ABSTRACT
Rasashastra is a branch of Ayurveda which deals with the various pharmaceutical processes of Rasoushodhis\textsuperscript{[5]} which are used therapeutically in practice of Ayurveda.\textsuperscript{[8]} Durjalajeta rasa is one of the important rasayoga among them, which is mentioned in well known rasa text yogaratnakara is said to be more effective in Ajirna.\textsuperscript{[4]} Qualitative and Quantitative analysis is done for prepared compound and clinical trial is done on 60 patients grouping them in two groups each containing 30/30 patients. **Results:** After the study it is revealed that the Durjalajeta rasa is having good efficacy in Ajirna, specially in Amajirna and vistabdhajirna.

KEYWORDS: Kapadika, Ajirna.

INTRODUCTION
Ayurveda in general and Rasashastra in particular are ocean of remedies and Rasayogas are one of the important preparation of that, being used in various diseased conditions. One amongst them is DURJALA JETA RASA,\textsuperscript{[9]} a compound, mentioned in well known Rasa text Yogaratnakara, is said to be effective in Durjalajanita Vikaras, which contains kapardika bhasma,\textsuperscript{[1,20]} shudda vatsanabha churna,\textsuperscript{[6,8]} Maricha churna,\textsuperscript{[7]} Adraka swaras.\textsuperscript{[12]} These drugs mainly acts as Deepaka, Pachaka and Shoolanashaka. Our acharyas have mentioned about Ajirna\textsuperscript{[2,3]} in detail assigned simple causes being responsible for the manifestation of Ajirna of such as Atyambupana, Vishamashana, Atiguru and sheeta ahara sevana, Asatmya bhojana\textsuperscript{[10,11]} etc. which are very commonly committed by a common man. As Ajirna is main root cause for manifestation of
all the diseases, there is an urgent need to focus upon such problems and needs optimum and very economic remedies.

**OBJECTIVES OF THE STUDY**

1) Preparation of Dujalajeta rasa, by adapting standard pharmaceutical processing techniques according to textual / classical references Yogaratnakara, Jwaradhikara, Sholaka No. 1-3, Page No. 250.

2) Physico-chemical analysis (Qualitative & Quantitative) of the prepared formulation i.e. Durjalajeta Rasa.

3) Observational study of prepared formulation on Ajirna to evaluate it's efficacy and safety.

**DURJALAJETA RASA**

**Ingredients**

1) Shuddha Vatsanabha churna - 2 parts
2) Kapardika bhasma - 5 parts
3) Maricha churna - 9 Parts
4) Ardraka Swarasa - Q.S.

**Method of Preparation**

All the ingredients are taken in a clean kalwayantra in the proportion as mentioned above. Then Aradraka Swarasa bhavana is given and mudga praman vati’s are prepared.

**Matra**

Two vati – morning and evening.

**Anupana**

Jala

**Indication**


**MATERIAL AND METHODS**

**Inclusive Criteria**

i) Patients of both the sex, between the age of 15-65 years are selected for observational study.
ii) Patients presenting with vistamba, Arochaka, Avipaka, Daha, Vibanda and Chardi will be selected for the study.

Exclusive Criteria
i) Patients of below 15 and above 65 years.
ii) Ajirna resulted as a secondary to chronic diseases like Rajayaksha, Grahani, Amlapitta, Arsha, Pandu etc.
iii) Ajirna in pregnancy are excluded for the observational study.

Study design and Mode of Administration
In the present study 60 patients are selected irrespective of age, sex, socio-economic status etc. and made in two groups – 30 patients in each groups.

Table Showing Study Design And Mode of Administration.

<table>
<thead>
<tr>
<th>Group</th>
<th>Drug</th>
<th>Duration</th>
<th>Dose</th>
<th>Anupan</th>
</tr>
</thead>
<tbody>
<tr>
<td>G – A</td>
<td>Durjalajeta rasa</td>
<td>7 days</td>
<td>1 Ratti / twice daily after meals</td>
<td>Jala</td>
</tr>
<tr>
<td>G – B</td>
<td>Placebo (Starch)</td>
<td>7 days</td>
<td>1 Gram / twice daily after meals</td>
<td>Jala</td>
</tr>
</tbody>
</table>

Assessment of Clinical trial
1) The assessment of clinical study is done by the severity of symptomatology.
2) The clinical assessment are done – before treatment and after treatment by grading them as mild, moderate and severe.

The data of Group A and Group B are compared and analyzed with student paired 't' test. 'p' value was calculated by referring Table at corresponding level of degree of freedom.

Grading

G₀ – Nil 
G₁ – Mild +
G₂ – Moderate ++
G₃ – Severe +++

Based on above criteria, grading the response was assessed:-
1) Good Response – All signs and symptoms are relieved.
2) Moderate Response – Any 25 to 50% signs and symptoms are persisting & rest are relieved.
3) Mild Response – Any 75% signs & symptoms are persisting and remaining other symptoms are relieved.
4) No Response – Presence of all signs & symptoms.

OBSERVATIONS

Qualitative analysis of Durjalajeta Rasa

Table Showing Qualitative analysis of Durjalajeta Rasa.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of Metal</th>
<th>Durjalajeta Rasa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sodium</td>
<td>Present</td>
</tr>
<tr>
<td>2.</td>
<td>Iron</td>
<td>Present</td>
</tr>
<tr>
<td>3.</td>
<td>Magnesium</td>
<td>Present</td>
</tr>
<tr>
<td>4.</td>
<td>Calcium</td>
<td>Present</td>
</tr>
<tr>
<td>5.</td>
<td>Lead</td>
<td>Absent</td>
</tr>
<tr>
<td>6.</td>
<td>Chromium</td>
<td>Absent</td>
</tr>
<tr>
<td>7.</td>
<td>Nickel</td>
<td>Absent</td>
</tr>
<tr>
<td>8.</td>
<td>Zinc</td>
<td>Absent</td>
</tr>
</tbody>
</table>

Quantitative analysis of Durjalajeta Rasa

Table showing quantitative analysis of durjalajeta rasa.

<table>
<thead>
<tr>
<th>Name</th>
<th>Calcium %</th>
<th>L O D</th>
<th>A I A</th>
<th>Total Ash</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durjalajeta Rasa</td>
<td>11.1151%</td>
<td>6.5627%</td>
<td>0.5498%</td>
<td>30.1168%</td>
<td>7.49</td>
</tr>
</tbody>
</table>

CLINICAL OBSERVATIONS

Total number of patients, taken for the observational study are 60. A Special attention has been paid to the 60 patients in consideration to notice the incidence of Sex: age: religion: socio economic status : occupation : food habits : Prakruti : laxans and response in relation to observational study with placebo.

The patients are classified in to two groups. Group – 'A' and Group – 'B' having 30/30 patients in each group.

Group 'A' – trial group (on Durjala jeta rasa).
Group 'B' – Control group (on placebo).
TABLES

Incidence of sex in 60 patients of Ajirna

<table>
<thead>
<tr>
<th>SEX</th>
<th>Group – A No. of Pts.</th>
<th>Group – 'B' No. of Pts.</th>
<th>Total No of Pts.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>21</td>
<td>18</td>
<td>39</td>
<td>65%</td>
</tr>
<tr>
<td>Female</td>
<td>09</td>
<td>12</td>
<td>21</td>
<td>35%</td>
</tr>
</tbody>
</table>

1) Incidence of age in 60 patients of Ajirna.

<table>
<thead>
<tr>
<th>AGE YRS.</th>
<th>Group – A No. of pts.</th>
<th>Group – B No of Pts</th>
<th>Total No. of pts.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 – 25</td>
<td>12</td>
<td>09</td>
<td>21</td>
<td>35%</td>
</tr>
<tr>
<td>26 – 35</td>
<td>09</td>
<td>09</td>
<td>18</td>
<td>30%</td>
</tr>
<tr>
<td>36 – 45</td>
<td>03</td>
<td>09</td>
<td>12</td>
<td>20%</td>
</tr>
<tr>
<td>46 – 60</td>
<td>06</td>
<td>03</td>
<td>09</td>
<td>15%</td>
</tr>
</tbody>
</table>

2) Incidence of Religion in 60 patients of Ajirna.

<table>
<thead>
<tr>
<th>RELIGION</th>
<th>Group – A No of pts.</th>
<th>Group – B No. of Pts</th>
<th>Total No. of pts.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>15</td>
<td>09</td>
<td>24</td>
<td>40%</td>
</tr>
<tr>
<td>Muslim</td>
<td>06</td>
<td>12</td>
<td>18</td>
<td>30%</td>
</tr>
<tr>
<td>Others</td>
<td>09</td>
<td>09</td>
<td>18</td>
<td>30%</td>
</tr>
</tbody>
</table>

3) Incidence of Diet in 60 patients of Ajirna.

<table>
<thead>
<tr>
<th>DIET</th>
<th>Group – A No of pts.</th>
<th>Group – B No. of Pts</th>
<th>Total No. of pts.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veg.</td>
<td>18</td>
<td>21</td>
<td>39</td>
<td>65%</td>
</tr>
<tr>
<td>Non – Veg</td>
<td>12</td>
<td>09</td>
<td>21</td>
<td>35%</td>
</tr>
</tbody>
</table>

5) Mode of Response in 60 patients after 7 days Treatment.

I) Group – A 30 pts.

<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>NO OF PTS/ PARENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>12/40%</td>
</tr>
<tr>
<td>Moderate</td>
<td>09/30%</td>
</tr>
<tr>
<td>Mild</td>
<td>06/20%</td>
</tr>
<tr>
<td>No response</td>
<td>03/10%</td>
</tr>
</tbody>
</table>

II) Group – B 30 pts.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>NO OF PTS/ PARENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>0/0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0/0%</td>
</tr>
<tr>
<td>Mild</td>
<td>06/20%</td>
</tr>
<tr>
<td>No response</td>
<td>24/80%</td>
</tr>
</tbody>
</table>
6) Incidence of Laxanas in 60 patients of Ajirna.

<table>
<thead>
<tr>
<th>LAXANAS</th>
<th>Group – A No of pts.</th>
<th>Group – B No of pts.</th>
<th>Total No of pts.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guruta</td>
<td>10</td>
<td>09</td>
<td>19</td>
<td>31.66%</td>
</tr>
<tr>
<td>Utklesha</td>
<td>09</td>
<td>08</td>
<td>17</td>
<td>28.33%</td>
</tr>
<tr>
<td>Udgara</td>
<td>09</td>
<td>08</td>
<td>17</td>
<td>28.33%</td>
</tr>
<tr>
<td>Aruchi</td>
<td>07</td>
<td>08</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Avipaka</td>
<td>07</td>
<td>07</td>
<td>14</td>
<td>23.33%</td>
</tr>
<tr>
<td>Chardi</td>
<td>02</td>
<td>01</td>
<td>03</td>
<td>05%</td>
</tr>
<tr>
<td>Jwara</td>
<td>02</td>
<td>01</td>
<td>03</td>
<td>05%</td>
</tr>
<tr>
<td>Bhrama</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trushna</td>
<td>09</td>
<td>08</td>
<td>17</td>
<td>28.33%</td>
</tr>
<tr>
<td>Sweda</td>
<td>06</td>
<td>06</td>
<td>12</td>
<td>20%</td>
</tr>
<tr>
<td>Daha</td>
<td>06</td>
<td>06</td>
<td>12</td>
<td>20%</td>
</tr>
<tr>
<td>Amlodgara</td>
<td>08</td>
<td>07</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Murcha</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Shula</td>
<td>01</td>
<td>02</td>
<td>03</td>
<td>05%</td>
</tr>
<tr>
<td>Vistamba</td>
<td>09</td>
<td>08</td>
<td>17</td>
<td>28.33%</td>
</tr>
<tr>
<td>Admana</td>
<td>08</td>
<td>09</td>
<td>17</td>
<td>28.33%</td>
</tr>
<tr>
<td>Angapida</td>
<td>06</td>
<td>09</td>
<td>14</td>
<td>23.33%</td>
</tr>
<tr>
<td>Vibandha</td>
<td>08</td>
<td>06</td>
<td>14</td>
<td>23.33%</td>
</tr>
<tr>
<td>Angasada</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

RESULTS

Analytical findings observed
1. The percentage of Calcium is 11.1151%.
2. The percentage of loss on drying is 6.5627%.
3. The percentage of acid insoluble ash content of Durjalajeta Rasa is 0.5498% and the percentage of total ash content is 30.1168%.
4. The pH is slightly alkaline i.e. 7.49.
5. The qualitative analysis shows presence of sodium, iron, magnesium, calcium and absence of lead, chromium, nickel and zinc.
6. The TLC shows Rf values of 0.98, 0.84, 0.67, 0.60 and 0.06.

Clinical Results
The data were collected based on gradation given to the subjective parameters, as mentioned in assessment criteria. For the statistical study, the total number of patients having the laxans of Aruchi, Avipaka, Chardi, Daha, Vibandha, Vistambha are selected. These parameters are observed for a duration of 7 days, even though all symptomatology are observed in Group – A and Group – B. For assessment of the collected data only Aruchi, Avipaka, Chardi, Daha, Vibandha, Vistambha are taken as subjective parameters. The results are analysed using
student paired 't' test. Finally overall assessment was made based on these results. A null hypothesis was placed by there is no significant difference between the mean results in Group – A and Group- B. The 'p' value was observed for the comparison of the two Groups and the following results were obtained on observing the results the null hypothesis was accepted stating that "Statistically there is no such significant difference between the results of the two groups. Observing the mean value of various parameters I the two groups it was observed that Group – A had better results when compared to Group – B.

CONCLUSION

The selected formulation for the research work i.e. Durjalajeta rasa (Yogaratnakara, Jwaradhikara, Shloka No. 1-3, Page No. 250.) needs Raw materials – Kapardika; Vatsanabha; Maricha & Ardraka which are easily available.

1. The Pharmaceutical processing of Durjalajeta rasa is easy and very
2. Economic.
3. It is having highly significant results in Ajirna, especially in amajirna and vistabdhaejirna.

REFERENCES

3. Ambika datta Shastri-Ajirna, Susruta samhita, Poorvardha, Choukambha Sanskrit Samsthana, Varanasi, Reprint, 1974; I.