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Critical review of *Parada Shodhana*, *Jarana* and *Marana* processes

Amandeep Sharma¹, Amit Kapila², Rajni Bhardwaj³

¹Assistant Professor, Department of Agad Tantra, ^{2,3}Assistant Professor, Department of Rasashastra & Bhaishajya Kalpana, Desh Bhagat Ayurvedic College & Hospital, Mandi Gobindgarh, Punjab, INDIA.

ABSTRACT

Rasashastra is a branch of Ayurveda, related with the formulations involving drugs of metal/mineral origin. The different perspectives secured under this department are their origin, varieties, physical and chemical characteristics, therapeutic properties and their uses. *Parada* has the capability of consuming all the metals and minerals by which it attains high therapeutic value over other medicines. *Shodhana* is the process, which not only removes the *Doshas* but also increases strength and potency of the drug. Depending upon the nature of the metal and the disease for which they are meant to be used, the specific process for purification vary from one metal to the another and the process is repeated for several times. While *Jarana* is the process in which *Parada* reverts back to its original state without being subjected to processes like *Galena*, *Patina*, etc. In *Marana* removes the harmful effects produce various diseases in our body. In which metals/minerals should be converted into suitable form using *Marana* process.

Key words: *Parada*, *Shodhana*, *Jarana*, *Marana*, *Bhasma*.

INTRODUCTION

Rasashastra is a branch of Ayurveda pharmaceutics that deals with preparation of formulations using mineral, metals, gems, etc. There are different processes of *Parada* (Mercury) mentioned in Ayurveda Pharmaceutics which is called *Samskaras* (processes), *Shodhana* is the type of *Samskara*. The exact meaning of the term *Shodhana* is the purification. The term used particularly for *Shodhana* or processing of *Parada* is *Samskara*. Charaka has explained *Samskara* as *Gunantaradhana*.^[1] During the

process of *Shodhana*, the metal or mineral acquires a different property which is useful therapeutically and which overcomes original harmful properties of the metal. The process of eliminating the impurities of the metallic substances by means of *Svedana* (vapouring), *Mardana* (grinding), *Prakshalana* (performing frequent ablutions), *Galana* (straining fluids), *Avapa* (substances are added into the liquefied metals), *Nirvapa* (metals are burnt to red hot and dipped in liquids), *Bhavana* (maceration), *Bharjana* (frying in pan) etc. specific process and techniques with the help of specifically mentioned *Aushadha Dravya* (plant juices or animal products), is known as *Shodhana*.^[2] *Sodhana* process is subdivided into two major categories,^[3] namely *Samanya* and *Vishesha*. In *Samanya Shodhana*^[4] It is used as general procedure for *Shodhana* of all drugs of a particular group, in other words these drugs should be purified individually through the same procedure. e.g., *Samanya Shodhana* of metals and minerals. *Vishesha Shodhana* is used as specific procedure for particular drug material individually. This process should be useful after *Samanya Shodhana*.^[5]

Address for correspondence:

Dr. Amandeep Sharma

Assistant Professor, Department of Agad Tantra,
Desh Bhagat Ayurvedic College & Hospital, Mandi Gobindgarh,
Punjab, INDIA.

E-mail: dramandeep.as@gmail.com

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Changes during Shodhana process

- 1. Physical changes:** Elimination of physical impurities, Reduction in hardness, Increase brittleness,
- 2. Chemical change:** Elimination of chemical impurities, Formation of chemical compounds, change into desired compound.
- 3. Biological changes:** A Physico-chemical change of the material helps to increase its biological availability, means to improve its biological efficacy on the human body.

Parada Shodhana

Many methods of *Shodhana* procedures are prescribed in our texts, but the method, which is easy, effective are used in practice. During *Mardana* care is taken so as to prevent the spilling of *Parada*.

Equipment: Khalva yantra, Vessels, Mixer, Lukewarm water.

Parada Samanya Shodhana - Equal quantity of *Parada* and lime powder was added to *Khalva Yantra* (mortar pestle) and grinding was done for 8 hours for 3 days. *Parada* was then separated from lime powder and washed with water. Lime purified *Parada* was then triturated with equal quantity of *Rasona Kalka* (garlic paste) and half quantity of *Saindhava Lavana* (rock salt) until blackish colour was obtained. *Parada* was then separated from the mixture washed with water until clean *Parada* was obtained.

Table 1: Parada Shodana according to different texts

SN	Ingredients	Procedure	Reference
1.	<i>Parada</i> 1part, <i>Sudha Churna</i> 1part, <i>Nistusha Rasona</i> 1part, <i>Lavana</i> 1/2part	<i>Parada</i> and <i>Sudha Churna</i> <i>Mardana</i> done for 3 days and then <i>Vastragalana</i> with two fold cloth and placed in <i>Khalwa</i> . Then other drugs are added and <i>Mardana</i> done till <i>Kalka</i> becomes black. Then <i>Parada</i> is separated from the <i>Kalka</i> by washing.	R.T.5/27-30

2.	<i>Parada, Gritakumari, Chitraka Kwatha, Raktasarshapa, Brihati Kwatha, Triphala Kwatha</i>	<i>Mardana</i> with the prescribed drugs for 3 days.	R.T.5/31, Rm. 1/21 R.J.N.4/
3.	<i>Parada, Nagavallidala Rasa, Ardraka Rasa, Ksharatraya</i>	<i>Mardana</i> of <i>Parada</i> is done with the mentioned <i>Dravyas</i> for 3 days.	R.T.5/34-35
4.	<i>Parada, Sudha, Grhadhooma, Ishtika, Kanji</i>	<i>Parada mardana</i> with <i>Sudhachurna</i> for 7 days and then <i>Mardana</i> with <i>Grhadhooma</i> and <i>Ishtika</i> for 3 days and washed with <i>Kanji</i> and separated using fourfold cloth.	R.T.5/36-37
5.	<i>Parada, Shweta Chandana, Devadaru, Kaakajangha, Jayanti, Karkati, Musali, Kanya</i>	<i>Parada Mardana</i> is done with the <i>Rasa</i> of the mentioned <i>Dravyas</i> and then subjected to <i>Patana</i> .	R.S.S.1/27 A.K.23/22 R.J.N.4
6.	<i>Parada, Kumari, Nisha Churna</i>	<i>Parada Mardana</i> is done with the mentioned <i>Dravyas</i> and then <i>Patina</i> is done in <i>Patina Yantra</i> .	R.S.S.1/28, R.J.N.4, A.K. 23/23-24)
7.	<i>Parada</i> 1 part, <i>Gandhaka</i> 1/10th part, <i>Jambeera Drava</i>	<i>Parada</i> and <i>Gandhaka Maardana</i> is done with <i>Jambeera Swarasa</i> for 1 <i>Yama</i> and then <i>Pachana</i> is done in <i>Patina Yantra</i> . This whole process is repeated 7 times.	Rm.1/28-29 R.R.2/42 R.J.N.4,pg4 4 (Gandhaka 1/1 2th part) R.S.S.1/29 (Gandhaka 1/2 part)(3 yama)
8.	<i>Parada, Jayanti Patra, Eranda Patra, Ardraka Rasa, Vaayasa</i>	<i>Parada Mardana</i> is done with the mentioned <i>Dravyas</i> .	R.S.S.1/30
9.	<i>Parada, Jayanti</i>	<i>Parada Mardana</i> is	R.S.S.1/31-

	<i>Patra, Eranda Patra, Ardraka Rasa, Vaayasa.</i>	done with the mentioned <i>Dravyas</i> till it becomes <i>Shushka</i> and then repeated for 7 times. Then it is placed in <i>Mrthbhanda</i> and <i>Kshaalana</i> is done with <i>Ushnaaaranaala</i> . It becomes <i>Sarvadasha nirmukta, Saptakanchukavarjita</i> and can be used in <i>Sarvakarma</i> .	32R.J.N.4,
10.	<i>Parada, Nisa, Ishtika, Grihadhooma, Amlapishiti, Urna, Triphala, Aaranala, Kanya.</i>	<i>Parada Mardana</i> is done with the mentioned <i>Dravyas</i> . It is <i>Saptakanchuka Nashana</i> .	R.S.S.1/33 R.J.N.4
11.	<i>Parada, Kumari Swarasa, Chitraka Kwatha, Kaakamaachi Rasa</i>	<i>Parada Mardana</i> with <i>Kumari Swarasa</i> for 1 day, <i>Chitraka Kwatha</i> for 1 day and with <i>Kaakamaachi Rasa</i> for 1/2 day	R.S.S.1/34 R.J.N.4
12.	<i>Parada, Rasona Swarasa, Naagavallidala Rasa, Chitraka Kwatha, Kanji</i>	<i>Parada Mardana</i> is done with each of the <i>Swarasa</i> and then separated by <i>Kshaalana</i> with <i>Kanji</i> . It becomes <i>Sarvadasha Nirmukta</i> and can be used in <i>Sarvakarma</i> .	R.S.S.1/35-36 R.J.N.4

Parada Jarana

It is a process in which mercury is made to consume/ingest and digest various *Satvas* obtained from minerals and some of the metals in different proportions to make the mercury highly potentiated from both *Rasayana* and *Lohavedha* point of view. It is useful for *Dhatuwada* and *Rasayana* purpose. However without *Agni Samskara* it is not possible. The *Rasa Shastra* texts claim that *Parada* treated with *Gandhaka Jarana* process becomes highly potentiated and many pharmacological and therapeutic properties. This potentiation depends on the proportion of Sulphur made burnt during *Jarana* process.^[6]

Types of Jarana

- *Bhoochari & Khechari*
- *Bala & Vrddha*
- *Samukha, Nirmukha & Vasanamukha*

Table 2: Hingulottha Parada according to different Texts

SN	Ingredients	Procedure	Reference
1.	<i>Hingula Jambheera Toya</i>	<i>Mardana</i> of <i>Hingula</i> with <i>Jambheera Toya</i> for one day and then subjected to <i>Urdhwapatana</i> .	R.S.S.1/47-48 R.J.N.4
2.	<i>Hingula, Jambheera Rasa/ Changeri Rasa</i>	<i>Mardana</i> of <i>Hingula</i> with either of the mentioned <i>Dravyas</i> for 3 days and then in a <i>Sthali</i> it is taken and filled with the same <i>Rasa</i> and another <i>Sthali</i> is closed and heated from below. Above a <i>Toyadhara</i> is done and water is changed frequently to keep it cold.	R.S.S.1/49-51 R.J.N.4
3.	<i>Hingula, Paribhadra Drava / Jambheera Drava</i>	<i>Mardana</i> of <i>Hingula</i> using either of the mentioned <i>Dravya</i> and then subjected to <i>Patana</i> .	A.K.23/25 R.J.N.4 R.S.S.1/52-53
4.	<i>Hingula, Tilataila Mahishika Mootra, Amlaka, Gomamsa, Mayurapitt ha</i>	<i>Hingula</i> is taken in <i>Loha Patra</i> along with all the mentioned <i>dravyas</i> except <i>Mayurapitt ha</i> and then <i>Pachana</i> is done using <i>Kramagni</i> for 7days. During the procedure one has to stir frequently using <i>Loha Danda</i> . Then <i>Bhavana</i> of <i>Mayurapitt ha</i> is given and placed in <i>Patina Yantra</i> and <i>Patina</i> is done.	A.K.23/32-34
5.	<i>Hingula, Nimbu Rasa</i>	<i>Hingula Mardana</i> is done with <i>Nimbu Rasa</i> for 1 <i>Prahara</i> and <i>Chakrikas</i> are prepared and placed in <i>Tiryakpatana Yantra</i> and heated.	Rm.1/17

Parada Marana

Mercury is converted into ashes form successfully and if used internally may make the man *Amara* means he may live long and may not die. In this process, a paste is made by adding various drugs or juices to the metals and minerals and then subjected to heat

treatment (*Putra*) so as to convert it into *Bhasma* (ashes). Advantage of *Marana* process is that when metals/ minerals are converted into *Bhasma*, they will be absorbed into the system, mix with blood and produce their desired effect without having harmful side effects.^[7]

Table 4: Marana of Parada according to different authors

SN	Ingredients	Method	Reference
1.	<i>Shudda Parada 1part Palasha Beeja 1part, Raktajambeera mla</i>	<i>Mardana</i> is done along with <i>Sajeewa</i> and then <i>Yantra Pachana</i>	R.R.S. 11/113
2.	<i>Shudda Parada Apamarga beejaanvita churna Pushkara beeja churna</i>	Made into a <i>Kalka</i> and placed in <i>Dhrida moosharava</i> and <i>Putra</i> given	R.R.S. 11/114
3.	<i>Shudda Parada Hingu + Kakodumbarika a ksheera</i>	<i>Hingu</i> is given <i>Bhavana</i> with <i>Kakodumbarika Ksheera</i> and <i>Mardana</i> is done with <i>Parada</i> and <i>Putra</i> given	R.R.S. 11/115
4.	<i>Shudda Parada Devadaali + Harikranta + Aranala</i>	<i>Devadaali</i> and <i>Harikranta</i> are given <i>Bhavana</i> with <i>aranala</i> and its <i>rasa</i> is used for <i>mardana</i> and <i>moorchana</i> of <i>parade</i> and then placed in <i>kharpara</i> and kept over <i>chullika</i> and <i>pachana</i> is done by adding the <i>rasa</i> frequently and stirring to obtain <i>lavana</i> like <i>bhasma</i> . (<i>shweta roopa</i>)	R.R.S.11/16-117 R.T. 7/17-19A.K.Am. 23/63-64,
5.	<i>Shudda Parada Apamarga beeja churna Eranda churna</i>	<i>Mardana</i> is done together and placed in <i>moosha</i> containing the <i>churnas</i> above and below. Then <i>sandhibanda</i> is done and <i>Laghuputra</i> is given for 4 times	R.R.S. 11/118
6.	<i>Shudda Parada Naaripaya Katutumbiphala</i>	<i>Parada</i> is placed inside <i>Katutumbiphala</i> and dipped in <i>Naariksheera</i> and <i>swedana</i> is done using <i>vanopala</i> .	R.R.S.11/19R.J.N.4

7.	<i>Shudda Parada Shudda Gandhaka Ankolamoola rasa</i>	<i>Bhavana</i> of <i>Ankola moolarasa</i> is given to <i>Parada</i> and <i>Gandhaka</i> (<i>kajjali</i>) for one day and <i>putra</i> is given in <i>bhudarayantra</i> for 1 day.	R.R.S.11/120R.J.N.4R .T. 7/20-22 A.K.Am.23 /72-73
8.	<i>Shudda Parada Shudda Abhraka Vata ksheera</i>	<i>Bhavana</i> of <i>Vata ksheera</i> is given to the mixture of <i>Shudda Parada</i> and <i>Shudda Abhraka</i> for 3 <i>prahara</i> and then <i>pachana</i> is done using <i>kaashtaas fuel</i> .	R.R.S.11/121
9.	<i>Shudda Parada 2 pala Shudda Gandhaka 1 pala Kumari swarasa</i>	<i>Parada</i> and <i>Gandhaka</i> are taken together and <i>bhavana</i> of <i>Kumari Swarasa</i> is given for 3 days and kept in <i>bhoodhara yantra</i> and <i>putra</i> is given for 1 day.	R.S.S.1/58 R.Mn. 2/11(bhav anafor1day)
10.	<i>Shudda Parada Nagavalli Swarasa Karkoti kanda</i>	<i>Parada</i> is given <i>bhavana</i> with <i>Nagavalli Swarasa</i> and made into a <i>bolus</i> . Then it is placed inside <i>Karkotikanda</i> and kept in <i>mrt moosha</i> and made into <i>samputa</i> and <i>Gajaputra</i> given.	R.S.S.1/59
11.	<i>Shudda Parada Shwetha Ankola moolarasa</i>	<i>Bhavana</i> of <i>Shwetha Ankola moola rasa</i> is given to <i>Parada</i> for 3days and kept in <i>andha moosha</i> and <i>putra</i> is given.	R.S.S.1/60 R.Mn.2/15 - 16A.K.Am. 23/61-62
12.	<i>Shudda Parada Devadali Hamsapadi Yamachincha Punarnava</i>	<i>Mardana</i> of <i>Parada</i> is done with the mentioned <i>dravyas</i> and <i>putra</i> is given.	R.S.S. 1/61
13.	<i>Shudda Parada 1part Shudda Gandhaka 1part Goghrita</i>	<i>Parada</i> and <i>Gandhaka</i> are taken together and <i>bhavana</i> is given with <i>Goghrita</i> and made into a <i>bolus</i> and kept inside <i>Kumari leaf</i> and tied with a <i>thread</i> and placed inside a <i>Kanthaloha sharava samputa</i> and <i>Laghuputra</i> is given 3 times. Then it is placed in <i>Moosha</i> and sealed and <i>dhridadhamana</i> is done.	A.K.Am.23 /44-45
14.	<i>Shudda Parada Vandhyakarkoti Kakatundi</i>	All the drugs except <i>Parada</i> are <i>trituated</i> together and made into	A.K.Am.23 /49-52

	<i>Katutumbika Kanchuki, Nalika Kakamachi Kalamanjari Kakajangha</i>	pishti and placed inside moosha. Then Parada mardana with the drugs and made into bolus and kept in that moosha and placed in bhoodhara yantra and pachana is done. This whole process is repeated 8 times.	R.J.N.4,
15.	<i>Shudda Parada Niyamakagana Dwiguna Gandha Taila</i>	<i>Parada mardana is done with Niyamakagana for 4 yama. Then pachana is done with dwiguna Gandha taila in mandagni slowly till it becomes Khota. This Khota is kept in a lohasharava and samputa is done. Sandhibandha is done using pasted of Mandoora churna and Haritaki kwatha. Then over that a glass sharava is placed and it Naga is placed and heated strongly and Naga gets melted. It is continued to heat till Naga gets solidifies. Then again it is heated like before for 3 yamas.</i>	A.K.Am.23 /53-58 R.J.N.4
16.	<i>Shudda Parada 1part Gandhataila 2parts Sarpakshi Swarasa Bhringaraja Swarasa Vishnukranta swarasa</i>	Together mardana for 1 day. Then bhavana with the mentioned drava dravyas for 1 day each i.e., totally 3 days. Then it is placed in yantra and pachana is done for 3 hours. This whole procedure is repeated 8 times.	A.K.Am.23 /59-60

DISCUSSION

In ancient rasa literature it is reported that ancient *Acharyas* have recognized *Doshas* in almost all drugs including metals, minerals, etc. To remove these *Doshas*, certain procedures were given like *Shodhana*, and *Marana*.^[8] For purification, *Samanya Shodhana* and *Vishesha Shodhana* methods are carried out. But if not performed properly then it may lead to many complications like loss of vision, skin diseases, vomiting and even death. Out of the *Ashta Samskaras* of *Parada*, the first five *Samskaras* are seems to be for the removal of various types of *Doshas* of *Parada* and

the remaining *Samskaras* are done to bring about a change in its undesired properties and to improve its *Bubhuksha*. The main purpose of *Shodhana* process is to improve its physic-chemical properties so as to increase its availability in our body and to remove *Malas* (toxins) from the drugs. Also reducing the particle size enhances absorption and all the chemical changes makes the material friendly. *Marana* is the important steps in the formation of *Bhasma*. It is the process in which metals and minerals are made into paste with various drugs and juice. A change is brought about in the chemical form or state of the metal. This makes it to lose its metallic characteristics and physical nature. Metals can be converted into powder or other form suitable for administration. It is carried out by heating the metal in presence of mercury, plant extracts, and sulfur. *Bhasma* is a well-known potent preparation of Ayurveda which literally means 'ash'. These are unique metal base preparation made by sophisticated pharmaceutical processes incorporating herbs and converting them in to suitable form. Conversion of metals into *Bhasma* is a unique process mentioned under *Rasashastra*. *Bhasmas* are complex organo-metallic compounds of metals or minerals obtained by repeated incineration with different medias and are well known for its effectiveness, smaller dose and long shelf life.^[9]

CONCLUSION

Rasashastra is the branch of Ayurveda has been designated following the use of metals/ minerals. However, these have to undergo various types of pre-treatments to remove their toxicity and increase their potency. In order to get rid of the *Dosha* (impurities) present in the mercury, various *Shodhana* procedures and *Marana* procedures with various herbal ingredients have been explained in the classics.

REFERENCES

1. Charaka Samhita by Ram Karan Sharma & Vaidya Bhagwan Dash, published by Chowkambha Sanskrit Series office, Varanasi. Reprint: 2009; ISBN: 81-7080-013-7; Vol- II; Page no: 124

2. Rasa Tarangini by Pranacharya Sri Sadananda Sharma edited by Pandita Kashinath Shastry published by Motilal Banarasidas, New Delhi. Reprint: 2004; ISBN: 81-208-2542-X; Page no: 22
3. A text Book of *Rasashastra* by Dr. Vilas A. Dole &Dr. Prakash Paranjpe published by Chaukhamba Sanskrit Pratishtan , Delhi Reprint: 2006; ISBN: 81-7084-229-0; Page no: 272
4. Rasaratnasamuchchaya by Dr. A. D. Satpute, published by Chaukhamba Sanskrit pratishtan, Delhi. Reprint: 2006; ISBN: 81-7084-206-2; Page no:110
5. A text Book of *Rasashastra* by Dr. Vilas A. Dole &Dr. Prakash Paranjpe published by Chaukhamba Sanskrit Pratishtan , Delhi Reprint: 2006; ISBN: 81-7084-229-0; Page no: 273
6. Pradeep Kumar Prajapati, Singh AK, Damodar Joshi, AryyaNC. The role of gandhkajarana in the preparation of SamgunaandSadaguna Rasa Sindura. Ancient science of life 1994; XIV(1):99-10.
7. Krishna JM, Gaude R, Yeriswamy H, Sudhindra AN, Yernal R, Bondre H, et al. Significance of Parad in *Rasashastra* - A review. J Ayu Herb Med 2017;3(3):169-174.
8. Devanathan R. Concept of Bhasmikarana. IJRAP. 2011; 2(1):18-23.
9. Dalal SK: Systematic Study of Rajata (Silver) *Bhasma* Prepared by Traditional Ayurvedic Method J Int Ayu Pharm Chem 2017; 6(2): 150-63.

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