



Research Article

CLINICAL EVALUATION OF *SHATAPUSHPA SHATAVARI CHURNA* AND O.C. PILLS IN THE MANAGEMENT OF *ARTAVA KSHAYA* W.S.R. TO CERTAIN MENSTRUAL DISORDERS

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ABSTRACT

A randomised control clinical trial was carried out on 60 *Artava Kshaya* (irregular, scanty and painful menses) patients aged between 18 and 40 years having complaints of irregular, scanty and painful menstruations. The patients were registered from OPD of CSMSS Ayurved Rugnalaya & Research Centre, Aurangabad. Divided into 2 groups. They were administrated *Shatapushpa* and *Shatavari churna* (group A) and OC pill (group B) for three months in a dose of 5 g daily with cow *Ghrita* and *Guda*; OC pills (Mala N) once in a day as per standard schedule. The specific investigations were done in order to exclude congenital anomalies, endometritis, endocrine disorders, diabetes and heart disease. The clinical assessment was carried out in 3 intervals 30 days apart. It is inferred that the study shows the effect of both treatments were significant in clinical study. In group A, none of the patient showed excellent improvement in *Artava Kshaya*, while moderate improvement was observed in one (3.33%) patient, mild improvement was observed in 25 (83.25%) patients and 4 (13.32%) of the patients showed ineffective improvement after treatment. In group B, none of the patient showed excellent improvement in *Artava Kshaya*, while moderate improvement was observed in 2 (6.66%) patients, mild improvement was observed in 25 (83.25%) patients and 3 (9.99%) of the patients showed ineffective improvement after treatment. The *Shatapushpa Shatavari Churna* is more effective on *Yoni Vedana*, *Artava strava Pramana* and *Artava strava kalvavadhi*. Both *Shatapushpa Shatavari Churna* and O.C. pill are effective on and duration between two *Artava Darshana* but O.C. pill is comparatively more effective.

KEYWORDS: Irregular, Scanty, Painful menses, *Artavakshaya*, *Shatapushpa*, *Shatavari*, Mala-N.

INTRODUCTION

Woman's health is the primary factor to be considered for wellbeing of family, society and culture. Any physical, physiological disorder disturbs her life. Physiological changes and development occurs right from birth but markedly during the reproductive period. Due to changed life style of women, increased the physical and emotional stress which alters the physiology of 'Hypothalamus- Pituitary- Ovarian- Uterine axis' which leads to many gynaecological problems. Among all gynaecological problems, the most common one is menstrual problem that is *Artava Kshaya* being more common.

In today's scenario the hormonal treatment which has a good therapeutic utility, is not devoid of side effects, rather than hormonal treatment from contemporary science Ayurvedic herbo-mineral, non-hormonal, non-toxic preparations are proved effective for *Artava Kshaya*. Therefore there is increasing demand to address the problem from view of Ayurvedic medicine which gives better relief without causing any harms.

Many formulations have been documented in Ayurveda and which are effective in *Artava Kshaya*.

In allopathic system *lakshana* of *Artava Kshaya*¹ can be correlated with certain menstrual disorders as follows.

- Irregular menses^{2,3,4} as *Yathochita kala adarshanam*,
- Hypomenorrhoea^{5,6,7} as *Alpata*
- Dysmenorrhoea^{8,9} as *Yonivedana (Trayavarta)*

In allopathic system, only treatment on these certain menstrual disorders is hormonal therapy/hormonal pills².

So *Shatapushpa Shatavari Churna* may be better alternative to these hormonal OC pills. So keeping this view in mind *Shatapushpa Shatavari Churna* and O.C. pills is being selected for the study as they restore the health of uterus and subside the menstrual disorders.

MATERIAL AND METHOD

Materials

- 1) Diagnosed patients of *Artava Kshaya*.
- 2) Drug: *Shatapushpa Shatavari Churna*, *Guda* and *Ghrita* as *Anupan*, OC pills (Mala-N).

Method

Type of study: Open Randomized controlled trial.

60 patients was enrolled and randomly divided in 2 groups.

- a. Group A was given *Shatapushpa Shatavari Churna (Samabhag* i.e. 1:1 ratio)
- b. Group B was OC Pills (Mala-N)

S.No	Topic	Group A	Group B
1)	Form.	<i>Shatapushpa Shatavari Churna</i>	OC pills (Mala-N)
2)	Dose	5gm OD With <i>Ghrita</i> and <i>Gud</i>	1pill OD with water
3)	Time	<i>Abhaktakal</i> (early morning) with empty stomach)	After meal
4)	Duration of therapy	3 month /3 menstrual cycle (from 5th day of Menses)	3 month/3 menstrual cycle (from 5th day of Menses)
5)	Route of administration	Oral	Oral

Inclusion Criteria

- Patients willing to be part of treatment of *Artava Kshaya*.
- Patients age between 18-40 years.
- Both unmarried and married women.
- Spotting / bleeding less than 1 day.
- Patients presenting with the *Pratyatma lakshana* of *Artava Kshaya*.
 - *Yathochitakala-adarshanam* (irregular menses)
 - *Atyalpataa* (Hypomenorrhoea) scanty menses
 - *Yonivedana* (Dysmenorrhoea) painful menses

Exclusion Criteria

- Patient with systemic disorder like DM, HTN, TB, Asthma, Congenital Abnormalities.
- Patient with malnutrition, severe anaemia (Hb < 7 gm %)
- Lactating women.
- Woman having IUCD.

Study Design

1. From OPD and IPD, total 60 diagnosed patients of *Artava Kshaya* was selected. Divided into 2 groups by random sampling method Group A and Group B.30 patient in each group.
2. Written consent was taken from every patient after giving them information about research.
3. Proper case history was taken on case record form. Suitable changes made in CRF accordingly to need of study.
4. Observations was taken according to the assessment criteria. Follow up taken on 30th day, 60th day and 90th day during treatment or after each menstruation during treatment. Final observation was on 90th day or 3rd menstrual cycle.
5. Wilcoxon Signed Rank test and Mann-Whitney U test was applied to data available and after analysis results drawn accordingly.

Criteria For Withdrawal

1. Patient not willing to continue treatment.
2. Patient absent for any follow-up.
3. Any serious complication develops which requires urgent treatment with any other drug or therapy.
4. Patients in study hospitalized to another hospitals.

Assessment Criteria

Assessment was done based on following criteria before and after the treatment.

1. Duration of flow
2. Interval between 2 cycles
3. Amount of blood loss (Pad per day)
4. Pain (*Yoni vedana tryavarta voni*)

Observation criteria¹⁰

- **Yoni Vedana (Pain)**
Grades are I, II, III, IV with symptoms i.e., No pain, Mild (Having pain, can do routine work), Moderate (Unable to do work), Severe (bed ridden) having score 0, 1, 2, 3 respectively.
- **Artavastravakalavadhi (Duration of menses)**
Grades are I, II, III, IV with symptoms i.e.,- bleeding 3-5 days, bleeding less than 2-3 days, bleeding less than 1-2 days, bleeding less than 1 day / Spotting having score 0, 1, 2, 3 respectively.
- **Artavastrava Pramana (Blood loss)**
Grades are I, II, III, IV with symptoms i.e., Normal (2 pads/day), required 1 to 2 pads/day, required 1 pad/day, Spotting having score 0, 1, 2, 3 respectively.
- **Duration between Two Artavadarshan**
Grades are I, II, III, IV with symptoms i.e., Normal 28 days interval between two menses, 29-31 days or 25-27 days interval between two menses, 32-34 days or 22-24 days interval between two menses I, more than 34 days or less than 22 days interval between two menses having score 0, 1, 2, 3 respectively.

Investigations

1. Hb%, BT CT (if required)
2. ESR (if required)
3. Urine (Routine and Microscopic)
4. USG (if required)
5. Hormonal assay (if required)

Sample of Observation table

for each patient scoring done before, during and after completion of treatment and duration of study in following manner.

Observations	Before Treatment 1st day (score 0 to 3)	During the treatment (score 0 to 3)			After Treatment On 90th day (score 0 to3)
		After 1st M.Cycle/ 30th day	After 2nd M.Cycle/ 60thday	After 3rd M.Cycle /90th day	
<i>Vedana</i> (Pain)					
<i>Artavastravakalavadhi</i>					
<i>Artavastravapramana</i>					
Duration between 2 <i>Artavadarshan</i>					

Total assessment criteria

With the help of above score, efficacy of the drug was determined as

Efficacy of the treatment	Total Assessment
Excellent	75-100% Relief in sign and symptoms
Moderate	50-75% Relief in sign and symptoms
Mild	25-50% Relief in sign and symptoms
Ineffective	0-25% Relief in sign and symptoms

Study end point: after 90th day or end day of 3rd menstrual cycle.

Drug preparation for trial group (group A)**Drug Preparation**^{1,2}

Preparation of research drug *Shatapushpa* and *Shatavari samabhog* (1:1) *Churna* is prepared according to reference of Sharangdhar Samhita, time to time as per needed to patient. Also *Ghrta* and *Guda* will be given along with *Churna*².

Results

- In present study, the statistical analysis reveals that both the drugs i.e. *Shatapushpa Shatavari Churna* and O.C. pills are significantly effective.
- Also both the drugs have provided significant relief in sign and symptoms of *Artava Kshaya*. But, *Shatapushpa Shatavari Churna* is proved to be relatively better than O.C. Pills in relieving the symptoms *Yoni Vedana* and *Aratava strava Pramana*
- Whereas O.C. pills are proved to be relatively better than *Shatapushpa Shatavari Churna* in relieving symptom Duration between two *Artava Darshana*.

DISCUSSION

Artava Kshaya is known to mankind since ancient period. In *Veda* and *Purana Granthas*, the references of *Artava Kshaya* and its management are available. In classical Ayurvedic literature, *Artava Kshaya* is described in detail regarding to its causes, patho-physiology and treatment.

Artava Kshaya is *Vata-Kaphatmak vyadhi* in which *Artava chakra* of a female get disturbed in terms of-

- *Yathochit kal Adarshanam*.
- *Alpata* (Quantity as well as duration).
- *Yonivedana*.

In modern science it is group of symptoms observed in disease of female reproductive system together or separately. Caused by hormonal imbalance And they are

- Irregular Menstruation
- Hypomenorrhoea
- Dysmenorrhoea

So, present study is an attempt to provide an effective Ayurvedic remedy.

Disease review

In the present study, a detail description of *Artava Kshaya* is done with all its *Nidana*, *Lakshanas samprapti*, *Samprapti ghatakas*, etc. *Artava Kshaya* can be correlated to some extent with Irregular menstruation Hypomenorrhoea and Dysmenorrhoea. The effects of drugs as evidenced in the clinical trials were recorded along with detailed case history.

The direct reference for the *Nidana* of *Artava Kshaya* is not found in the classics. The *Samanya nidana*

that causes *Kshaya* of the *Dosha & Dhatu* is considered & the *Vishesha Nidana* that vitiates the *Doshas* are considered in the study. Thus all these *Nidanasevana* contribute to cause *Artava Kshaya*.

To understand the *Samprapti* of *Artava Kshaya* it is important to know about the formation of *Rasa dhatu*. As *Artava* is the *Upadhatu* of *Rasa dhatu*, the *Kshaya* of *Rasa dhatu* finally leads to *Kshaya* of *Artava*. Formation of *Rasa dhatu* is affected when there is *Jataragni mandhya*. This *Mandagni* with vitiated *Doshas* hamper the formation of *Ahara Rasa* by producing *Ama*. Hence *Utpatti* of *Rasa Dhatu* is affected as it is formed from *Ahara Rasa*.

Since the '*Samprapti vighatana*' is the main aim for the proper *Artava utpatti*, which can be achieved by maintaining the normalcy of the *Agni*. Normalcy of *Apana vata* helps in expulsion of *Artava*. *Garbhashaya & Artavavahini dhamani* are *Mula* for *Artavavaha srotas*. If there is any injury to this, leads to *Nastartava*. *Aratavavaha srotas* are obstructed by the *Vikruti* of *Apana vata & Kapha*, results in *Artava Kshaya*.

To maintain normalcy of *Agni & Vata*, removing the *Kapha* is the basic line of treatment. In the classics both *Shodhana & Shamana Chikitsa* has been explained for *Artava Kshaya*. *Shodhana Chikitsa* as explained by *Acharya Dalhana* includes only *Vamana karma*, as this removes only the *Soumya dhatu* and maintains the *Pitta* which is required for *Utpatti* of *Artava*. *Acharya Cakrapani* explains that both *Vamana & Virechana karma* can be administered. *Acharya Kashyapa* has mentioned *Basti* to be the best treatment. *Shamana Chikitsa* is explained in the form of '*Agneya dravyas*'.

Agneya dravyas are used as they are *Pittavardhakar*. By this the *Agni* is stimulated which helps in digestion of *Ama*, formation of *Ahara Rasa*, which later on forms the *Rasa dhatu* from which the *Artava* is formed. These *Agneya dravyas* helps in increasing the quantity of *Artava*, as the *Artava* is also *Pitta pradhana*. As the basic concept of "*Samanyam vrudhikaranam*" intake of *Samana Guna* causes the increase of same *Guna*. Hence the *Agneya dravyas* are given prime importance in producing *Artava*.

Use of *Agneya dravyas* not only relieves the *Kapha* which does *Avarana* to *Apana vata* but also increases the quantity of *Artava*. As *Agneya dravyas* have *Ushna virya*, it maintains the normalcy of *Ruksha & Sheetaguna* of *Vata*, *Snigdha & Pichhila Guna* of *Kapha*.

Drug review**Probable mode of action**

The action of *Rasa, Guna, Virya* etc. get neutralized among themselves. Therefore, stronger component neutralizes the action of weaker component. Hence, action of particular drug compound is the action in nature.

Mode of action of *Shatapushpa shatavari churna* along with *Ghruta* and *Guda* is as follows.

Shatpushpa^{11 12 3 14 15}

• *Katu Rasa* and *Katu Vipak* have *Deepana, Pachan karma* which cause *Aampachan* and thus provides proper metabolism and ultimately balance the *Agni*. *Ushna veerya* has *Deepana, Pachan, Virechan* and *Vilayan* property which ultimately act as *Anulomak karma*. *Ruksha* and *Tikshna Guna* have *Srotoshodhak* property which helps in expelling the morbid *Doshas*.

• *Ushna virya* - act as *Vata and Kapha hara* by *Deepan, Pachan*; in *Artava Kshaya* there is obstruction in *Srotas* due to *Kapha* and *Vata*. *Shatpushpa* act as *Pachaka (Pachana karma)* after that the *Sama Kapha* become *Niram* and facilitate normal action of *Vata* which is turn stimulate the normal production of *Artava*. Also *Deepan karma* takes place which stimulate *Artava Dhatwagni* which results in formation of *Artava*.

Shatavari^{16 17 18 19 20 21}

Due to its *Madhura, Tikta Rasa, Madhura vipaka, Sheet veerya* it acts as *Vatagnha*. It also acts as *Balya* and *Bruhana*. *Tikta Rasa* have *Srotogamitva* properties it act on *Sukshama Srotas* and removes the *Margavarodh*. also by *Sheet virya* it act as *Dhatu Prasadana* and *Balya* for *Garbhashaya*.

Due to *Guru, Snigdha Guna*, it is *Vatagnha* and leads to *Vatanulomana*. It breaks the *Samprapti* of vitiated *Doshas* by *Vatanuloman*.

Guda^{22 23 24 25}

Due to *Madhura Rasa* it act as *Vatashamak* and it work as *Asrug Prasadana* that's why *Niram* or *Dushti rahit artava* is produced. The properties of *Guda* help in enhancing the quality of *Shatapushpa shatavari Churna*. Though it is having *Madhura Rasa, Madhura vipaka, Guru guna & Sheeta veerya*, it is *Pittavardhaka* as per *Nighantu Ratnakara*. It is having special qualities like *Ruchikara, Raktakara, Rasayana, Vrushya* which not only helps in *Dhatu vrudhhi*, but also makes the *Churna* palatable.

Ghruta^{26 27}

Due to *Madhura Rasa* and *sheet, Snigdha, Guru Guna* is *Vata shamak, Bruhaniya, Dhatu vrudhikar*.

Due to *Madhura vipak* it act as *Vata shamak Dhatu vardhan, Balya* and *Sheet veerya* it act as *Vatagnha, Pittagnha*. Due to *Sheet virya* - act as *Dhatu Prasadana* and *Balya* as given *Anupana* it help to enhance effect of *Shatapushpa* and *Shatavari Churna*. Thus help in *Samprapti bhanga*.

Overall action of compound drug as follows^{16 to 27}

- Due to *Laghu Guna, Ushna veerya and katu, Tikta Rasa* reduces *Pichhil guna* of *Kapha* and by *Srotoshodhan srotorodh* removed.

- *Madhur Rasa, Sheet, Snigdha Guna Vata shaman* and *bruhan, Dhatu Prasadana* by the sequence action of *Prakrut Artava* is produced.

- By *Agnideepan* and *Aampachana karma Jatharagni* get stimulated which further stimulates all *Dhatwagni* thus production of *Niram sapta Dhatu* and their *Upadhatu (Artava)* takes place.

Discussion on clinical study

It is the most important part of research work it not only helps us to understand the subject but also leads us toward the conclusion.

For this study clinical evaluation of *Shatapushpa Shatavari Churna* and O.C. pills in the management of *Artava Kshaya*, randomly 60 patients were selected. They were examined and observed, data is recorded and interpreted. The observation and results are explained earlier. The critical notes and discussion on the data is presented as follows.

Shatapushpa and Shatavari Churna with Guda and Ghruta

Artava is *Agneya Guna Yukta* so according to *Sushruta Saman Guna Yukta Aushadhi* is very helpful for *Chikitsa*. *Shatapushpa* is *Ushna veeryatmak, Vata- Kapha shamak, Anulomak, Deepan pachan*.

Shatavari is *Sheet veeryatmak, Madhura- Tikta Rasatmak*. It act as *Garbhashaya Balyakar*, it also act as *Dhatu Prasadana*. Due to *Tikta rasa Sukshma srotorodha* is removed.

Guda is also *Madhura Rasa* and *Sheet veeryatmak*. It also act as *Balya*. Due to *Ushna Guna* it help to enhance the production of *Artava*. Also it have *Asrugprasadana* property. *Ghruta* as *Anupana* it enhance the effect of the *Churna*.

Discussion on observations

Age

Out of 60 maximum 44 (73.03%) patients were in age group 20-30. As women in this age group are more conscious for pregnancy also family burdens, children and personal problems are there which might affect the personal life of a woman due to which menstrual cycle is disturbed and leading to *Artava Kshaya*.

	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
Below 20	01	3.33	02	6.66	03	4.98
20-30	23	76.59	21	69.93	44	73.04
30-40	06	19.98	07	23.31	13	21.58
Total	30	100	30	100	60	100

Menarche

Out of 60 patients 20 (33.20%) patients were having menarche at the age of 12 years. while 17 (28.22%), 17 (28.22%), 04 (6.64%), 02 (3.32%) at the age of 13,14,15 and 16 year respectively. The difference in age of menarche is not significant so *Artava Kshaya* is independent of menarche.

Menarche at Age in years	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
12	10	33.33	10	33.33	20	33.20
13	07	23.31	10	33.33	17	28.22
14	08	26.64	09	29.97	17	28.22
15	03	9.99	01	3.33	04	6.64
16	02	6.66	0	-	02	3.32

Marital status

Out of 60 patients 36 (59.76%) patients were married while 24 (39.84%) patients were unmarried. It can be said that the change in *Desha, Ahara, Vihara* after marriage, disturbs menstrual cycle which in turn lead to *Artava Kshaya* and in some married women psychological and economical stress and disturbances in marriage may lead to *Artava Kshaya*

Marital Status	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
Unmarried	11	36.63	13	43.29	24	39.84
Married	19	63.27	17	56.61	36	59.76
Total	30	100	30	100	60	100

Gravida

Out of 60 patients maximum 34 (56.44%) patients were nulli-gravida, 09 (14.94%) were primi-gravida while 17 (28.22%) patients were multi - gravida. So it can be said that nulli gravida are more prone to *Artava kshaya*.

No. of Gravida	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
Nulli-Gravida	18	59.94	16	53.28	34	56.44
Primi-Gravida	06	19.98	03	9.99	09	14.94
Multi-Gravida	06	19.98	11	36.63	17	28.22
Total	30	100	30	100	60	100

Educational status: Out of 60 patients, all 60 patients are educated.

Educational Status	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
Literate	30	100	30	100	60	100
Illiterate	-	-	-	-	-	-
Total	30	100	30	100	60	100

Religion

Out of 60 patients maximum 56 (92.96 %) patients were from Hindu community, 2 (3.32%) were from Muslim community where as 2 (3.32%) patients were from other community.

Religion	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
Hindu	30	100	26	86.58	56	92.96
Muslim	0	0	02	6.66	02	3.32
Other	0	0	02	6.66	02	3.32
Total	30	100	30	100	60	100

Mode of work

Out of 60 patients maximum 21 (34.86%) of patients were doing education, 17 (28.22%) patients were in service, 16 (26.56%) patients were housewife while 6 (9.96%) doing labour work. So it can be said that women doing education or service are more prone to *Artava Kshaya* due to stress and unstable lifestyle, food habit.

Mode of work	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
Education	10	33.33	11	36.63	21	34.86
Service	09	29.97	08	26.64	17	28.22
Housewife	08	26.64	08	26.64	16	26.56
Labour	03	9.99	03	9.99	6	9.96
Total	30	100	30	100	60	100

Diet

Out of 60 patients 17 (28.22%) of patients were vegetarian while 43 (71.38%) patients were taking mixed type of diet. So it can be said that patients were taking mixed type of diet are more prone to *Artava Kshaya*.

Diet	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
Vegetarian	9	29.97	8	26.64	17	28.22
Mixed	21	69.93	22	73.26	43	71.38
Total	30	100	30	100	60	100

Koshtha

Out of 60 patients 35 (58.10%) patients were having *Krura Koshtha*, 8 (13.8%) patients were having *Madhyam Koshtha* whereas 17 (28.22%) having *Madhyam Koshtha*.

Prakruti

Out of 60 patients 25 (41.50%) having *Vata kaphaj prakruti*. This is may be due to *Artava Kshaya* is also *Vata-kaphaj vyadhi*, so it can be said that women having *Vata-kaphaj prakruti* are more prone to *Artava Kshaya*.

Prakruti	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
Vata-Pittaj	07	23.31	09	29.97	16	26.56
Vata-Kaphaj	12	39.96	13	43.29	25	41.50
Pitta-Vataj	06	19.98	04	13.32	10	16.60
Kapha-Vataj	03	9.99	04	13.32	07	11.62
Kapha-Pittaj	02	6.66	0	0	02	3.32
Total	30	100	30	100	60	100

Agni

Out of 60 patients 18 (59.94%) patients were found having *Mandagni*. As *Mandagni* is primary cause of all *vyadhi* it is also may cause *Artava kshaya*. So it can be said that women having *Mandagni* are more prone to *Artava kshaya*.

Agni	Group A		Group B		Total	
	No. of patients	%	No. of patients	%	No. of patients	%
Tikshana	6	19.98	11	36.63	17	28.22
Manda	18	59.94	16	53.28	34	56.44
Visham	6	19.98	4	13.32	10	16.6
Total	30	100	30	100	60	100

Effect of therapy on subjective criteria**Yathochit kal Adarshana**

Where the interval in between two *Artava Darshana* is concerned, 47.29% reduction was seen in Group A and 60.81% reduction was seen in Group B. These results show that O.C. Pill is more effective in reducing the *Yathochit kal Adarshana*.

Alpata

- In terms of *Artava strava Pramana*
- Where the amount of *Artava strava* is concerned 80% relief was seen in group A while 62% relief was seen in Group B. These results show that both the therapies were effective in increment of the amount of *Artava strava*, but *Shatapushpa Shatavari Churna* is more effective in reliving *Alpata* of *Artava*.
- In terms of *Artava strava Kalavadhi*.
- Where the duration of *Artava strava* is concerned 95.76 % increment was seen in Group A and 81.05% increment was seen in Group B. These results show that both the therapies were effective in increasing the duration of *Artava strava* but *Shatapushpa Shatavari Churna* is more effective in reliving *Alpata* of *Artava strava Kalavadhi*.

Yoni Vedana

Where the pain during menses subsided 88.34 % in Group A and 68.96% in Group B. The result was highly significant in both group. But *Shatapushpa Shatavari Churna* is more effective in reliving *Yoni Vedana*.

In trial group (group A)

Lakshana	Before treatment		After treatment		% Relief	Wilcoxon Signed Rank Z value	p value	Significance
	Mean	S.D.	Mean	S.D.				
Yoni vedana	2.23	0.62	0.26	0.49	88.34%	-4.70	<0.05	Hig.Sig.
Artava strava pramana	1.8	0.76	0.36	0.49	80%	-4.54	<0.05	Hig.Sig.
Artava strava kalavadhi	2.36	0.61	0.1	0.30	95.76%	-4.78	<0.05	Hig.Sig.
Duration between two Artava darshana	2.96	0.18	1.56	0.56	47.29%	-4.70	<0.05	Hig.Sig.

In control group(group B)

	Before treatment		After treatment		% Relief	Wilcoxon Signed Rank Z value	P value	Significance
	Mean	S.D.	Mean	S.D.				
Vedana	2.03	0.66	0.63	0.49	68.96%	-4.62	<0.05	Hig. Sig.
Artava strava pramana	2.50	0.50	0.93	0.69	62.8%	-4.78	<0.05	Hig. Sig.
Artava strava kalavadhi	1.90	0.66	0.36	0.49	81.05%	-4.54	<0.05	Hig. Sig.
Duration between two Artava darshana	2.96	0.18	1.16	0.37	60.81%	-4.78	<0.05	Hig. Sig.

Comparison of both therapies

The overall effects of both the therapies on cardinal symptoms of *Artava Kshaya* showed that

- The *Shatapushpa Shatavari Churna* is more effective on *Yoni Vedana*, *Artava strava Pramana* and *Artava strava kalvavadhi*.
- Both *Shatapushpa Shatavari Churna* and O.C. pill are effective on and duration between two *Artava Darshana* but O.C. pill is comparatively more effective.

Overall effect of therapy

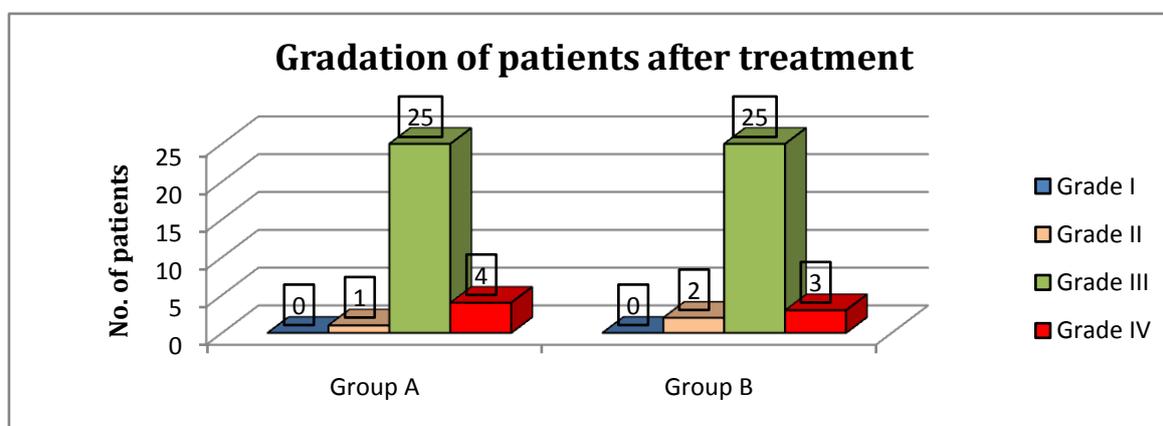
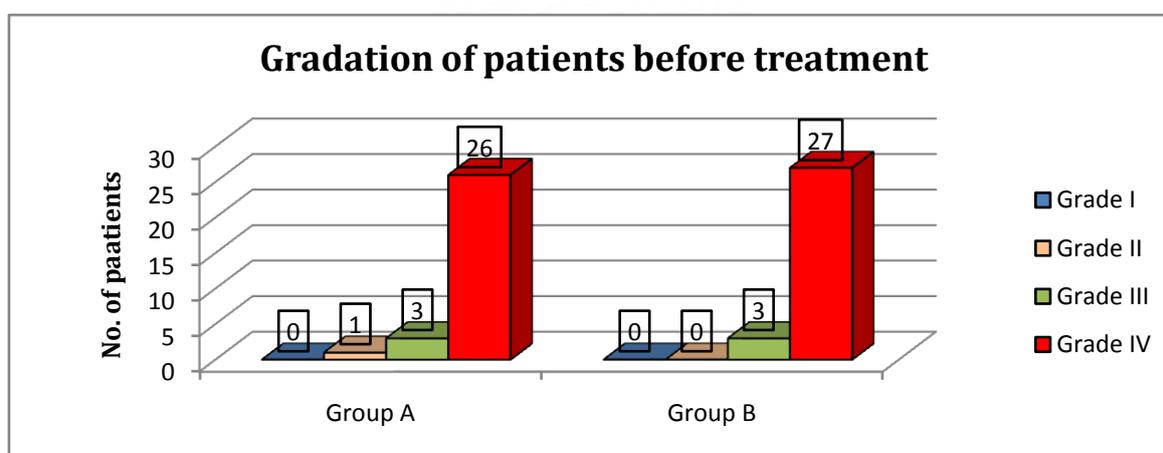
In group A, none of the patient showed excellent improvement in *Artava Kshaya*, while moderate improvement was observed in 1 (3.33%) patients, mild improvement was observed in 25 (83.25%) patients and 4 (13.32%) of the patient showed ineffective improvement after treatment.

In group B, none of the patient showed excellent improvement in *Artava Kshaya*, while moderate improvement was observed in 2 (6.66%) patients, mild improvement was observed in 25 (83.25%) patients and 3 (9.99%) of the patient showed ineffective improvement after treatment.

Overall effect of therapies on *Artava kshaya* as *vyadhi*

Gradation of patients before treatment	Group A		Group B	
	Number of patients	%	Number of patients	%
Grade I	0	0	0	0
Grade II	1	3.33	0	0
Grade III	3	9.99	3	9.99
Grade IV	26	86.58	27	89.91

Gradation of patients after treatment	Group A		Group B	
	Number of patients	%	Number of patients	%
Grade I	0	0	0	0
Grade II	1	3.33	2	6.66
Grade III	25	83.25	25	83.25
Grade IV	4	13.32	3	9.99



CONCLUSION

A clinical study has been done for Clinical evaluation of *Shatapushpa Shatavari Churna* and O.C. pill in the management of *Artava Kshaya* w.s.r. to certain menstrual disorders. The conclusions drawn from the results obtained in this study are as follows.

- On the basis of statistical analysis it can be concluded that both the drugs that is *Shatapushpa shatavari Churna* and O.C. Pills effective in *Artava Kshaya*.
- Also both the drugs have provided significant relief in sign and symptoms of *Artava Kshaya*. But,

Shatapushpa Shatavari Churna is proved to be relatively better than O.C. Pills in relieving the symptoms *Yoni Vedana* and *Aratava strava Pramana*

- Whereas O.C. pills are proved to be relatively better than *Shatapushpa Shatavari Churna* in relieving symptom Duration between two *Artava Darshana*.
- Trial drug *Shatapushpa Shatavari Churna* is proved to be a safe formulation, without having any adverse effects.
- From the above observations obtained in this study it can be conclude that *Artava Kshaya* is more common in women who is-

-Age between 20-30,married, nulli-gravida.

-Doing stressful work, having mixed type of diet.

-*Krura koshtha, Manda Agni, Vata-Kaphaj prakruti*.

- This study was carried out on small sample size that is 30 patients in each group and it showed significant results. Further studies on large sample are necessary to confirm these findings.

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