

ULATKAMBAL KA UDAVARTA YONI VYAPAD ME CHIKITSA PARAK ADHYAYAN

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ABSTRACT

Here in the present study, we conducted a clinical trial on 100 patients with Udavartayoni vyapad (primary dysmenorrhea), divided into two groups, of 50 patients each. One receiving Ulatkambal churna and the other receiving Corn Maize Churna. The patients were assessed using a grading system for symptoms such as pain intensity, duration, menstrual flow, and other related symptoms before and after treatment. The results were made according to the subjective and objective criteria which showed a significant reduction in symptoms with 41.67% of patients experiencing complete remission and no adverse reactions reported. Therefore, here in this study we found that Ulatkambal churna was found to be effective in treating primary dysmenorrhea.

KEYWORDS: Udawarta Yonivyapad, Kashtartava, Dysmenorrhoea.

INTRODUCTION

The disease '*Kashtārtava*' is neither described in classics nor in Vedas as an individual disease entity. Though it is a symptom of various *Yonivyapadas* specially *Udavartayoni vyapad*.^[1] It is one of the commonest gynaecological complains. It is *Vata* predominant *Tridoshaja Vyādhi*. In this there is derangement of *Apana* and *Vyana Vayu*, with the vitiation of *Rasa Dhatu*. If we go through the *Prakriti* wise distribution of menstruation, the *Vata Prakriti* women will have irregular, scanty flow and associated dysmenorrhoea as classical features.

The drug *Abroma augusta* Linn. is very much popular for the remedy of painful and scanty menstruation. The plant is not available in Brihatrayee, Laghutrayee and so called Nighantus also. First time it was mentioned in Bhavprakash nighantu by Panday and Chuneekar and this view was later supported by Nighantu Adarsh by Vaidya Bapalal in *Muchkundadi varga*. Ulatkambal has Katu-tikta rasa, Laghu- ruksha -Tikshna Guna, Katu vipaka ushna virya it has *Garbhashaya Balya*, *Garbhashaya Shodhak*, emmenagogue (*Aartava pravartaka*), *Artavajanana* and *Vedanasthapan* properties. It is very efficacious drug with a single administration during the menses which will cure the disease and regulate the menstrual flow, and act as an uterine tonic.

With the advent of new millennium and the herald of high-tech era, women's status was expected to reach new horizons both socially and physically. But some of the physiological things trouble the lady to make her slow down the race. Such a problem is *Kashtārtava*. Once the menstruation is over, the menstrual problems disappear leaving behind an anxiety free wellbeing but when she has painful menstruation in fully blown up and exaggerated manner then it becomes difficult for her to cope with daily activities and surroundings.

Now-a-days, in modern medicine NSAIDs (Non steroid anti-inflammatory drug), antispasmodic and analgesic are used regularly in every cycle for dysmenorrhea, though it causes various side effects due to regular use. Further it is not a permanent solution to the ailment. Hence an attempt to evaluate the efficacy of *Ulatkambal (Abroma augusta)* in *Kashtartava* was undertaken for the present study, in order to get a potent medicament to solve this issue.

AIMS AND OBJECTIVES

- To study the pharmacognostical, pharmacological and pharmaceutical aspect of *Abroma augusta* Linn.
- To evaluate the effect of *Abroma augusta* Linn. on *Udavarta yonivyapad*.
- To find out an effective and cheapest remedy of *Udavarta yonivyapad*.
- The conceptual study of *Udavarta yonivyapad (Kashtartava)*.
- To explore the pathogenesis of *Udavarta yonivyapad (Kashtartava)*.
- To evaluate clinically & analyse the data statically.

MATERIALS AND METHODS

Method of treatment and drug administration

Total 100 patients were selected and divided into two groups

Group A with 50 patients- They were treated with *Ulatkambal churna*.

- 1 gm capsules of *Ulatkambal churna* was prepared in pharmacy of Government (Auto.) Ayurveda College and hospital, Rewa,
- Two capsules in morning after food and two capsules in the evening after food was prescribed.
- Treatment was started 5 days before menstrual cycle and continued for 10 days in total for 3 consecutive menstrual cycles.
- Total 4 gm of *churna* daily was administrated orally.
- *Anupana: Natiushna jala* (luke warm water).

Group B with 50 patients- They were treated with Corn Maize *Churna* (Placebo group).

- 1 gm capsules of Corn Maize *churna* was prepared in pharmacy of Government (Auto.) Ayurveda College and hospital, Rewa,
- Two capsules in morning after food and two capsules in the evening after food was given.
- Treatment was started 5 days before menstrual cycle and continued for 10 days in total for 3 consecutive menstrual cycles.
- Total 4 gm of *churna* daily will be administrated orally.
- *Anupana: Natiushna jala* (Luke warm water).

Inclusion Criteria

- Patients presenting the classical sign and symptoms of Udavarta yonivyapada.
- Age between 16-45 yrs.
- Only female patients

Exclusion Criteria

- Below 16yrs and above 45yrs.
- Patient having PCOD or PID
- Patients having serious systemic disease like hypertension, diabetes, renal dysfunction or cancer etc
- Patient with secondary dysmenorrhoea and other complications.

Criteria of Assessment**(1)- Subjective criteria**

- 1- Pain (*Vedana*)
 - a) Character of Pain
 - b) Onset of Pain
 - c) Duration of Pain
 - d) Intensity of Pain
- 2- Duration of menstrual blood loss (*Rajasrava Avadhi*)
- 3- Colour of menstrual blood (*Artava swaroop*)
- 4- Consistency of menstrual blood (*Artava ghanatva*)
- 5- Nausea (*Praseka*)
- 6- Constipation (*Vibandha*)
- 7- Backache (*Katishool*)
- 8- Headache (*Shirahshool*)

1. Vedana (PAIN)**Table 1: Gradation of character of pain (*Vedana Swaroop*).**

(a) Character of Pain (<i>Vedana Swaroop</i>)	Score
No Pain	0
Intermittent	1
Spasmodic or cram like	2
Constant	3

Table 2: Gradation of onset of pain (*Vedana Kaal*).

(b) Onset of Pain (<i>Vedana Kaal</i>)	Score
No pain	0
Pain exists only during menstrual flow	1
Pain exists before menstrual flow and continues during the flow	2
Pain exists before, during and even after menstruation	3

Table 3: Gradation of Duration of pain (*Vedana Avadhi*).

(c) Duration of pain (<i>Vedana Avadhi</i>)	Score
No Vedana	0
Only few hours or occasionally.	1
1 – 2 days	2
3 – 4 days	3

Table 4: Gradation of Intensity of Pain (*Vedana tivrata*).

(d) Intensity of Pain (<i>Vedana tivrata</i>)	Score
Menstruation is not painful and daily activity unaffected. (Normal)	0
Menstruation is painful and daily activity not affected. No analgesics required. (Mild)	1
Menstruation is painful and daily activity affected, analgesics were needed. (Moderate)	2
Menstruation is painful, she cannot do even her normal routine work and has to be absent from class or office during menses. She has to take analgesics but have poor effect. (Severe)	3

Table 5: Gradation of Duration of menstrual blood loss (*Rajasrava Avadhi*).

Duration of menstrual blood loss (<i>Rajasrava Avadhi</i>)	Score
Duration of menses 4 – 5 days (Normal)	0
Duration of menses 3 days	1
Duration of menses 2 days. (Slightly short)	2
Duration of menses 1 day. (Short)	3

Table 6: Gradation of colour of menstrual blood (*Artava Swaroop*).

Colour of menstrual blood (<i>Artava Swaroop</i>)	Score
Reddish	0
Brownish	1
Blackish	2
Blackish with clot	3

Table 7: Gradation of Consistency of menstrual blood (*Artava ghanatva*).

Consistency of menstrual blood (<i>Artava ghanatva</i>)	Score
Normal	0
Mucoid	1
Thin	2
Clotted	3

Table 8: Gradation of Nausea (*Praseka*).

Nausea (<i>Praseka</i>)	Score
No Praseka (nausea)	0
2 – 3 times/day	1
4 – 5 times/day	2
>5 times/day	3

Table 9: Gradation of constipation (*Vibandha*).

Constipation (<i>Vibandha</i>)	Score
No Vibandha	0
Frequency once in a day, but hard stool pass.	1
Frequency of stool alternative day and patient fills difficulty in defaecation.	2
Patient cannot pass stool without any purgative agent even after 2– 3 days.	3

Table 10: Gradation of Back ache (*Katishool*).

Back ache (<i>Katishool</i>)	Score
No pain	0
Pain exists only during menstrual flow.	1
Pain exists before menstrual flow and continues during the flow.	2
Pain exists before, during and even after menstruation	3

Table 11: Gradation of headache (*Shirahshoola*).

Headache (<i>Shirahshoola</i>)	Score
No Headache	0
Headache exists only during menstrual flow.	1
Headache exists before menstrual flow and continues during the flow.	2
Headache exists before, during and even after menstruation	3

(2) Objective Criteria**Table 12: Gradation of *Artava Pramana* (Assessment by Pad).**

<i>Artava Pramana</i> (Assessment by Pad) (Scoring amount of menstrual blood loss)	Score
6 – 7 pads/cycle	0
4 – 5 pads/cycle	1
2 – 3 pads/cycle	2
Spotting or 1 pad/cycle	3

Investigations

Following investigations were done in the cases selected for the study

(A) Haemological

- 1) TLC & DLC by neubar haemocytometer.
- 2) ESR
- 3) Hb% by Sahli's method.

(B) Urine Examination

Routine and microscopic examination was done specially for Albumin, Sugar, Casts, Crystal, and Cells etc. The cases suspected of having any abnormality of urinary system were excluded.

(C) Stool Examination: For Ova and Cyst.**❖ Criteria For Overall Effect of Therapy in both the Groups**

For the assessment of the overall effect of the therapy following categories were taken into consideration.

Table 13: Gradation of assessment of total effect of therapy.

Complete remission	100% relief in signs and symptoms
Marked improvement	75-99% relief in signs and symptoms.
Moderate improvement	50-74% relief in signs and symptoms.
Mild improvement	25-49% relief in signs and symptoms.
No relief	No change in signs and symptoms.

❖ Analysis

For assessing the improvement of symptomatic relief and to analyze statistically, the observations were recorded before, after the treatment and after the follow-ups. The mean percentage, S.D., S.E. and Z test were calculated.

RESULTS AND DISCUSSION

Result obtained from the present study has been summarized below after analyzing the data with paired 't' test, using Graph Pad.

Table-14: Effect of study drug on subjective parameters of 50 patients of Test group.

Sl no.	Signs and Symptoms	Mean		Mean Difference	±SD	±SE	't' value	'p' Value
		BT	AT					
1	<i>Vedana swaroopa</i> (Characteristic of pain)	2.020	0.5200	1.500	0.8144	0.1152	13.024	<0.0001
2	<i>Vedana kaala</i> (Onset of pain)	1.940	0.5400	1.400	0.5714	0.08081	17.324	< 0.0001
3	<i>Vedana avadhi</i> (Duration of pain)	1.960	0.5400	1.420	0.5379	0.07608	18.665	<0.0001
4	<i>Vedana tivrata</i> (Intensity of pain)	2.220	0.6000	1.620	0.7796	0.1103	14.694	< 0.0001
5	<i>Rajasrava avadhi</i> (Duration of menstruation)	2.360	1.240	1.120	0.7461	0.1055	10.614	< 0.0001
6	<i>Praseka</i> (Nausea)	1.200	0.6000	0.6000	0.7559	0.1069	5.612	< 0.0001
7	<i>Vibandha</i> (Constipation)	1.120	0.4800	0.6400	0.6312	0.08926	7.170	< 0.0001
8	<i>Katishoola</i> (Low backache)	1.920	0.5000	1.420	0.5379	0.07608	18.665	< 0.0001
9	<i>Shirashoola</i> (Headache)	1.100	0.4800	0.5675	0.08025	0.6200	7.725	< 0.0001

Note: SD-Standard Deviation; SE- Standard Error.

Table-14, shows the effect of study drug on the subjective parameters of 50 patients before and after the treatment. Mean value of parameters like *Vedana swaroopa* (Characteristic of pain) BT was 2.020 which were significantly ($P<0.0001$) improved to 0.5200. *Vedana kaala* (Onset of pain) BT was 1.940 which were significantly ($P<0.0001$) improved to 0.5400. *Vedana avadhi* (Duration of pain) BT was 1.960 which were significantly ($P<0.0001$) improved to 0.5400. *Vedana tivrata* (Intensity of pain) BT was 2.220 which were significantly ($P<0.0001$) improved to 0.6000. *Rajasrava avadhi* (Duration of menstruation) BT was 2.360 which were significantly ($P<0.0001$) improved to 1.2400. *Praseka* (Nausea) BT was 1.200 which were significantly ($P<0.0001$) improved to 0.6000. *Vibandha* (Constipation) BT was 1.120 which were significantly ($P<0.0001$) improved to 0.4800.

Katishoola (Low backache) BT was 1.920 which were significantly ($P < 0.0001$) improved to 0.5000. *Shirashoola* (Headache) BT was 1.100 which were significantly ($P < 0.0001$) improved to 0.4800.

Table-15: Effect of study drug on objective parameters of 50 patients of Test group.

Signs and Symptoms	Mean		Mean Difference	\pm SD	\pm SE	't' value	'p' Value
	BT	AT					
<i>Artava pramana</i> (Quantity of menstrual blood)	1.900	0.9600	0.9400	0.9982	0.1412	6.659	< 0.0001

Note: SD-Standard Deviation; SE- Standard Error.

Table-15, shows the effect of study drug on objective parameter of 50 patients. Drug shows the significant effect in the changes of Quantity of menstrual blood. BT of mean was 1.900 which was changed to 0.9600 after treatment. Observed mean difference was 0.9400. Mean \pm was observed 0.1412. which indicates that drug was significantly effective to reduce the Quantity of menstrual blood ($P < 0.0001$) where 't' value was found 6.659.

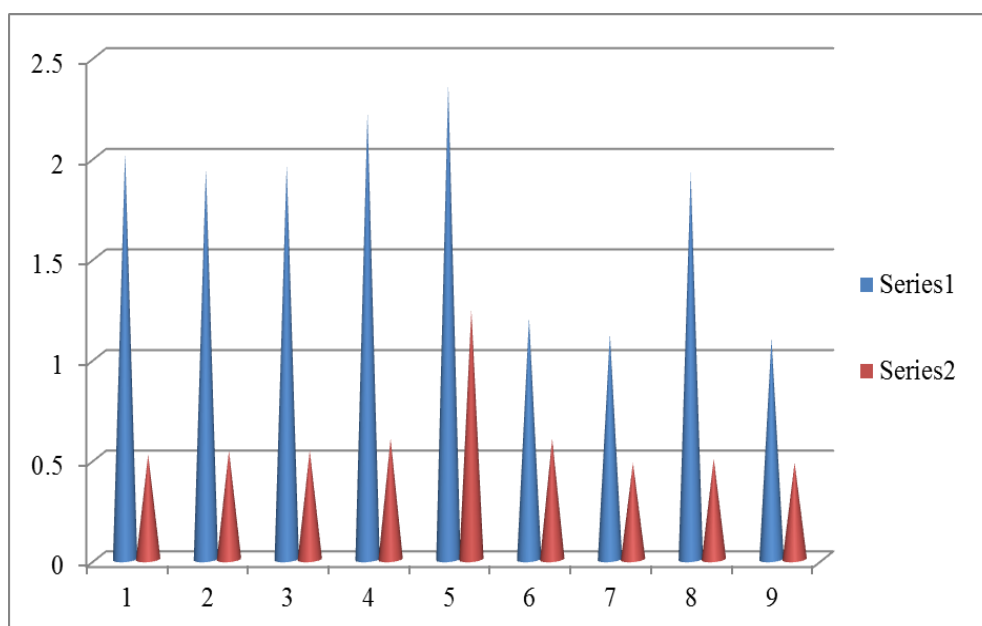


Figure 1: Graphical presentation showing the changes of mean value of the data in subjective parameters of 50 patients of Test group before and after providing the test drug.

Note: Series 1-Before Treatment (BT); Series 2-After Treatment; 1- *Vedana swaroopa* (Characteristic of pain); 2-*Vedana kaala* (Onset of pain); 3-*Vedana avadhi* (Duration of pain); 4-*Vedana tivrata* (Intensity of pain); 5-*Rajasrava avadhi* (Duration of menstruation);

6-*Praseka* (Nausea); 7-*Vibandha* (Constipation); 8-*Katishoola* (Low backache); 9-*Shirashoola* (Headache).

Figure 1, shows the Graphical presentation of mean value of the data in subjective parameters of 50 patients before and after providing the test drug. Here plot area1, shows the mean value of parameter *Vedana swaroopa* (Characteristic of pain) Before treatment was 2.02 which was significantly reduced to 0.52 after providing the study drug; plot area2, shows the mean value of parameter, *Vedana kaala* (Onset of pain) Before treatment (BT) was 1.94 which was significantly reduced to 0.54 (AT) after providing the study drug ; plot area 3, shows the mean value of parameter *Vedana avadhi* (Duration of pain) Before treatment (BT) was 1.96 which was significantly reduced to 0.54 (AT) after providing the study drug; plot area 4, shows the mean value of parameter *Vedana tivrata* (Intensity of pain) Before treatment (BT) was 2.22 which was significantly reduced to 0.6 (AT) after providing the study drug; plot area 5 shows the mean value of parameter *Rajasrava avadhi* (Duration of menstruation) Before treatment (BT) was 2.36 which was significantly reduced to 1.24 (AT) after providing the study drug; plot area 6, shows the mean value of parameter *Praseka* (Nausea) Before treatment (BT) was 1.2 which was significantly reduced to 0.6 (AT) after providing the study drug; Plot area 7, shows the mean value of parameter *Vibandha* (Constipation) Before treatment (BT) was 1.12 which was significantly reduced to 0.48 (AT) after providing the study drug; Plot area 8 shows the mean value of parameter *Katishoola* (Low backache) Before treatment (BT) was 1.92 which was significantly reduced to 0.5 (AT) after providing the study drug; Plot area 9, shows the mean value of parameter *Shirashoola* (Headache) Before treatment (BT) was 1.1 which was significantly reduced to 0.48 (AT) after providing the study drug.

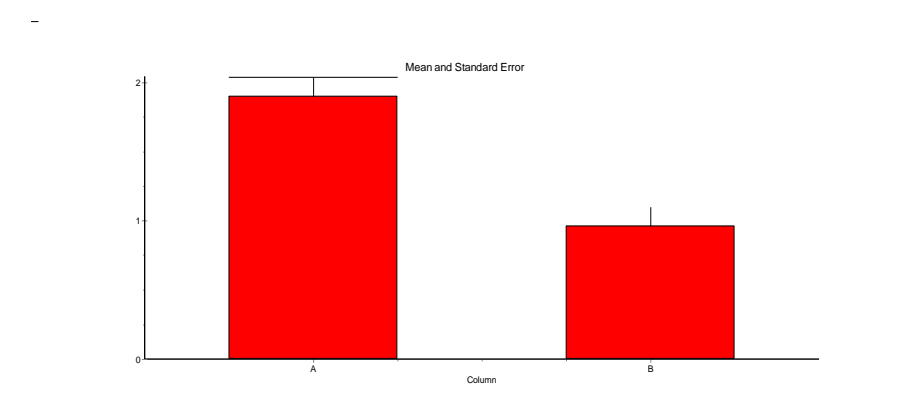


Figure 2: Graphical presentation showing the changes of data in objective parameter of 50 patients of Test group before and after providing the test drug.

**Data presented as Mean \pm SEM

Figure 2 shows the Graphical presentation of changes of data in objective parameter of 50 patients before and after providing the test drug. Observed mean difference was 0.9400. Mean \pm was observed 0.1412. which indicates that drug was significantly effective to reduce the Quantity of menstrual blood ($P < 0.0001$).

Table-16: Effect of study drug on subjective parameters of 50 patients of Test group compared to 50 patients of placebo group.

Sl no.	Signs and Symptoms	Mean \pm SEM		Mean Difference	Percentage changes	't' value	'p' Value
		Group A (Test group)	Group B (Placebo group)				
1	<i>Vedana swaroopa</i> (Characteristic of pain)	1.028 ± 0.1069	5.027 ± 0.3469	3.999	79.55%	11.016	< 0.0001 S
2	<i>Vedana kaala</i> (Onset of pain)	1.056 ± 0.08835	1.156 ± 0.09325	0.1000	8.650%	0.7785	0.4382 NS
3	<i>Vedana avadhi</i> (Duration of pain)	1.024 ± 0.08424	1.120 ± 0.09664	0.09551	8.571%	0.7439	0.4587 NS
4	<i>Vedana tivrata</i> (Intensity of pain)	1.128 ± 0.1138	1.140 ± 0.06135	0.01200	2.456%	0.09281	0.9262 NS
5	<i>Rajasrava avadhi</i> (Duration of menstruation)	1.580 ± 0.1162	1.392 ± 0.1189	0.1880	13.505%	1.131	0.2608 NS
6	<i>Praseka</i> (Nausea)	0.7760 ± 0.1079	0.9960 ± 0.1238	0.2200	22.088%	1.339	0.1835 NS
7	<i>Vibandha</i> (Constipation)	0.7320 ± 0.1009	0.8520 ± 0.1055	0.1200	14.084%	0.8222	0.4130 NS
8	<i>Katishoola</i> (Low backache)	0.9080 ± 0.08106	1.240 ± 0.09285	0.3320	17.419%	2.694	0.0083 S
9	<i>Shirashoola</i> (Headache)	0.6760 ± 0.09422	0.8600 ± 0.1076	0.1840	21.395%	1.287	0.2012 NS

*Data presented as Mean \pm SEM

Table-16. Shows the Effect of study drug on subjective parameters of 50 patients of Test group compared to 50 patients of placebo group after the duration of study analyzing through unpaired 't' test. Here in all the parameters positive effects of drug were observed compared to placebo group. The parameters like in *Vedana swaroopa* (Characteristic of pain) 79.55% improvement was observed; in *Vedana kaala* (Onset of pain) 8.650% improvement was observed; in *Vedana avadhi* (Duration of pain) 8.571% improvement was observed; in *Vedana tivrata* (Intensity of pain) 2.456% improvement was observed; in *Rajasrava avadhi* (Duration of menstruation) 13.505% improvement was observed; in *Praseka* (Nausea) 22.088% improvement was observed; in *Vibandha* (Constipation) 14.084% improvement was

observed; in *Katishoola* (Low backache) 17.419% improvement was observed; in *Shirashoola* (Headache) 21.395% improvement was observed. Although in all these parameters the comparative changes was observed $P > 0.05$ level which was statistically not significant, except the parameter *Vedana swaroopa* (Characteristic of pain) where observed p value was $P < 0.0001$ which indicates that the study drug having highly significant effect to improve the condition of *Vedana swaroopa* (Characteristic of pain). Similarly in the parameter *Katishoola* (Low backache) the pvalue of unpaired 't' test was observed $P = 0.0083$. That indicates that the study drug having highly significant effect to improve the condition of *Katishoola* (Low backache) of the patients suffering from *Udavarta yonivyapada*.

Table-17: Effect of study drug on objective parameters of 50 patients of Test group compared to 50 patients of placebo group.

Signs and Symptoms	Mean \pm SEM		Mean Difference	Percentage changes	't' value	'p' Value
	Group A (Test group)	Group B (Placebo group)				
<i>Artava pramana</i> (Quantity of menstrual blood)	2.596 ± 1.276	1.000 ± 0.1375	1.596	61.479%	1.232	0.2209

***Data presented as Mean \pm SEM**

Table-17, shows the comparative effect of study drug on objective parameter of both study group and placebo group. Drug shows effect in the changes of Quantity of menstrual blood in study group compared to test group. Where 61.479% improvement of the symptom of *Artava pramana* (Quantity of menstrual blood) were observed after providing the test drug compared to placebo group. Though the comparative changes was observed $P > 0.05$ level which was statistically not significant.

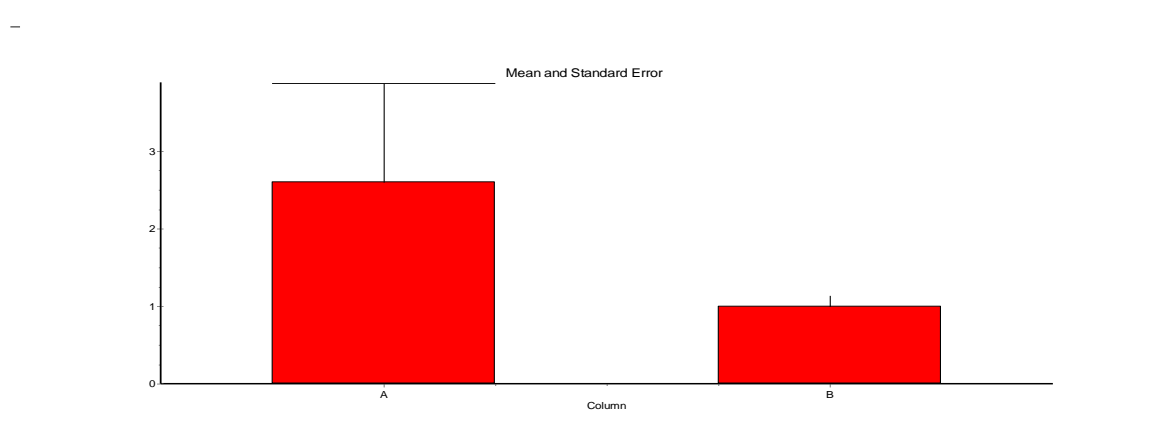


Figure 3: Graphical presentation showing the comparative changes of objective parameter of 50 patients of Placebo group and 50 patients of Test group after providing the test drug:

**Data presented as Mean \pm SEM; Column A-Test group, Column B-Placebo group

Figure 3, shows the comparative changes of objective parameter of 50 patients of Placebo group and 50 patients of Test group after providing the test drug. Where 61.479% improvement of the symptom of *Artava pramana* (Quantity of menstrual blood) were observed after providing the test drug compared to placebo groups.

CONCLUSION

- *Abroma augusta* Linn. is a multi indication drug and had been used for several ailments. Since 16th century onwards in *Bhavprakash nighantu*
- Historical review and botanical basis are pointing that *Ulatkambal* (*Abroma augusta* Linn.) previously included in Sterculiaceae family. But according to new information Sterculiaceae family has been incorporated into Malvaceae family. So presently *Ulatkambal* belonging to Malvaceae family.
- *Udavarta yoni vyapad* is almost like spasmodic dysmenorrhoea of modern medical science.
- The incidence of *kastartava* is slightly more in young unmarried and in nullipara women.
- The Root bark of *Abroma augusta* Linn. is emmenagogue for congestive and nervous dysmenorrhoea, sterility, and other menstrual disorder.
- The drug *Abroma augusta* Linn. was significantly effective to reduce the symptoms of dysmenorrhoea like *Vedana swaroopa* (Characteristic of pain), *Vedana kaal*, *Vibandha* (Constipation) *Vedana tivrata* (Intensity of pain). *Praseka* (Nausea) *Vibandha* (Constipation) *Katishool Shirashoola* (Headache) with $P < 0.0001$. It increases *Rajasrava avadhi* with $P < 0.0001$. *Ulatkambal* churna also increases the Quantity of menstrual blood.
- The drug *Ulatkambal* has Vata shamak properties due its *Katu-Tikta Rasa*, *Laghu Ruksha Tikshna Guna*, *Ushna virya* and *Katu Vipaka* & the experimental studies on *Ulatkambal* also show its analgesic effect. Moreover references are available regarding its use in pain dominated diseases of *artava* & its *Garbhashaya Balya*, *Garbhashaya Shodhak*, emmenagogue (*Aartava pravartaka*), *Artavajanana* and *Vedanasthapan* properties.
- *Artava pravartak* action, probably by its property of *Ushna veerya* which regularized the function of *Apan vayu* during menstruation; results in relief of pain as well as it regularizes the normal functions of *artava*.
- Modern point of view states that the analgesic action of drug *Abroma augusta* Linn. root bark is probably through its action on anti-inflammatory and pain suppression which

activates by possibly mediating through prostaglandin synthesis, inhibition antihistamine, membrane stabilizing and antioxidant activities.

- *Ulatkambal* showed its potent analgesic effect. *Abroma augusta* possesses both central and peripherally mediated analgesic activities. Peripherally analgesic effect of *Abroma augusta* may due to the inhibition of synthesis and release of PGs and other endogenous substances. The analgesic effect produced by the extract may be via central mechanisms involving these receptor systems or via peripheral mechanisms involved in the inhibition of prostaglandins, leukotrienes, and other endogenous substances that are key players in inflammation and pain.^[1]
- According to research paper by K.C. Bose, *Abroma augusta* Linn. increases the contraction of Uterine muscles and acts as a tonic for it.
- During course of therapy and after withdrawal no adverse effect was noted.
- The drug therapy of *Abroma augusta* Linn. gives better relief, economic, easily acceptable and recurrence of the disease is very minimal.

Present study may be considered as a commencement of research in this area. But to establish the effect of these *Ayurvedic* formulations, a multi-disciplinary and large-scale study is needed to establish *Abroma augusta* root bark powder as a choice of drug in *Udavarta yonivyapad*.

Thus, it can be concluded that cost effective treatment modalities of *Ayurveda* can be developed for treating this common problem which needs medications in each cycle and sometimes lifelong and disturbs the day today life of a female.

REFERENCES

1. Acharya Charaka Samhita, Commentary by Bramhanand Tripathi, Chaukhamba Surabharati Prakashan, Varanasi, 2010; 30.
2. Sushruta Samhita, Commentary by Ambika Dutta Shastri, Chaukhamba Sanskrit Sansthan, Varanasi, reprinted, 2012; 38.
3. Text Book of Gynaecology, D.C.Dutta, Jaypee brothers. Reprint, 2005; 12.
4. Nighantu Adarsha Vol.I, by Bapalal G. Vaidya, Chaukhamba Bharati Academy, Varanasi, reprint, Muchukundadi Varga, 2005.
5. Dravya Guna Vigyana Vol II, by P.V Sharma, Chaukhamba Sanskrit Pratishthan, Varanasi, reprint, Artavajanana Varga, 2003.

6. Text Book of Gynaecology, D.C.Dutta, Jaypee brothers. Reprint, 2005; 12.
7. Obstetrics & Gynaecology, by Charles R.B. Beckmann, Publisher Wolters Kluwer, 7th edition, 2014.
8. Dravya Guna Vigyana Vol II, by P.V Sharma, Chaukhamba Sanskrit Pratishthan, Varanasi, reprint 2003, Artavajanana Varga.
9. Dictionary of Economic plants in India, by Umrao Singh, Indian council of Agricultural Research, 2nd edition 1983.
10. Medicinal Plants, by S.G. Joshi, Oxford & IBH Publishing Co. Pvt. Ltd., 2009.
11. Flora of British India Vol-I, by Joseph Dalton, Published under the authority of secretary of state for India in council.
12. Obstetrics & Gynaecology, by Charles R.B. Beckmann, Publisher Wolters Kluwer, 7th edition, 2014.
13. Shaw's Textbook of Gynaecology, by V.G. Padubidri & S.N. Daflary, Publisher: Churchill Livingstone, Reprint, 2006
14. K.Raghunathan & Miss. Roma Mitra Pharmacognosy of Indian Drugs, II.