

“PHARMACEUTICO ANALYTICAL STUDY OF "DURJALAJETA RASA" AND IT'S OBSERVATIONAL STUDY ON AJIRNA”

***Dr. Mahantesh B. Rudrapuri, M.D. (R.S.B.K), FAGE.**

Professor & HOD, PG Dept. Of Rasa Shastra & Bhaishajya Kalpana Shri
Shivayogeeswar Rural Ayurvedic Medical College & Hospital, Inchal, Tq. Saundatti,
Dist. Belgaum, Karnataka.

Article Received on
11 Jan. 2018,

Revised on 31 Jan. 2018,
Accepted on 21 Feb. 2018,

DOI: 10.20959/wjpr20185-11320

***Corresponding Author**

Dr. Mahantesh B.

Rudrapuri, M.D. (R.S.B.K),

FAGE

Professor And HOD, PG

Dept. Of RasaShastra &
Bhaishajya Kalpana Shri

Shivayogeeswar Rural

Ayurvedic Medical

College & Hospital, Inchal,

Tq. Saundatti, Dist.

Belgaum, Karnataka.

ABSTRACT

Rasashastra is a branch of Ayurveda which deals with the various pharmaceutical processes of Rasoushodhis^[5] which are used therapeutically in practice of Ayurveda.^[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.^[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,^[9] a compound, mentioned in well known Rasa text Yogaratnakara, is said to be effective in Durjalajanita Vikaras, which contains kapardika bhasma,^[1,20] shudda vatsanabha churna,^[6,8] Maricha churna,^[7] Adraka swarasa.^[12] These drugs mainly acts as Deepaka, Pachaka and Shoolanashaka. Our acharyas have mentioned about Ajirna^[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^[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^[9]

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

Samajwara : Ajirna : Admana: Vistambha : Shula : Swasa & Kasa.

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 Rajayakshma, 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.

Group	Drug	Duration	Dose	Anupan
G – A	Durjalajeta rasa	7 days	1 Ratti / twice daily after meals	Jala
G – B	Placebo (Starch)	7 days	1 Gram / twice daily after meals	Jala

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

G ₀ – Nil	-
G ₁ – Mild	+
G ₂ – Moderate	++
G ₃ – 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.

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

Quantitative analysis of Durjalajeta Rasa

Table showing quantitative analysis of durjalajeta rasa.

Name	Calcium %	L O D	A I A	Total Ash	P ^H
Durjalajeta Rasa	11.1151 %	6.5627 %	0.5498 %	30.1168 %	7.49

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

SEX	Group – A No. of Pts.	Group– 'B' No. of pts.	Total No of Pts.	%
Male	21	18	39	65%
Female	09	12	21	35%

1) Incidence of age in 60 patients of Ajirna.

AGE YRS.	Group – A No of pts.	Group – B No of Pts	Total No. of pts.	%
15 – 25	12	09	21	35%
26 – 35	09	09	18	30%
36 – 45	03	09	12	20%
46 – 60	06	03	09	15%

2) Incidence of Religion in 60 patients of Ajirna.

RELIGION	Group – A No of pts.	Group – B No of Pts	Total No. of pts.	%
Hindu	15	09	24	40%
Muslim	06	12	18	30%
Others	09	09	18	30%

3) Incidence of Diet in 60 patients of Ajirna.

DIET	Group – A No of pts.	Group – B No of Pts	Total No. of pts.	%
Veg.	18	21	39	65%
Non – Veg	12	09	21	35%

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

I) Group – A 30 pts.

ASSESSMENT	NO OF PTS/	PARENTAGE
Good	12	40%
Moderate	09	30%
Mild	06	20%
No response	03	10%

II) Group – B 30 pts.

Assessment	NO OF PTS/	PARENTAGE
Good	0	0%
Moderate	0	0%
Mild	06	20%
No response	24	80%

6) Incidence of Laxanas in 60 patients of Ajirna.

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

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 P^H 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 R_f 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 symptamatology 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 in 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 (Yogaratanakara, 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 vistabdhajirna.

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