parada which is helpful to the Lohasidhi and Dehasidhi are Yashasvi or place secure in Swarga.
Parada Ashtadasha Samsakaras are arranged serially in different manner as given bellow:1-Patasarana Samskara, 2-Mardana Samskara, 3-Shodhana Samskara, 4- Murchitothapana Samskara, 5- Rasa Patana Samskara, 6- Uthapana Samskara, 7- Swedana Samskara, 8- Niyamana Samskara, 9- Nirodhana Samskara, 10-Mukkhari, 11- Jarana Samskara, 12- Vedhakruta Samskara, 13- Sarana Samskara, 14- Marana, 15- Pratisarana, 16- Kramana Samskara, 17- Vedha Samskara, 18- Udhatana Samskara.

Different methods of Abhraka Shodhana are explained:
In this text Abhraka shodhana with different drugs, two types of Jeerna Abharaka Jarana Vidhi, Jeerna Abharaka Parada Vidhi, Abhra Pishhti Nirmana Vidhi also explain in detail.
There is no reference regarding the explanation of about Jeerna Abharaka Suta-Loha Prakasharaji Jarana Vidhi, Jeernaya Prakasha Raji Sutasya Hemaraji Jarana Vidhi, Jeerna hemaraji sutasya Gandhaka Jarana Vidhi and lastly Jeerna Gandhaka Paradasya Manahshila Satwa Jaranavidhi.

Different types of Kharpara Jarana Vidhi in which Jeerna Kharpara Satwa Sutasya Annapatha Hiraka Jarana Vidhi this type of Parada is called as Roudra Samharaka Parada because it engulfs the all types of Rasa, Maharasa, Dhatu etc. here Upama given like a Shankara Mahadeva.

Vadvanal Vida nirmana Vidhi with different drugs should be used like Shankha, Madara Dugdha, Jambira Nimbu Swarasa, Sovarchala Lavana, Aja Mutra, Nara Mutra, Shilajita, Jayapala Beeja, Gunja, Tanka, Kasisa, Tintidik etc. The prepared Vadvanala Vida is engulfing the Parada as well as Swarna, Abharaka, all tyapers of Lohas also.

Siddharasa Nirmana Vidhi, Siddha Rasasya Phala nirupanam, Badhasutasya Sarana Vidhi also explained properly.

Dwitiya Adhikara:
Nagarajyadmuttanmandadi Nirupana- Nagaraji was Samanya Raji, Makshiki Raji is Madhyama Raji, Ghoshrai is Uttam.
Prakasharaji Niramanvidhi: TikshnaLoha-1 Pala, Kansa- 2 Pala, Tamra- 9 Pala, Pittala- 3 Pala, Naga- 15 Pala, Swarna Makshika – 7.5 Pala & do Jarana in a
Moosha upto Tamra part will be remaining is known as Prakashraji.
Kansyarakaj Nirmanavidhi: Saraloha Churna- 1 part, Kamsya Churna- 1part mixes in a Sharava and prepare in a bolus form. 1 part of Shuddha Naga add in a Moosha do Jarana, after that 1 part of Naga should be added do Jarana repeatedly. Then Kansyarakaj will be obtained.
Makshikaraj Nirmana Vidhi: Tamra Churna-4Pala, Thutha Churna-4Pala, Swarnamakshila- 4Pala, in a Moosha do Jarana upto 4 pala will be remaining is known as Makshikarakaj.
Nagaraj Nirmana Vidhi: Shuddha Tamra-1part, Manahshila-4 parts, Mruta Naga – 4 parts, Thutha Churna - 4 parts take all ingredients in a Moosha do Jarana upto 1 part will be remaining is known as Nagaraj.
Trutiya Adhikara:
Kharpara Satwapatana Vidhi is explained to do in Moosha of Kuchalakara and Vartulakara then Satwapatana is extracted through Naika by subjecting to BhudharaYantra.
Chaturthi Adhikara:
Manahshila Satwapatana Vidhi- Take Mrutakapatita Kanch Kupi fill with ManahshilaChurna and Abhrak put at the neck region close the Kanch Kupi, kept in a ValukaYantra on Teevrigni for 12to15hrs. Then Manahshila goes upper side to the bottle carefully collected after Swangashita. Tridhannapathdoraka Karana Vidhi is three types of Shad Vidha Loha Drutikarana Vidhi is explained.
Pancham Adhikara:
Dwitiya Shad Lohadrutikarana Vidhi: Peetavarna Devadali Vruksha Panchanga is prepared in to Bhasma. Bhavana is given with the Devadali Swarasa after that 1Gadhyana (4 Ratti) Swarna and 1Valla (3Ratti) Devadali Bhasma are amalgamated and the end product is Hemadruti.
Shashtam Adhikara:
Tamra Marana Vidhi- 1 part of Tamra Patra, 2 parts of Gandhaka are subjected for Mardana with Kumari Swarasa / Godugdha taken in a Sharava. Sharava samputa and Sandhibandhana are done after complete drying Pata is given and collected after Swangashita.
Saptam Adhikara, Ashtama Adhikara:
Tridhanna Patha Hiraka Karana Panchadha Marana Vidhi explained in this Adhikara. Three types of Hirakanna Pathakarana Vidhi also explain. Five types of Hiraka Bhasmikarana Vidhi has been explained.
Navama Adhikara, Dasham Adhikara, Ekadasha Adhikara: For Gandhaka different types of Gandhaka Shodhana, two types of Gandhaka Pitha Nirmana Vidhi, as well as Gandhaka Taila Nirmana Vidhi. Swarna (Hema) Nirmana Vidhi: 384gms of silver melted properly and added with 6 gm of Gandhaka Pitha to prepare Swarna (Hema). Gandhaka Pitha is also helpful for the goldsmiths.
Dwadasha Adhikara:
Three types of Hema Nirmana Vidhi with Gandhaka Taila have been mentioned.
Pratham Hema Karana Vidhi:
Shuddha Parada- 10 Gadhyanna (60gm) and Gandhaka Taila -1 Gadhyanna are
taken and placed in a Bhudhara Yantra and Sandhibandhana is done, later after drying puta is given with 4Chagana (4 dried stem). In this same manner 100 puta should be given and every time Gandhaka Taila is to be added to each puta and Sandhibandhana should be done. After these 4 puta Hema Raji Dasha Valla is added and again 4 puta is to be given. By doing this the Parada becomes Jarita by 1 Karsha into it. Later to this the Rajata Patra is added and Kukkuta Puta is given. Thus, Hema of Panchadasha Varna is attained.

Dwitiya Hema Karana Vidhi:
Rajata 12 parts, Tamra Loha 16 parts placed in a Vajra Moosha, melt and prepare Chandrarka Khota. This Khota is converted into a Patra form and to this Khota apply Hemaraji churna and keep in a Sharava Samputa and give Kukkuta Puta. By this method Panchadasha Varna Hema will be obtain.

Trutiya Hema Niramana Vidhi:
Take Pittala Patra and cover with Purvakta Nirmita i.e (Dwitiya Hema Karana) and give 50 Kukkuta puta then 50 Varna Hema will be obtained.

Trayodasha Adhikara:
In this chapter the different types of Prakarantrena Gandhaka Tailena Hema Nirmana Vidhi Gandhaka Vaarihrutipiti Nirmana Vidhi also mentioned. Gandhakadrutipitya Swarna Nirmana Vidhi have been mentioned.

Chaturadasha Adhikara:
Gandhaka Drutipitya Paradabandha Khotabandha: In Sharava take Shuddha Parada is taken in Sharava and kept on Mrudu Agni for 21 days and put some drops of Gandhaka Jala throughout the process for Pachana, then subjected for Parada Bandha or Khota Bandha.

Panchamodasha Adhikar:
Gandhakadrutipitya Uttama Swarna Nirmana: Explain the procedure Sharava in a Kukkuta Puta this method is use for the preparation of Uttama Swarna. It is also known as Gandhaka Druti Pithi Chatushashti Vedhak.

Shodashadasha & Saptadasha Adhikara:
Talaka Shodhana Vidhi: Acharya says that Talaka means Godanti i.e. Haratala Godanti Shodhana is done with 5 ingredients like Saindhajala, Lavana Yukta Kanji, Kushmanda Swarasa, Dugdha, Wadawai Jala.

Ashuddha Godanti Upadravani: Ashudha Godanti produces Hrudkleda, Bhrama, Nadi Vikara so it should be used after Shodhana only. After Shodhana it acts as Amruta.

Ashtadasha Adhikara, Ekonwimshatiya Adhyaya:
Abharaka Trividha Drutinirmana Vidhi as well as its Karma also mentioned in Rasadhyay.

Abhraka Druti Nirmana:
The Suksha Churna of Vyaghra Madana is to be taken in a quantity of 80 kg and pound to fine powder and it should be added in a Kanji and water should be added into it upto the level of Kantha Bhaga of Sthali. It should be kept for 7 days so that it will attain the Amlata Bhava. Another Amla Jala should be prepared by same method.

Shweta Abhraka Churna should be taken in a quantity of 40 kg and it should be mixed with prepared Amla Jala. The mixture should be taken in Ulukhala Yantra and it should be pounded for 1 Yama and Dhanya Abhraka is to be prepared. This Dhanya
Abhraka should be placed in a water for 21 days and it should be dried under the sun rays and it should be dried under the sun rays again and again. In this ¼ part of Rala, Tankana Kshara, Lavana, and Kana Guggulu should be taken, Tila 36gm, Guda120gm, Pallika Pithi 13 Ratti, Madhu 1gm Dugdha 12gm all the above ingredients should be taken with Abhraka and Mardana is to be done. Then it should be kept in a Rakshasa Yantra and heated upto 1 Yama, after that it should be kept for Swangshita and then Abhraka druti is to be collected.

Dwitiya Dhanyabhara Druti Nirmana Vidhi:

Shweta Dhanyaabhara- 12gm in milk vessels and feed to Sehula. It drinks the milk and throws out side as a Purisha. This Purisha should be collect and measure it, take Tankana Kshara 1/4th part of the Purisha weight, then do Mardana with Ghruta or Madhu prepare it as like Lepa and take Tumbhi Nali Yantra and Lepa is done to inner side of the Tumbhi Yantra Dhmapana should be done by this method Dwitiya Dhanyabhara Druti should be prepared.

Trutiya Dhanyabhara Druti Nirmana Vidhi:

Take brain of the rabbit, add Dhanyabhara equal to the quantity of the brain ie240gm and do Mardana it gets become like Pinda and placed in Ghruta or Taila coverd Patra and do Sandhibandhana properly and placed it in Kankoshtha for 21 days. In this pot Krumi originate and these engulf the Abhraka, later Krumi dies because of heat or absence of Mechaka. Remaining material is after 21 days is known as Trutiya Dhanyaabhara Druti.

Vimshatiya Adhaya:

Hemavajra bhasma, Bhunaga Satwakarma Nirupana, Gutikanjana Parada Sevana Vidhi: With the blessings of Lord Bhairava, Ganesh, Lakshmi, Saraswati the Gutika, Parada, Anjana become Siddha. Gutika, Anjana, and Parada each are having 84 in number. In above formulation take in a use than before 1 month upto obtained result all Yoga Tapa should be done, Like Brahmacharya Palana, Havishaanna Bhojana etc. Shree Kankalayan Yogi has explained the Anjana, Gutika or Parada Prayoga etc.

Ekvimshatiya Adhaya:

Procedure of prepare Balavadini Guti:

Abhraka Satwa- 4 Valla (1.50gm), Swarna Makshika – 4 Valla, Shuddha Rajata – 4 Valla, Hemaragi -1Valla and Ashtadasha Samskarita Parada-49Valla all these ingredients are taken in Khalwa Yanta and Mardana for 7 days. Letter on it is taken in to Dola Yantra and Swedana procedure is carried out on Mandagni for 2 days, Letter on the Guts are prepared and Swedana is done in Panchamruta for 8 Prahara. Then it is taken into Kanta Loha vessels and Gutikas are mixed with Madhu and it is kept in Valupurita Sthali, This Sthali is placed over the Koshti and Agni is given for 8 Prahara in a same pattern after Madhu it is placed in Ghruta, then Dadhi, Dugdha, Sharkara separately and individually 8hrs. Swedana is carried out. This medicine is use full for the Dnyanapradh this medicine starts from the first month of pregnancy. It is chewable for 1month whole day and night time also. It shows tremendous effect on human beings.
DISCUSSION
There is no any specific time period is given in the book. Rasadhyaya author by Kankalaya and his disciple, because their period is not known. It can be said that it was contemporary of the Rajya. Because he has used Yawan, Shashan, Kalik, Maap, (measure) Valla, Gadyann and Man etc. in his book.
Many words and preparation processes in this text differ from other texts. There are some words that are not known by dictionaries and other texts, like Karpar, Kodiyaka, Siddhachakra, Valla, Gadyaan, Mana, Dugdhpali, Leehalaka, Kumbak etc. which do not have clear knowledge from the dictionary. Acharya’s unique contribution is seen in this text. In this text, the methods of Parada Samskara are different from other contemporary texts. In the order of the Parada Samskara, he first described the Patsarana, which is their fundamental contribution. In this text Acharya explained the process of Heerak (diamond) testing and the formation of Gandhaka Taila. Gold production has been described by Gandhaka Taila and Gandhak-Druti Pishti. Description of different types of Druti in the maximum chapters, are the specialty of the text. In this text Acharya quoted that Lohavada and Dehavada will be achieved by the consumption of Parada formulations, Khot formulations and Gutika formulations. Acharya has highly praised the treatment of Rasaushadhi very effectively. In Rasadhyaya the Author has included different types of Druti, Pishti and Rasa Aushadhies by his own experience. There is no any doubt that Rasadhyaya is one of the best texts of its time. In modern era it is also very useful in the preparation of various pharmaceutical formulations.

CONCLUSION
In this text very systematic description of Parada Samskara (Astdasha) has been described not only for the metallic transformation but also for the metabolic transformation by which body will become strong and healthy. The features of Rasa therapy are that it works quickly and gives health immediately. Rasadhyaya is known for its virtue of practical usefulness. It gives contribution to the development of Rasashastra through various methods of preparations of Rasa-Yogas. Chapters and its contents are well arranged. Rasadhyaya is an important text on Ancient Indian Alchemy and therapeutics. The subject matter of the text is focused on performance and alternative methods of experimentation.

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