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**Review Article** 

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# RATIONALE OF ASHTASAMSKARAS OF PARADA – A REVIEW (Part 2)

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#### **ABSTRACT**

Samskara literally means a process or procedure by use of which there is enhancement in properties. Samskara is the qualitative alteration done for improvement, enhancement, modification, lowering the bad effects or any such procedure. Parada due to its mystical importance in Ayurveda and Rasasshastra is briefly used for two purposes; **Dehavadha** (Medicine, body rejuvenation) and **Loh-vadha** (Occult, Alchemical and Spiritual upliftment). To completely attain all the purposes, Ayurveda texts inform about **Ashtadash-Sanskar** (Eighteen process) required to purify mercury. The first part of this article has already been published in the same journal namely "**Rationale Of** 

Ashtasamskaras Of Parada – A Review (Part 1)"covering samanya shodhana of parada & the first four samskaras namely Swedana, Mardana, Murchana & Uthapana. So in this current article we attempted to do the practical aspects of further four samskaras starting from Patana samskara to Dipana samskara.

**KEYWORDS:** Samskara, Parada, Ashtasamskara, Loha vadha, Deha vadha etc.

#### INTRODUCTION

Sodhana is the first norm to be completed during Ayurvedic drug formulation. So it has got unique importance. Most of the substances cannot be used internally in natural form, The same process are also being used during drug formulations. In Ayurveda Sodhana has great

importance. The raw drugs utilized for manufacturing of medicament must also be subjected to purification. The first four samskaras of parada has already been mentioned in previous edition of the same journal. As per the conclusion drawn from the practical aspects of first five samskaras, it clearly point out only the purification of parada and later three samskaras deals with both purification and increasing the potency of the parada. Thus in this article it depicts about the practical aspects of Patana Samskara to Dipana Samskara.

PRACTICAL NO. - 6 PATANA SAMSKARA

Name of the Practical	Reference	<b>Date of Starting</b>	<b>Date of Completion</b>
Patana Samskara	R.H.T. 2/8	25-07-2000	28-07-2000

#### **Materials**

Sr. No	Name of Drug	Weight
1.	Utthapita Parada	825 gm
2.	Suddha Tamra Patra	275 gm
3.	Nimbu Swarasa	Q.S.



#### **Apparatus**

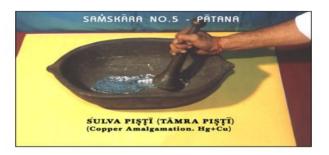
Electric weigh machine, Khalva yantra, Patanayantra, Spatula, Knife, Cloth, Angara kosthika, Cork, Measure glass, Upale, Kerosene, Blower, etc.

#### **Procedures**

- Parada regained from Utthapana Samskara was triturated in Khalva yantra by adding pieces of Sodhita Tamra patra along with Nimbu Swarasa.
- Trituration was continued till the amalgamation of Parada and Tamra was formed.
- Parada-Tamra amalgamation was kept in a Tiryaka Patana Yantra and proper connection of the apparatus including condensation system were done and proper sandi bandhana

was done. The condenser pipe of Tiryaka Patana Yantra was properly supplied with water to make it cool during the process.

- The outlet pipe was wrapped with wet cloth, the end part of outlet pipe was kept immersed in water.
- Complete Patana yantra was kept slight inclined in a large enough Angara Kosthika and subjected to high heat along with proper condensation system.
- The condensed Parada was collected in a glass bottle kept inside the water pot.



#### **Observations**

- Mardana was initially started with 50 ml Nimbu Swarasa.
- On getting dry, each time 50 ml of Nimbu Swarasa was added for further trituration.
- Parada and Tamra did not convert into amalgamation on simple trituration. But when Nimbu Swarasa was added to it and triturated, amalgamation was easily achieved.
- After two hours of trituration, Parada started conjugating with Tamra Patra pieces. The initial colour of amalgam was reddish white.
- After seven hours of trituration, a proper amalgamation started to form but still some globules of Parada was seen beneath the amalgam.
- It took eighteen hours of trituration for complete amalgamation and the colour of amalgam was white.
- On adding Nimbu Swarasa to the amalgam a brown layer was formed, which on drying turned to brown colour powder.
- After applying intense heat for 1 hour, gaseous bubbles started to appear at the end of pipe immersed in water.
- After 1 hour & 15 minutes droplets of Parada started coming out through the pipe.
- After 2 hours Parada stopped coming out of Tiryak Patana Yantra and heat was reduced.

- After 3 hours Tiryaka Patana Yantra was taken out of Angara Kosthi & kept in inclined slant position and water supply was continued for further 15 minutes.
- 775 gm of Parada was collected from Tiryak Patana yantra after heating for 3 hours.
- After completion of 3 hours of heating, the remaining Parada of 25 gm was obtained from the cooled pipe of Tiryak Patana yantra.
- After re-opening of Patana yantra, the residual Tamra pieces found in Tiryak Patana yantra was brick red in colour, which turned to reddish black when kept in open air.



#### **Precautions**

- Maradana should be done very carefully, as Parada may spill out of Khalva.
- Proper amalgamation of Parada and Tamra should be done.
- While trituration, Nimbu Swarasa must be added as the amalgamation becomes dry.
- All the junctures of Patana Yantra should be properly sealed
- The condensor of Patana Yantra should continuously be supplied with current of cold water.
- The end part of Patana yantra must be kept immersed in water.
- Even after completion of process, the supply of water through condenser should be continued for further 15 minutes.
- The condensor and its junction pipe should be opened cautiously.
- Angara kosthi should be large enough, so that whole of Patana yantra must be covered with ignited coals.

#### Result

No. of days taken	4 days
For making Tamra pisti	18 hours
For Patana process	3 hours
Total time taken	21 hours
Weight of Utthapita Parada taken	825 gm.
Weight of Patita Parada obtained	800 gm.
Weight loss	25 gm.
Weight of residual Tamra curna	280 gm
Total quantity of Nimbu Swarasa consumed	650 ml.

# Cause of weight loss

- Spilling of Parada during Mardana process
- Due to the improper sealing of junction of Patana yantra
- During opening of condensor adhered Parada might be lost.

# PRACTICAL NO. - 7 PATANA SAMSKARA - 2nd

Name of the Practical	Reference	<b>Date of Starting</b>	<b>Date of Completion</b>
2nd Patana Samskara	R.H.T. 2/8	07-07-2000	03-08-2000

#### **Materials**

1. 1st Patita Parada: 800 gm

2. Suddha Tamra Patra: 267 gm

3. Nimba Swarasa: q.s

Apparatus	Procedure	Precaution	Cause of weight loss
Same as practical	Same as practical	Same as practical	Same as practical No-6
No-6	No-6	No-6	

#### **Observations**

- For amalgamation of Parada Tamra (Hg+Cu) it took less time (17 hours) as compared to 1st Patana Samskara.
- Other observations same as Practical No-6.

### **Results**

No. of days taken	4 days
For making Tamra pisti	17 hours
For Patana process	3 hours
Total time taken	20 hours
Weight of 1st Patita Parada taken	800 gm
Weight of 2nd patita Parada obtained	760 gm

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Weight loss	40 gm
Weight of residual Tamra curna	275 gm
Total quantity of Nimbu Swarasa consumed	600 ml.

# PRACTICAL NO. - 8 PATANA SAMSKARA - 3rd

Name of the Practical	Reference	<b>Date of Starting</b>	<b>Date of Completion</b>
3rd Patana Samskara	R.H.T. 2/8	07-08-2000	10-08-2000

#### **Material**

2nd Patita Parada: 760 gm.
 Suddha Tamra Patra: 253 gm

3. Nimbu Swarasa: q.s

Apparatus	Procedure	Precaution	Cause of weight loss
Same as practical	Same as practical	Same as practical	Same as practical No-6
No-6	No-6	No-6	

#### **Observations**

- $\bullet$  For the amalgamation of Parada- Tamra (Hg +Cu) it took even less time (16hours) as compared to 1st and  $2^{nd}$  Patana Samsakara.
- Other observation same as Practical No-6.

#### **Results**

No. of days taken	4 days
For making Tamra pisti	16 hours
For Patana process	3 hours
Total time taken	19 hours
Weight of 2nd Patita Parada taken	760 gm.
Weight of 3rd patita Parada obtained	735 gm.
Weight loss	25 gm.
Weight of residual Tamra curna	260 gm
Total quantity of Nimbu Swarasa consumed	550 ml.

# PRACTICAL NO. – 9 RODHANA SAMSKARA (Nirodhana- Bodhana)

Name of the Practical	Reference	Date of Starting	<b>Date of Completion</b>
RodhanaSamskara	R.H.T. 2/16	11-08-2000	14-08-2000

# Materials

Sr. No	Name of Drug	Weight
1.	3rd Patita Parada	735 gm
2.	Saindhava Lavana	460 gm
3.	Jala (Water)	2.250 liter

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#### **Apparatus**

Electric weigh balance, Measuring glass, Glass jar, Cloth, Thread, etc.

#### **Procedures**

- Prepare Lavana jala by adding 460gm powdered Saindhava Lavana in 2.250 ltrs of water.
- Filtered it and kept it in a clean glass jar.
- Patita Parada obtained from the 3rd Patana process was placed in the Lavana jala in a glass jar, with sandhibandhana and left undisturbed for 3 days.
- After three days, Parada was taken out of Lavana jala and washed with warm water.





#### **Observations**

- Colour of the prepared Lavana Jala was reddish white.
- On filtering lavana jala, some impurities was found on filtering cloth.
- There was no loss of weight in Parada after the process.

#### **Precaution**

- Prepared Lavana jala should be used after proper filtration.
- Parada should cautiously be poured in Lavana jala.
- Parada placed in lavana jala jar should be kept undisturbed.
- Proper sandhibandana should be done

#### Result

No. of days taken	4 days
Total time taken for Rodhana	3 days
Weight of 3rd Patita Parada taken	735 gm.
Weight of Rodhita Parada obtained	735 gm.
Weight loss	Nil.

#### PRACTIAL NO. - 10 NIYAMANA SAMSKARA

Name of the Practical	Reference	Date of Starting	<b>Date of Completion</b>
Niyamana Samskara	R.H.T. 2/17	24-08-2000	01-09-2000

#### **Materials**

Sr. No	Name of Drug	Weight
1.	Rodhita Parada	46 gm
2.	Phani –Tambula patra	46 gm
3.	Nayana – Lasuna	46 gm
4.	Ambuja – Lavana	46 gm
5.	Markava – Bhrngaraja	46 gm
6.	Cinca	46 gm
7.	Kanji	Q.S.



# **Apparatus**

• Electric weigh balance, Dolayantra, Khalva yantra, Kadali patra, Cloth, Spatula, thread, Gas stove, Steel vessels, Thermometer, measure glass, etc.

#### **Procedures**

- Rodhita Parada wrapped in paste of Tambula patra, Lasuna, Lavana, Bhrngaraj & Cinca.
- A four folded cloth was taken and kept on tray. On this cloth banana leaf (Kadali patra) was placed and it was smeared with above mentioned paste in a thickness of 1½" and it has to be dried properly to withhold parada in it.
- Parada (mercury) was carefully placed in the paste and folded into pottali form.
- Pottali was placed in Dolayantra filled with kanji and subjected to heat. Proper care should be taken during heating, as the pottali should not touch the bottom of the container.

• Throughout the heating process only mild fire was given. When the kanji started boiling, its temperature was maintained between 90°C-100°C. This heating process was continued for 36 hours and the level of kanji in the Dolayantra was maintained by adding additional kanji to it. After 36 hours of heating, Dolayantra was kept for self cooling. Pottali was transferred in a tray and it was opened very carefully. Free Parada was first procured from the pottali and parada mixed in paste was regained through washing it thoroughly with hot water. Finally all the regained Parada was filtered through a four folded cloth.



#### **Observations**

- Practical started with 6.5 liter of Kanji.
- 1 ltr. Kanji was added in Dolayantra after every one and half hour.
- Initially Mrdu agni was given for 30 minutes, then the temperature noted inside the kanji was  $70^{0}$ C
- After one hour of heating the temperature raised to 90°C
- Each day, quantity of Kanji decreased as the heating process was continuous and a thick layer was formed on upper surface of Kanji.
- After continuous heating, the colour of Kanji became dark brown and its consistency became thick.
- After completion of process, the pottali was opened and it was found that most of the Parada remained in the inner side of the paste and few quantity of Parada was found mixed with paste on Banana leaf. Any traces of Parada was not found in the Kanji.

- On washing the paste with hot water it became brown in colour but on repeated washing
  it gradually became colourless and Parada settled at the bottom of the vessel
- Then the Parada was collected from vessel and was dried with a blotting paper/cloth.

#### **Precaution**

- Samputa prepared out of the paste of fine powdered drugs has to be dried properly, otherwise the spillage of parada will occur.
- During preparation of pottali, Parada must be kept inside the paste.
- Pottali should be remain dipped in kanji and should not touch to the bottom and side wall
  of the container.
- Swedana process should be carried out on Mandagni in a temperature ranging between 60°C to 70°C.
- During the entire process the vessels should be left as such undisturbed.
- Washing of the paste with hot water should be done carefully otherwise Parada will be lost through Malagati and Jalagati.
- After washing the Parada should be filtered through a four folded cloth.

#### **Results**

No. of days taken	9 days
Total time taken for Niyamana	36 hour
Weight of Rodhita Parada taken	735 gm
Weight of Niyamita Parada obtained	725 gm
Weight loss	10 gm
Total quantity of Kanji consumed	30 liters

#### Cause of weight loss

- Impurities will be removed during Sodhana
- Fine particles of parada remain adhered to Sodhana dravyas and vessel.
- Parada will be lost during washing process through Jalagati.

#### PRACTICAL NO. – 11 DIPANA SAMSKARA

Name of the Practical	Reference	Date of Starting	<b>Date of Completion</b>
Dipana Samskara	R.H.T. 2/18	04-09-2000	11-09-2000

# **Materials**

Sr. No	Name of Drug	Weight
1.	Niyamita Parada	725 gm
2.	Bu- Suddha Spahatika	45 gm
3.	Khaga –Suddha Kasisa	45 gm
4.	Suddha Tankana	45 gm
5.	Marica	45 gm
6.	Lavana	45 gm
7.	Asuri – Rajika	45 gm
8.	Sahijana Twaka	45 gm
9.	Kanji	Q.S.



# **Procedures**

- Parada wrapped in a paste of Su.Sphatika, Su.Kasisa, Su.Tankana, Sahijana, Marica, Lavana, Kanjika were heated in Dolayantra
- Other procedure same as Niyaman samskara, practical no-10





#### **Observations**

- Practical started with 6.5 liters of Kanji.
- Other observations same as Niyaman Samskara, Practical no-10

#### **Precautions**

Same as Niman Samskara, Practical no-10.

#### Results

No. of days taken	-8 days
Total time taken for Dipana Samskara	36 hrs.
Weight of Niyamana Parada taken	725 gm.
Weight of Dipana Parada obtained	715 gm
Weight loss	10 gm.
Total quantity of Kanji consumed	30 liters.

#### Cause of weight loss

• Same as practical no -10.

#### DISCUSSION AND CONCLUSION

#### Practical No. 6 to 8

This practical deals with Patana Samskara of Parada. Parada was triturated with 1/3 Suddha Tamra using Nimbu Swarasa as Bhavana Dravya, Parada was triturated with Tamra until Amalgum formation. It was then sublimated in Tiryaka Patana Yantra. It was observed that during Amalgamation, use of Nimbu Swarasa accelerates the formation of Amalgam. This is for the first time, that Tamra a Metallic substance is used in Astasamskara, the reason for using Tamra metal only in this Samskara could be that being higher in place in electrochemical series, it is highly reactive and this combines with Parada forming amlagum. Tamra is said to be removing Naga and Vanga impurities found in Parada. Both the impurities react with Tamra leaving behind Suddha Parada. This property of Tamra is mentioned as Visaghna in our Sastra. According to the textual references available Patana Samskara should include Urdhava, Adhah and Tiryaka Patana. But since all these three process are time consuming and the loss of Parada is much more in these processes. On the basis of experts opinion only Triyaka Patana process is repeated thrice (practical no. 8, 9, 10) moreover, it can be seen from the textual references that at the end of all the three Patana procedures, Tiryaka Patana process is repeated. Hence, Tiryaka Patana was selected and repeated thrice.

#### **Practical No.9**

This practical deals with Rodhana Samskara of Parada. For this Samskara "Lavanajala" was prepared in ratio of approximately 1:5 i.e. 460gm Saindhava Lavana was dissolved in 2.250 litre of water. Parada was dipped in this Lavana Jala filled in a glass jar for 3 days. Glass Jar was kept undisturbed, use of Lavanjala destroys 'Sandhatva' of Parada as per the textual references found. Lavana thus used increases Virya of Parada which has been destroyed in previous Samskaras.

#### **Practical No.10**

This practical deals with Niyamana Samskara of Parada. Parada was triturated with prescribed dravyas and kalka was prepared out of it. It was then kept in dolayantra and Swedana was performed in Kanji for 36 hrs. According to the reference, Tambula Patra was taken as 'Phani' and Lasuna as 'Nayana'. All the Dravyas used for Kalka were having 'Usna' 'Tiksna' properties e.g. Tambula patra, Lasuna, Lavana, Bhrngaraja and Cinca. Due to these properties they are said to be controlling Capala / Cancala properties of Parada which was increased due to the increased Virya of Parada during Rodhana Samskara.

#### Practical No. 11

This practical deals with Dipana Samskara of Parada. The outstanding remark of this Samskara is that in this Samskara for the first time minerals like Sphatika, Kasisa etc along with herbal drugs are used. Kalka was prepared out of these dravyas and Parada along with this Kalka was heated by Swedana process. Swedana procedure was undertaken for 36 hours in Kanji using Dolayantra. All the dravyas used in this Samskara are having 'Dipana', 'Pacana' properties due to which they are said to be increasing appetite ('Bubhuksa') of Parada for either consuming metals for Dehavada or Lohavada purpose.

# Percentage wise loss in Practical study

Practical	Wt.Taken	Wt.Obtained	Loss in gm.	Loss in %
Patana-1	825 gm	800 gm	25 gm	3.03 %
Patana-2	800 gm	760 gm	40 gm	5.0%
Patana-3	760 gm	735 gm.	25 gm	3.29%
Rodhana	735 gm	735 gm	-	-
Niyamana	735 gm	7725 gm	10 gm.	1.36%
Dipana	725 gm	715 gm	10 gm	1.30%

#### RESULT OF ASTASAMSKARITA PARADA

1	Weight of Parada before Astasamskara	1000 gm
2	Weight of Parada after Astasamskara	715 gm
3	Weight loss during Astasamskara	285 gm
4	Percentage of Parada loss after Astasamskara	28.5 %

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