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**A COMPARATIVE CLINICAL STUDY TO EVALUATE THE EFFICACY OF  
J R VATI (JYOTISHMATI RAJIKAAADI VATI) WITH RAJAHPRAVARTANI  
VATI IN THE MANAGEMENT OF ARTAVAKSHAYA W.S.R. TO OLIGO-  
HYPOMENORRHOEA**

**GUPTA H\*<sup>1</sup> AND TOMAR P<sup>2</sup>**

- 1:** Associate Professor, Department of Prasuti Tantra evum Stree Roga, FIMS, SGT University,  
Gurugram, Haryana
- 2:** Associate Professor, Department of Prasuti Tantra evum Stree Roga, Rishikul Campus,  
Haridwar, Uttarakhand

**\*Corresponding Author: Dr Himani Gupta: E Mail: [gupta.himani2103@gmail.com](mailto:gupta.himani2103@gmail.com)**

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**ABSTRACT**

Women is endowed with energy of procreation for which menarche is the first step. Menstrual Cycle commences with this and ends with menopause; having normal menstruation depicts the well-being of female. A slight deviation in the menstrual cycle which may be excessive or low is leading to the fear of some serious pathology of internal genital organs.

The amount of menstrual discharge varies from person to person. *Acharya Charaka* has clearly stated that neither excessive nor scanty discharge is considered normal. The menstrual abnormalities are a common that plague women. 30% of women visiting gynecological OPD's have menstrual variations. *Artavakshaya* is one among these gynecological problems. It is characterized by delayed and scanty menstruation associated with pain in lower abdomen or/and back during menstruation. This can be compared with Oligomenorrhoea and Hypomenorrhoea based on sign and symptoms. The contents of the selected drugs are *Agneya* in nature with the properties like *Artavajanana*, *Rakta-uttejaka*, *Garbhashaya-uttejaka* and *Raktashodhaka*.

**Objectives:** A conceptual study of *Artavakshaya*.

To evaluate the efficacy of *J R Vati* (*Jyotishmati Rajikaadi Vati*),

To compare the efficacy of *J R Vati* with *Rajahpravartani Vati*.

**Study Design:** This research work is a single blind comparative clinical study; conducted on 60 patients presenting with *Pratyama Lakshanas* of *Artavakshaya*, equally divided in to two groups (Group A and Group B). Group A was given *J R Vati* (*Jyotishmati Rajikaadi Vati*) and Group B was given *Rajahpravartani Vati* for a period of 3 menstrual cycles and follow up for further 2 menstrual cycles.

**Result:** The drugs showed good improvement in Duration of flow, delayed menstrual cycle, amount of flow and pain.

**Keywords:** *Artavakshaya, Oligomenorrhoea, Hypomenorrhoea, Menstrual disorder, Hormonal treatment, J R Vati, Rajahpravartani Vati.*

## INTRODUCTION

Female is a priceless gift of God. She is endowed with energy of procreation for which menarche is the first step. Menstrual cycle commences with menarche and ends with menopause and having normal menstruation depicts the well-being of female. A slight deviation in a normal menstrual cycle, may lead to solve serious pathology of internal genital organs. Due to changed life mottos, life style of female has also altered. Their life style alteration along with responsibilities and liabilities at work and house results in disorders of female reproductive system. The chain of female reproductive functioning, starts from menstruation to ovulation, conception, child birth, parturition and lastly with its cessation at menopausal phase. If any deviation from its normal course takes place, it leads to different diseases.

Women are greatly affected by hormonal fluctuations. Hormonal changes in

female body are much more prominent and undergo changes as the age advances. The main two hormones released in female body are oestrogen and progesterone. Menstruation is the natural event as a part of normal phenomena of female's reproductive life guided by hormones. Due to sedentary lifestyle, irregular dietary habits and lack of exercise, menstrual disorders are becoming today's burning problem throughout the world.

Incidences of menstrual disorder are rising which could be a precursor of other problems, so it requires more concern [1]. Menstrual patterns are influenced by a number of host and environmental factors. These are also responsible for emotional, physical, behavioural and dietary changes. Menstrual disorders like Oligomenorrhoea and Hypomenorrhoea affects mental state of women and quality of life. These disorders require systemic and schematic treatment

with appropriate counseling. There is an altered physiology at the level H-P-O-U axis (Hypothalo-pituitary-ovarian-uterine axis). Hence this requires attention that can answer the rising question. In Modern medical science hormonal treatment which has a good therapeutic utility is used for menstrual disorders but this is not devoid of adverse effects. According to various studies, 87.7% of the girls are suffering from menstrual problem [2]. The Oligomenorrhoea is found in 16.08% females as per the study done in Maharashtra, India in 2011 [3]. Another study conducted in Saudi Arabia states 19.3% women suffered from problem of Oligomenorrhoea [4]. In recent survey done in Bangalore in 2014-2015, 19.9% women were recorded with Oligomenorrhoea and 11.89% patients with Hypomenorrhoea [5].

The amount of menstrual discharge varies from person to person. *Acharya Charaka* has clearly stated that neither excessive nor scanty discharge is considered normal [6]. The menstrual abnormalities are a common that plague women. 30% of women visiting gynecological OPD's have menstrual variations. *Artavakshaya* is one amongst these gynecological problems. It is characterized by delayed and scanty menstruation associated with pain [7]. This can be compared with Oligomenorrhoea and Hypomenorrhoea based on sign and symptoms.

Menstrual bleeding occurring at an interval of more than 35 days and remain constant at that frequency, is known as Oligomenorrhoea. Hypomenorrhoea is unduly scanty and last for less than 2 days. In classics there are many *Aushadha Yogas* mentioned for alleviating *Artavakshaya*, these *Yogas* possess *Agneya* properties which helps in increasing *Artava*. It is said, "Necessity is the Mother of Invention". Perhaps, the necessities which appeared in the various facts like dose, route of administration, self-life, availability, easy dispensing, palatability and efficacy; to get potentially active principles of the drugs, various *Kalpanas & Upakalpanas* came into existence.

In the present study *Acharya Yogaratanakara's Yoga (Jyotishmati Rajikaadi Vati* containing *Jyotishmati Patra, Rajika, Ajwain and Asana*) was used for the trial in comparison to the *Rajahpravartani Vati* (described by *Bhaishjya Ratnavali*). The patients were randomly selected for the study from the Gynaecology OPD of Rishikul campus, Haridwar; and equally divided in to two groups i.e. Group A (*Jyotishmati Rajikaadi Vati*) and Group B (*Rajahpravartani Vati*). The contents of the selected drugs are having the properties *Kapha-Vatahara, Artavajanana, Rakta-Uttejaka, Garbhashaya-uttejaka* and *Raktashodhaka. Samprapti Vighatana* and effective control and cure in

the *Artavakshaya* are the main aims with which the drugs were selected.

#### **AIMS AND OBJECTIVES:**

The present clinical study has been planned to accomplish following aims and objectives-

- To evaluate the effects of *J R Vati* in the patients suffering from *Artavakshaya* on various scientific parameters.
- To compare the efficacy of *J R Vati* with *Rajahpravartani Vati*.

#### **MATERIAL & METHOD**

The trial was conducted on clinically diagnosed & confirmed cases of *Artavakshaya* selected from OPD/IPD of Prasuti Tantra Evum Stri Roga Dept.

- 1) Literature Source – Available in all Ayurvedic Samhitas.
- 2) Sample Source – Patients were selected from O.P.D. and I.P.D. of Department of Prasuti Tantra Evum Stri Roga of Rishikul Campus, Haridwar (U.K.), India, irrespective of caste, creed, race and religion of age 15-40 years.
- 3) Drug Source - Required raw drugs were collected and both the drugs i.e. *J R Vati* and *Rajahpravartani Vati* were prepared in the Premnagar Ashram Pharmacy, Haridwar.
- 4) Sample Size – Two groups, 30 patients in each group.
- 5) Method of Data Collection – Patients fulfilling the inclusive criteria were selected.

#### 6) Inclusion criteria:

- Female aged between 15-40 years, with complaints of scanty bleeding per vagina during menstruation either in amount or in duration or both or prolonged menstrual cycles (> 35 days) for 2 consecutive menstrual cycles (having regular menstrual cycles before 6 months). The quantity of menstrual bleeding was decided by soaking of the pads used (with decided parameters).
- The patients of reproductive age were included in the study irrespective of obstetric history related to parity.
- The patients who were ready for consent, necessary investigations and agreed to come for follow up regularly selected.
- Infections such as candidiasis, trichomoniasis or any other form of vulvo-vaginitis and pelvic congestion were initially treated with respective drugs and when symptoms and signs totally disappeared then they were included in the study.

#### 7) Exclusion criteria:

- Female ageing below 15 and above 40.
- Pregnant and lactating woman.
- History of severe PPH in previous delivery.
- Patient using oral contraceptive pills or IUCD.

- Female taking treatment for bleeding disorder.
  - Congenital anomalies e.g. hypoplastic uterus, septate uterus, vaginal septum, atresia, uterine synechiae etc.
  - Patient having either any organic pathology or benign and malignant growth of genital organs.
  - Patient with endocrinal disorders like hyperthyroidism, PCOS, ovarian resistant syndrome, early menopause.
  - Patient having generalized acute and chronic illness, anemia, weight loss, CVS diseases, tuberculosis, liver diseases etc.
  - Patient with metabolic disorder like diabetes.
  - Worm infestation.
- 8) Study Design: The patients with *Artavakshaya* were treated with the following conditions.
- **Type of Study**: Single blind.
  - **Period of Study**: Duration of trial was 3 consecutive menstrual cycles.
- **Route of Administration**: Oral (for both the drugs).
  - **Dosage**:  
J R Vati – 2 tablets (weighing 500mg each), TDS.  
*Rajahpravartani* Vati – 2 tablet (weighing 250mg each), TDS.
  - **Anupana**: Water.
  - **Frequency of Medication**: 3 times a day after meal for the whole duration of the treatment i.e. 3 consecutive menstrual cycles.
  - **Observation during Treatment**: At an interval of 15 days till the completion of trial.
  - **Follow-up after Treatment**: The patients were followed up for another two consecutive menstrual cycles after the completion of treatment period.
  - **Total duration of Study**: 5 menstrual cycles.
- 9) Posology: Patients included in the present study are randomly divided into following two groups:

Table 1: Showing Posology

	GROUP A	GROUP B
Drug	<i>J R Vati</i>	<i>Rajahpravartani Vati</i>
Dose	1 g, TDS	500 mg, TDS
Anupana	Water	Water
Route	Oral	Oral
Duration	3 consecutive menstrual cycles	3 consecutive menstrual cycles
Follow- Up	2 menstrual cycles	2 menstrual cycles

10) Assessment Criteria:

**Parameters:** Scoring of the symptoms was done before, during and after the study, purely on the basis of patient's explanation.

- **Duration of Menstrual Flow:** The duration of menstrual bleeding or flow was recorded as per the patient's explanation, in number of days.
- **Interval between two menstrual cycles:** The number of days in between two consecutive menstrual cycles.
- **Amount of Blood Loss:** It was assessed on the basis of statement

given by the patient. All the patients were advised to use standard size sanitary pads i.e. 6 inch x 3 inch x 1.5 inch, made of cotton and asked to change sanitary pads when it is soaked and note the count of pads used per day during menstruation. Hence the number of pads used in every cycle was recorded.

- **Grade of Pain during Menstruation:** All the patients were asked about the association of pain during menstruation and intensity of that pain, does pain disturbs their daily routine or not.

Table 2: Showing the Gradation of Cardinal Symptoms of *Artavakshaya*

Symptoms	Criteria	core
<i>Yathochitakala Adarshanam</i> (Delayed Menses)	28 – 35 Days Cycle	0
	36 – 45 Days Cycle	1
	46 – 60 Days Cycle	2
	61 – 75 Days Cycle	3
	76 – 90 Days Cycle	4
<i>Alpata</i> (Amount of Menstrual Flow) pads / day	When 4 or more than 4 Pads Use/ Day	0
	3 Pads Use/ Day	1
	2 Pads Use/ Day	2
	1 Pads Used/ Day	3
	Spotting Bleeding without Pad given*	4
<i>Alpata</i> (Duration of Menstruating Phase) day wise	4 Days	0
	3 Days	1
	2 Days	2
	1 Day	3
	Only Spotting*	4
<i>Yonivedana</i> (Dull Aching Pain)	No Pain	0
	Mild	1
	Moderate	2
	Severe	3

\*spotting irrespective of days

11) Intervention: Duration of treatment was three consecutive menstrual cycles and then the follow-up for next two menstrual cycles i.e. one visit after each cycle after completion of treatment.

12) Criteria for Assessment of Overall Effect of Therapy:

Data obtained from the parameters of assessment, before & after the therapy was utilized to evaluate the overall effect of therapy in terms of cured, markedly

improved, moderately improved, mild improved and no improvement. First percentage improvement of individual patient was calculated as shown below:

- All the B.T. score of the above mentioned symptoms & biochemical parameters of the patient were added.
- All the A.T. score of the above mentioned symptoms & biochemical parameters of the patient were added.
- Overall percentage improvement of each patient was calculated by the following formula:

$$\frac{\text{Total BT}-\text{Total AT}}{\text{Total BT}} \times 100$$

- The result thus obtained from individual patient was categorized according to the following grades:  
Control of the disease 100% relief

Marked improvement  $\geq 75\%$  to 99% relief  
Moderate improvement  $\geq 50\%$  upto 74% relief

Mild improvement  $\geq 25\%$  upto 49% relief

No improvement  $\leq 25\%$  relief

### 13) Statistical Analysis:

The information collected on the basis of observation were analyzed using appropriate statistical test (Paired t-test was used for data) to evaluate the significances at different levels i.e. at 0.05, 0.01 and 0.001 levels. The obtained results were interpreted as follows-

- Insignificant or Not significant (NS or NQS) -  $p > 0.05$
- Significant (S) -  $p < 0.05$
- More or very Significant -  $p < 0.01$
- Highly or Extremely Significant -  $p < 0.00$

### OBSERVATION

**Table 3: Distribution of Patients on the Basis of *Yathochitakala Adarshanam* (Delayed Menstruation)**

Grade	Menstrual Cycle	Group A		Group B		Total Number of Patients (n=60)	%
		No. of Patients	%	No. of Patients	%		
0.	28-35 Days	4	13.3	5	16.7	9	15
1.	36-45 Days	6	20	6	20	12	20
2.	46-60 Days	9	30	11	36.7	20	33.3
3.	61-75 Days	7	23.4	5	16.6	12	20
4.	76-90 Days	4	13.3	3	10	7	11.7

**Table 4: Distribution of Patients on the Basis of *Alpata* (Amount of Menstrual Bleeding according to No. of pads i.e. 6X3X1.5 inch used per day)**

Grade	Amount of Blood Loss	Group A		Group B		Total Number of Patients (n=60)	%
		No. of Patients	%	No. of Patients	%		
0.	4 Pad/More	5	16.5	3	10	8	13.3
1.	3 Pad	4	13.3	4	13.3	8	13.3
2.	2 Pads	10	16.5	12	40	22	36.7
3.	1 Pads	8	26.7	9	30	17	28.4
4.	No Pads	3	10	2	6.7	5	8.3

Table 5: Distribution of Patients on the Basis of *Alpata* (Duration of Menstrual Bleeding - Day wise)

Grade	Menstrual Duration	Group A		Group B		Total Number of Patients (n=60)	%
		No. of Patients	%	No. of Patients	%		
0.	4 days/ More	3	10	4	13.3	7	11.7
1.	3 Day	1	3.3	1	3.4	2	3.3
2.	2 Days	15	50	15	50	30	50
3.	1 Days	6	20	6	20	12	20
4.	Spotting	5	16.7	4	13.3	9	15

Table 6: Distribution of Patients on the Basis of *Yoni Vedana* (Dull Aching Pain)

Grade	Pain Intensity	Group A		Group B		Total Number of Patients (n=60)	%
		No. of Patients	%	No. of Patients	%		
0.	No Pain	7	23.3	8	26.7	15	25
1.	Mild	20	66.7	16	53.3	36	60
2.	Moderate	3	10	6	20	9	15
3.	Severe	0	0	0	0	0	0

### Observations Recorded during Treatment on Different Parameters

- *Yathochitkala Adarshanam* (Delayed Menstruation)

Table 7: Improvement in *Yathochitkala Adarshanam* within the Groups

Grp	Menstrual cycle (in Days)	B.T. No. of Cases (%)	D.T.		A.T.
			In 1 <sup>st</sup> Cycle (C1)	In 2 <sup>nd</sup> Cycle (C2)	In 3 <sup>rd</sup> cycle
			No. of cases %	No. of cases %	No. of Cases%
'A'	GRADE 0	4 (13.3%)	5 (16.6%)	8 (26.6%)	18 (60%)
	GRADE 1	9 (30%)	10 (33.3%)	15 (50%)	12 (40%)
	GRADE 2	8 (26.6%)	11 (36.6%)	7 (23.3%)	0 (0%)
	GRADE 3	5 (16.6%)	3 (10%)	0 (0%)	0 (0%)
	GRADE 4	4 (13.3%)	1 (3.3%)	0 (0%)	0 (0%)
'B'	GRADE 0	5 (16.6%)	5 (16.6%)	5 (16.6%)	5 (16.6%)
	GRADE 1	6 (20%)	9 (30%)	17 (56.6%)	20 (66.6%)
	GRADE 2	11 (36.6%)	13 (43.3%)	8 (26.6%)	5 (16.6%)
	GRADE 3	5 (16.6%)	2 (6.6%)	0 (0%)	0 (0%)
	GRADE 4	3 (10%)	1 (3.3%)	0 (0%)	0 (0%)

- *Alpata* (Duration of Menstrual Flow)

Table 8: Improvement in *Alpata* within the Groups (by counting number of Menstruating Days in each Cycle)

Grp	Menstrual cycle (in Days)	B.T. No. of Cases (%)	D.T.		A.T.
			In 1 <sup>st</sup> Cycle (C1)	In 2 <sup>nd</sup> Cycle (C2)	In 3 <sup>rd</sup> cycle
			No. of cases %	No. of cases %	No. of Cases%
'A'	GRADE 0	3 (10%)	4 (13.3%)	11 (36.6%)	14 (46.6%)
	GRADE 1	3 (10%)	16 (53.3%)	11 (36.6%)	15 (50%)
	GRADE 2	14 (46.6%)	8 (26.6%)	7 (23.3%)	1 (3.3%)
	GRADE 3	5 (16.6%)	4 (13.3%)	1 (3.3%)	0 (0%)
	GRADE 4	5 (16.6%)	1 (3.3%)	0 (0%)	0 (0%)
'B'	GRADE 0	4 (13.3%)	5 (16.6%)	5 (16.6%)	5 (16.6%)
	GRADE 1	1 (3.3%)	7 (23.3%)	12 (40%)	15 (50%)
	GRADE 2	15 (50%)	13 (43.3%)	11 (36.6%)	10 (33.3%)
	GRADE 3	6 (20%)	4 (13.3%)	2 (6.6%)	0 (0%)
	GRADE 4	4 (13.3%)	1 (3.3%)	0 (0%)	0 (0%)

- *Alpata* (Amount of Menstrual Bleeding)

Table 9: Improvement in *Alpata* within the Groups (by counting number of pad used Per day)

Grp.	Amount of bleeding Pads/day	B.T.	D.T.		A.T.
		No. of Cases (%)	In 1st Cycle (C1)	In 2nd Cycle (C2)	In 3rd cycle No. of Cases%
			No. of cases %	No. of cases %	
'A'	GRADE 0	5 (16.6%)	5 (16.6%)	7 (23.3%)	15 (50%)
	GRADE 1	3 (10%)	3 (10%)	12 (40%)	15 (50%)
	GRADE 2	4 (13.3%)	14 (46.6%)	11 (36.6%)	0 (0%)
	GRADE 3	13 (43.3%)	8 (26.6%)	0 (0%)	0 (0%)
	GRADE 4	5 (16.6%)	0 (0%)	0 (0%)	0 (0%)
'B'	GRADE 0	3 (10%)	3 (10%)	4 (13.3%)	4 (13.3%)
	GRADE 1	4 (13.3%)	5 (16.6%)	10 (33.3%)	15 (50%)
	GRADE 2	12 (40%)	17 (56.6%)	16 (53.3%)	11 (36.6%)
	GRADE 3	9 (30%)	5 (16.6%)	0 (0%)	0 (0%)
	GRADE 4	2 (6.6%)	0 (0%)	0 (0%)	0 (0%)

- *Yonivedana* (Dull Aching Pain)

Table 10: Improvement in *Yonivedana* within the Groups

Grp	Intensity of Pain	B.T.	D.T.		A.T.
		No. of Cases (%)	In 1st Cycle (C1)	In 2nd Cycle (C2)	In 3rd cycle
			No. of cases %	No. of cases %	No. of Cases%
'A'	GRADE 0	7 (23.3%)	9 (30%)	17 (56.6%)	21 (70%)
	GRADE 1	18 (60%)	18 (60%)	13 (43.3%)	9 (30%)
	GRADE 2	5 (16.6%)	3 (10%)	0 (0%)	0 (0%)
	GRADE 3	0 (0%)	0 (0%)	0 (0%)	0 (0%)
'B'	GRADE 0	8 (26.6%)	11 (36.6%)	13 (43.3%)	15 (50%)
	GRADE 1	16 (53.3%)	15 (50%)	14 (46.6%)	14 (46.6%)
	GRADE 2	6 (20%)	4 (13.3%)	3 (10%)	1 (3.3%)
	GRADE 3	5 (16.6%)	3 (10%)	0 (0%)	0 (0%)

## RESULTS

The parameters were used in the initial and consecutive observation time, for the assessment of progress. The parameters were *Alpata* (amount of blood flow), *Alpata* (duration of menstruating phase), *Yathochitakala Adarshanam* and *Yonivedana*. The assessments were separated by different grading patterns of criteria's described above. The records were maintained for denoting the progress or retardation of each specific component of *Artavakshaya*. In view of changes in the

grade of chief complaint the final assessment of the efficacy of both the drugs (*J R Vati* and *Rajahpravartani Vati*) in *Artavakshaya* was made, by studying their effect in 30 patients (in each group). The patients were followed up for another two consecutive menstrual cycles after the treatment period, to check if there is any re-occurrence, of any symptom.

### Comparison of Effect of Treatment on Decided Parameters (Group A vs. Group B)

Table 11: Comparative effect of Group A and Group B on various Parameters

		Yathochitakala Adarshanam		Alpata (Amount)		Alpata (Duration)		Yonivedana	
		GrpA	GrpB	GrpA	GrpB	GrpA	GrpB	GrpA	GrpB
Mean±S. D	BT	1.8±1.2	1.8±1.2	2.3±1.34	2.2±0	2.2±1.1	2.1±1.1	0.9±0.6	0.9±0.69
	C1	1.5±1	1.5±0.9	1.8±1	1.8±0.8	1.5±1	1.6±1	0.8±0.6	0.76±0.67
	C2	0.9±0.7	1.1±0.6	1.1±0.7	1.4±0.7	0.9±0.8	1.3±0.8	0.4±0.5	0.6±0.6
	AT	0.4±0.4	1±0.5	0.5±0.5	1.2±0.6	0.5±0.5	1.1±0.69	0.3±0.4	0.5±0.5
	BT-AT	1.3	0.83	1.8	1	1.63	1	0.63	0.4
% Relief		69.6%	45.4%	78.5%	44.7%	74.2%	46.1	67.8	42.8
t-value		6.96	5	8.75	7.37	10.05	8.51	6.23	5.47
p-value		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Significance		HS	HS	HS	HS	HS	HS	HS	HS

Table 12: Effect on Decided Parameters

Decided Parameters	Mean ± S.D.		% Relief		Unpaired t test	P value
	Group A	Group B	Gr.A	Gr.B		
Yathochitakala Adarshanam	0.4±0.49	1.0±0.58	69.6	45.4	4.328	<.05
Alpata (Quantity)	0.5±0.5	1.2±0.67	78.5	44.7	4.586	<.05
Alpata (Duration)	0.56±0.5	1.2±0.69	74	46.1	4.114	<.05
Yonivedana	0.43±0.5	0.53±0.57	67.8	42.8	0.7224	>.05

### Estimation of Overall Response in Between Groups

Table 13: Overall Response in two Groups

RELIEF	Group A		Group B	
	NUMBER	%	NUMBER	%
Complete Resolution (100%)	3	10%	-	-
Marked Improvement (75% to <100%)	14	46.7%	1	3.3%
Moderate Improvement (50% to <75%)	10	33.3%	13	43.4%
Mild Improvement (26% to <50%)	3	10%	12	40%
No improvement (≤25%)	-	-	4	13.3%

From the above **Table 13**, it was clear that:

**Group A:** In 10% patient complete resolution was observed; marked relief in 46.6% patients; moderate relief in 33.3% and mild relief in 10% patients.

**Group B:** 3.3 % patients showed marked relief; 43.4% recorded with moderate relief; 40% had mild relief and 13.3% showed no relief at all.

### Follow Up & Recurrence Status of Patients within the Groups

Table 14: Follow Up for Two Menstrual Cycles

Groups	After 1 <sup>st</sup> Follow-up No. of Patients	After 2 <sup>nd</sup> Follow-up No. of Patients
Group A	3	2
Group B	7	4

## DISCUSSION

The aim of the treatment of *Artavakshaya* should be

- To correct the altered & vitiated *Doshas* causing *Artavakshaya*.
- To improve the *Alpata* (Amount and Duration of menstrual bleeding).
- To correct the *Yathochitakala Adarshanam* i.e. to regularize the *Artava Chakra*.
- To maintain the general health of patients i.e. to maintain the *Bala* and *Oja*.
- To prevent any further complication of the disease.
- To study the adverse effects of the medicine.

Considering these aspects, the drugs acting as *Kapha-Vatahara*, *Artavajanaka*, *Rakta-uttejaka*, *Garbhashaya-uttejaka*, *Raktashodhaka*, *Deepana* and *Balya* are desired in the treatment of *Artavakshaya*. Considering all these facts, an effort was made to evaluate the efficacy of Drug '*J R Vati (Jyotishmati Rajikaadi Vati)*' in comparison with '*Rajahpravartani Vati*' in the patients suffering from *Artavakshaya*.

## Mode of Action of *J R Vati (Jyotishmati Rajikaadi Vati)*:

- ❖ ***RASA***- All the *Dravyas* of *J R Vati* is having *Katu* and *Tikta Rasa*. The properties of these *Rasas* are:
    - ***Arochaghna***:<sup>1</sup> It is the basis property of *Tikta Rasa* i.e. it increases the patient's appetite; thus resulting in proper nutrition of the body, *Dhatu* and *Upadhatu*.
    - ***Agnivardhana, Deepana & Pachana***:<sup>1</sup> Both the *Rasa* helps in proper digestion of *Aahara Rasa* and *Aama*; thus nourishment of *Dhatu*s takes place.
    - ***Srotas Vivrnoti***:<sup>1</sup> *Katu Rasa* helps in broadening of the orifices of *Srotas* which leads to the good conduction of hormones through the blood and also clears the passage (*Artavavahi Dhamanis*) for *Artava*.
    - ***Krimighna***:<sup>1</sup> This property creates a hostile environment against pathological organisms.
- Thus, these *Rasas* improves the general health condition of the *Artavakshaya* patients.

- ❖ **GUNA**- *Jyotishmati*, *Rajika* and *Ajwain* possess *Tikshna Guna* mainly. In addition they are also *Laghu* and *Ruksha*.
- ***Tikshna***: It increases *Pitta Dosha*, especially *Pachaka Pitta*, which in turns results in *Agni Samyata* and finally leading to proper production of *Rasa* and *Rakta Dhatu*, and *Artava Upadhatu*.
- ***Laghu and Ruksha Guna***: They are *Kapha Shamaka*, *Lekhaniya* and *Shoshana Kara*; thus helps in *Sroto Shodhana*.
- ***Sara Guna***: *Jyotishmati* has *Sara Guna* and hence helps in maintaining the normal blood flow.
- ❖ **VIRYA**- Except *Asana* all the other three drugs are of *Ushna Virya*.
- This *Guna* pacifies the vitiated *Vata* and *Kapha Dosha*, which are responsible of *Vishama* and *Mandya Agni*. *Ushna Virya* helps in formation of *Pitta Dosha (Pachaka Pitta)*, which stimulates the *Agni* and helps in digestion of *Aama*.
- ❖ **VIPAKA**- All the *Dravyas* are *Katu* in *Vipaka*; thus they helps in *Kapha Shamana*.
- ❖ **DOSHA KARMA**- All contents of *J R Vati* are *Kapha-Vatahara*. *Ajwain* in addition is also *Pitta Vardhaka* in nature.
- ❖ **KARMA** -
  - ***Artavajanana***: The drug possesses this action; thus it helps in production of *Artava*.
  - ***Hridaya-uttejaka & Rakta-uttejaka***: Drug maintains the good blood flow throughout the body, resulting in proper circulation at cellular level and finally leading to the healthy growth of endometrium.
  - ***Garbhashaya-uttejaka***: The drug may help to stimulate the uterine actions at the level of myometrium and endometrium, and may maintain and regularize the menstrual cycle.
  - ***Deepaniye***: Drug cures *Agnimandhya* and increases the production of *Rasa Dhatu*, hence it relieves *Artavakshaya*.
  - ***Vedana Shamaka***: Helps in relieving pain.
  - ***Lekhaniye***: Due to this property, it may acts as *Srotho Shodhaka*; leading to proper transportation of *Artava*. *Lekhaniye Dravya* may help in the shedding of endometrium during menstrual phase. Hence it improves the amount of bleeding and helps to prepare the uterus for new menstrual cycle.
  - ***Rasayana***: *Rasayana Dravya* modulates cell and tissue rejuvenation by maintaining the

micro nutrition and improving the quality of *Dhatu*.

- **Raktasodhaka & Yonidoshahara:** They maintain the quality of *Rakta Dhatu*, which further provide nutrition to other *Dhatu*s and *Upadhatus*. The *Yonidoshahara* property may help to maintain the normal health of female genital tract.

❖ **RECENT RESEARCHES-**

- **Jyotishmati:** The dried leaves are recommended for menstruation induction. The methonolic extract in the leaves have analgesic and anti-inflammatory property, thus they help in relieving menstrual pain.

Its leaves contain Steroids and Saponin, which may help in endometrial regeneration. Saponin is an immuno-modulator and anti-oxidant.

- **Rajika:** Its seeds have Terpenoids, which helps in growth and development of the body. By inducing *Dhatu* and *Upadhatu Utpatti*, it improves the general condition of the patients.
- **Ajwain:** It is anti-spasmodic in nature. It increases the gastric acid secretion which leads to proper digestion of *Aahara*
- **Asana:** It Relieves pain.

**Rajahpravartani Vati**

The contents of the drug are *Ghritakumari*, *Hingu*, *Kasisa* and *Tankana*.

- ❖ **RASA-** *Aloe vera* is *Tikta rasa Pradhana*; *Hingu* mainly has *Katu Rasa*; *Kasisa* is *Pradhana* in *Kashaya* and *Tikta Rasa* and *Tankana* is *Kshariye*.

- All the *Rasas* are *Kapha Shamaka* and helps in opening the blocked channels i.e. *Srotas*.<sup>1</sup>

- ❖ **GUNA-** *Ghritakumari* is *Guru* and *Snigdha*; on the other hand *Hingu* is *Tikshna* and *Laghu* in properties, and *Tankana* is *Ruksha* and *Laghu*.

- **Guru and Snigdha:** Both the *Guna* do *Tarpana* of *Dhatu*s.

- ❖ **VIRYA-** Except *Aloe vera* all the other three drugs are of *Ushna Virya*, which increase the *Pitta Dosha*. By this the *Agni* is stimulated which helps in digestion of *Aama*.

- ❖ **VIPAKA-** The *Aloe vera* and *Hingu* are having *Katu Vipaka*, thus they help in *Kapha Shamana*.

- ❖ **DOSHA KARMA-** All contents are *Kapha-Vatahara*, hence they pacify the *Kapha and Vata Doshas*.

- *Tankana* is *Pitta Vardhaka* in nature.

❖ **ACTION-**

- **Artavajanana:** All the contents of the drug are *Artavajana* or *Rajahpravartaka* in nature. Thus

they enhance the *Artava* production and flow.

- **Balya:** *Ghritakumari*, *Hingu* and *Kasisa* are considered as *Balya Dravya*. *Ghritakumari* is *Rasayana* and *Brihghana* in nature, due to all these properties of the drugs improves the health of the patient; resulting in proper formation of *Dhatus* and *Upadhtus*.
- **Deepana, Pachana, Bhedaniye and Krimighna:** Majority of the contents are *Deepaka* and *Pachaka*, therefore they helps in *Agni Deepana* and resulting in *Aahara Rasa* production. *Krimi* i.e. worm affects the general health of the individual and they may even cause anemia. This drug blocks all this. The *Bhedaniye Dravya* widens the orifice of the *Srotas*.
- **Raktashodhaka and Rakta-uttejaka:** This property of the drug enhances the blood supply of the body and of uterus also.

#### RECENT RESEARCHES-

- *Aloe vera:* As per the studies done on *Aloe vera* till now, proved its role in increasing arteriole diameter, thus stimulating the microcirculation. We can conclude that it also increases the menstrual flow. It improves digestion and boost immunity. Above mentioned properties prove

its role in *Artava* production and transportation.

- *Hingu:* Study showed its result in *Artavakshaya*. The *Byakangelicin*, present in *Hingu*; has also been studied in female sex hormones. The drug is used for helping in neurotic states and nervous disorders. It also possesses the anti spasmodic activity and anti-inflammatory activities.
- *Tankana:* Various studies proved its action on *Artavakshaya* and *Amenorrhoea*.

#### Discussion on Overall effect J R Vati & Rajahpravartai VATI

- ❖ Total 60 patients were treated in this present study equally divided in to 2 groups.
- ❖ In Group A (*Jyotishmati Rajikaadi Vati*), 10% patients were completely resolved; 46.7% showed marked improvement; 33.3% moderately improved and 10% patients recorded with mild improvement.
- ❖ In Group B (*Rajahpravartani Vati*), 3.3% found under marked improvement; 43.4% showed moderately improved, 40% showed mild improvement and in 13.3% no improvement was seen.
- ❖ After completion of treatment in Group A, recurrence was seen in 3 patients after 1<sup>st</sup> follow-up and in 2

more patients after 2<sup>nd</sup> follow up i.e. in total 5 patients were recorded with recurrence.

- ❖ In Group B, after 1<sup>st</sup> follow up recurrence was recorded in 7 patients and after 2<sup>nd</sup>; 4 more patients were reported.
- ❖ Group A was found to have better results in treating *Artavakshaya* than Group B.
- ❖ No adverse reaction of any drugs was seen in both the groups was seen during and after study.

#### CONCLUSION:

- Based upon the detailed conceptual description, it can be concluded that *Artavakshaya* and Oligo-Hypomenorrhoea, both are nearly same entities.
- *J R Vati* and *Rajahpravartani Vati* showed statistically significant results on all parameters of the study.
- The results of *J R Vati* are comparatively much better than *Rajahpravartani Vati* in all of the criteria of the study.
- No adverse effects were recorded during and after the treatment, with both of the drugs.
- In the group of *J R Vati*, the recurrence of *Yathochitakala Adarshanam* was found negligible patients of the study. So we can say

that no recurrence was recorded for all of the criteria in this group.

- In maximum patients of *Rajahpravartani Vati* group recurrence was noticed.
- The contents of the drug i.e. *Jyotishmati Patra*, *Rajika*, *Ajwain* and *Asana* are cost effective and easily available.

#### REFERENCES

- [1] Cakir M, Mungan I, Karakas T, Giriskan L, Okten A; ‘Menstrual pattern and common menstrual disorders among university students in Turkey’. *Paediatrics Int.* 2007; 49:938-42 [PubMed] [Ref list].
- [2] Dr. Rama Ravi M.D, Dr. Pankaj Shah M.D, Dr. B.W.C. Sathiyasekaran M.D., M.Sc.; *Journal of Pediatric and Adolescent Gynecology*; 29 October, 2015; ‘Prevalence of menstrual problems among adolescent school girls in rural Tamil Nadu’. [www.sciencedirect.com](http://www.sciencedirect.com)
- [3] Mahite R V, Mohite V R, Kumbhar S M, Ganganahakki P; *JKIMSU*, Vol-2, No.1; Jan-June 2013; ISSN2231-4261; ‘Common Menstrual Problems among Slum Adolescent Girls of Western Maharashtra, India’.

- [4] N. Karout, S.M. Hawai and S. Altuwajri; EMHJ, Vol-8, No. 4, 2012; 'Prevalence and Pattern of Menstrual Disorders among Lebanese Nursing Students.'
- [5] Tabassum Kotagasti; 'Prevalence of different Menstrual Irregularities in Women with Abnormal Uterine Bleeding (AUB) – An observational Study'; IJCRR, Volume-7, Issue-10, May 2015.
- [6] Charaka Samhita of Agnivesha; Revised by Charaka & Dridhbala; Elaborated by Vidyotini Hindi commentary by Pt. Kashinath Shashtri & Dr. Gorakhnath Chaturvedi; Chaukhambha Bharati Academy, Varanasi; Edition-2005; Part-2; Chikitsa Sthana; Chapter- 30, Shloka-225; Page-870.
- [7] Sushruta Samhita of Maharshi Sushruta; Edited with Ayurveda - Tattva- Sandipika; Hindi Commentary, Scientific Analysis, Notes by Kaviraja Ambika Dutta Shastri; Foreword by Dr. Pranajivana Manekchanda Mehta; Chaukhambha Sanskrit Sansthan, Varanasi; Volume-1; Reprint-2010; Sutra Sthana; Chapter-15, Shloka-16; Page-77.