



A COMPARATIVE CLINICAL STUDY OF *DARVYADI KWATHA* & *BOLA PARPATI* IN *ASRIGDARA* w.s.r. TO DYSFUNCTIONAL UTERINE BLEEDING.

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ABSTRACT

Regular menstrual cycle results from the relationship between endometrium and its regulating factors like H-P-O axis. Changes in either of these results DUB. Excessive bleeding is associated with considerable health Consequences and its impact on the social, economic and psychological well being of women can be severe, also due to alteration of food habits and changing life styles ^[5] Its worldwide incidence is 19 % of women of reproductive age.^[4] Dysfunctional uterine bleeding is defined as a state of abnormal uterine bleeding without any clinically detected organic, systemic and iatrogenic cause (pelvic pathology, tumours, inflammation or pregnancy is excluded).^[3] Commonest age group effected by *Asrigdara* is 35-45 years (60-65%), seen mostly in multiparous (89.89%) more than 3 abortions (44.44%). As *Darvyadi Kwatha* has been described in *Asrigdara* in *Bhavpraksha* and *Bola Parpati* has been described in (*Asrigdara*, *Raktapitta* and *Arsha Chikitsa*) in *Yogaratanakara*. These drugs are having Vata-Pitta Shamaka, Rakta Shodhaka, Stambhaka, Garbhasaya Balya, & Vatanulomana properties. Aims to compare the efficacy of *Darvyadi Kwatha* and *Bola Parpati* in *Asrigdara*. Design a randomized comparative clinical study of two groups, each consisting of 20 patients. Patient aged between 15 to 45 years who has clinically diagnosed as DUB in Rishikul Campus, Hospital Haridwar, were included in the study. Analysis used of subjective parameters of intra group by Wilcoxon signed rank test and inter-group by Mann-Whitney Rank Sum test. Analysis of objective parameters of intra group by Paired 't' Test and Inter-group by Unpaired 't' Test. In overall effect of treatment group-A 10 has completely cured, 5 has marked improvement and 3 has moderate improvement while 2 has mild improvement. In group-B 14 has completely cured, 3 has marked improvement and 2 has moderate improvement while 1 has mild improvement. Conclusion is the present shows that *Bola Parpati* is safe and better treatment in *Asrigdara*.

KEYWORDS: *Asrigdara*, Dysfunctional uterine bleeding (DUB), *Darvyadi Kwatha*, *Bola Parpati*.

INTRODUCTION

Since the evolution of the life in the Universe, women have been placed on extreme worship place due to her power of '*Janani*'. The God has blessed the female with the most valuable gift of motherhood. The preparation of motherhood starts with puberty and ends with menopause. The word *Artava* denotes two meanings one of them is *Antaha Pushpa* and another one is *Bahira Pushpa*. Both *Antah* and *Bahira Pushpa* are interrelated. *Bahira Pushpa* is outward manifestation of appropriate work of *Antah Pushpa* which is necessary for conception. Here, the present study deal with *Bahira Pushpa* that is menstrual blood. Menstruation is a natural physical specific property of a female and so, it called as monthly period.

Many gynaecological disorders effects her motherhood of women. Dysfunctional uterine bleeding is one of the frequent complaints and its incidence is becoming higher with degree of civilization.

The prevalence varies widely but an incidence of 10% amongst new patients attending the outpatient seems logical.^[1]

Dysfunctional uterine bleeding is defined as a state of abnormal uterine bleeding without any clinically detected organic, systemic and iatrogenic cause (pelvic pathology, tumours, inflammation or pregnancy is excluded).^[2]

Ancient *Acharyas* mentioned it under the disease *Asrigdara*. *Charaka* explained *Asrigdara* as a separate disease with its management in *Yoni Vyapata Chikitsadhyaya*.^[3]

Due to *Pradirana* (excessive excretion) of *Raja* (menstrual blood) is named as *Pradara* and since there is *Dirana* (excessive excretion) of *Asrika* (menstrual blood), hence it is known as *Asrigdara*.

Acharya Sushruta explained it as a separate disease entity in *Shukra Shonita Adhyaya* in *Sharirasthana*.^[4]

Acharya Sushruta says that when menstruation comes in excess amount for prolonged period and or even without normal period of menstruation and different from the normal period of menstrual blood or denoting the features of specific *Dosha*, it is known as *Asrigdara*. By analyzing the symptoms, status of *Doshas*, *Dushya*, *Agni*, *Shrotas* etc, it is probable that *Asrigdara* occurs by *Pittavrita-Apanavayu Doshas* leading to *Artavaha Srotodushti*. Thus the dominance of *Dosha* in *Asrigdara* is *Pitta* and *Vata*.

OBJECTIVES OF STUDY

To compare the efficacy of *Darvyadi Kwatha* and *Bola Parpati* in *Asrigdara*.

MATERIALS AND METHODS

Total 40 patients diagnosed with *Asrigdara* w.r.s. to DUB on the basis of inclusion and exclusion criteria attending the O.P.D and IPD of Prasuti Tantra & Stree Roga department, Rishikul Campus, Hospital Haridwar and total 40 patients (100%) had completed their course of treatment. So observations and results of 40 patients given below.

Inclusion Criteria

- Patients fulfilling the diagnostic criteria.

RESULT

Table 1: Effect of treatment on subjective parameter in group-A.

Subjective parameter	Mean		Mean Diff.	% of relief	W	p-value	Result
	BT	AT					
Duration of blood loss	1.85	0.30	1.55	83.78%	135	<0.001	HS
Interval of menstruation	1.75	0.15	1.60	91.42%	153	<0.001	HS
Number of pads	1.60	0.15	1.45	90.62%	136	<0.001	HS
Pain during menses	0.55	0.25	0.30	54.54%	0.21	0.010	S

Table 2: Effect of treatment on Objective parameter in Group-A.

Objective parameter	Mean		Mean Diff.	% of relief	SD	SE	't'	P	Result
	BT	AT							
Hb%	10.05	11.50	1.44	13.71%	0.82	0.18	7.79	<0.001	HS
Amount of blood loss	108	82	25	23.14%	20.21	4.52	5.53	<0.001	HS
Endometrial thickness	15.46	7.61	7.85	50.77%	25.43	5.68	1.38	<0.05	S

- Patient having haemoglobin more than 8 gm%.
- Patients having age between (15-45years) with complaints of excessive bleeding per vagina.

Exclusion Criteria

- Patient having haemoglobin less than 8 gm%.
- Patients who are used OCPs, IUCD or hormonal treatment.
- Patients having systemic illness like TB, diabetes and hypertension.
- Patients having pelvic disease like fibroids, poly, PID, endometriosis.

STUDY DESIGN

Type of Study: Single blind comparative clinical trial of two groups each consisting of 20 patients.

Drugs: Group-A- Darvyadi Kwatha Dose- 50 ml BD, **Anupana: Madhu**

Group B:- Bola Parpati -Dose- 375 mg powder BD, **Anupana: Sharkara & Madhu,**

Route of administration: Oral in both Group A & B

Observation: The patients observed for 7 days, if no exaggerated complaints; same medicine given for 15 days, 3rd, 4th, 5th observation at the interval of 3 week. (Total duration 3month).

Follow up: The patients followed up for a period of 90 days at an interval of 1 month, after the completion of trail.

Diagnostic criteria

Subjective parameters: Duration of blood, Interval of menstruation, number of pads, Pain during menses

Objective parameters: Hb percentage, Amount of blood loss, Endometrial thickness.

Associated symptoms: Angamarda, Bhrama, Daurbalya.

Table-3: Effect of treatment on associated symptoms in Group-A

Associated Symptoms	Mean		Mean Diff.	% of relief	W	P value	Result
	BT	AT					
Angamarda	0.40	0.16	0.30	75%	27	<0.05	S
Bhrama	0.45	0.00	0.45	100%	45	<0.001	HS
Daurbalya	0.75	0.05	0.65	86.66%	91	<0.001	HS

Table 4: Effect of treatment on Subjective parameter in Group-B.

Subjective parameter	Mean		Mean Diff.	% of relief	W	P value	Result
	BT	AT					
Duration of blood loss	1.65	0.10	1.55	93.93%	153	<0.001	HS
Interval menstruation	1.80	0.10	1.70	94.44%	171	<0.001	HS
Number of pads	1.80	0.15	1.65	91.66%	6.00	<0.001	HS
Pain during menses	0.40	0.25	0.15	37.50%	190	>0.05	NS
Passage of clots	2.20	0.20	2.00	90.90%	190	<0.001	HS

Table 5: Effect of treatment on Objective parameters in Group-B.

Objective parameters	Mean		Mean Diff.	% of relief	SD	SE	't'	P	Result
	BT	AT							
Hb%	10.11	11.31	1.20	11.86%	0.96	0.21	5.59	<0.001	HS
Amount of blood loss	110.45	84.20	26.25	23.76%	17.74	3.96	6.615	<0.001	HS
Endometrial thickness	9.55	7.53	2.02	21.15%	1.96	0.44	4.59	<0.001	HS

Table 6: Effect of treatment on associated symptoms in Group-B.

Associated Symptoms	Mean		Mean Diff.	% of relief	W	p-value	Result
	BT	AT					
Angamarda	0.45	0.15	0.30	66.66%	21	>0.05	NS
Bhrama	0.05	0.00	0.50	100%	55	<0.001	HS
Daurbalya	0.60	0.00	0.60	100%	78	<0.001	HS

Comparative results of both groups

Table 7: Inter-group comparison on subjective parameter.

Subjective parameter	Group	Mean rank	Sum of rank	Mann-Whitney U	P value	Result
Duration of blood loss	A	1.500	404	206	>0.05	NS
	B	1.500	416	206	>0.05	NS
Interval menstruation	A	1.600	399	211	>0.05	NS
	B	1.700	421	211	>0.05	NS
Number of pads	A	0.300	440	170	>0.05	NS
	B	0.150	380	170	>0.05	NS
Pain during menses	A	1.450	252	358	<0.05	S
	B	1.700	516	358	<0.05	S

Table 8: Inter-group comparison on objective parameters.

Objective parameter	Group	Mean rank	't' value	P value	Result
Hb%	A	1.476	1.96	>0.05	NS
	B	2.324	1.96	>0.05	NS
Amount of blood loss	A	25.70	0.353	>0.05	NS
	B	27.65	0.353	>0.05	NS
Endometrial thickness	A	2.435	0.466	>0.05	NS
	B	2.160	0.466	>0.05	NS

Table-9: Inter-group comparison on Associated Symptoms.

Associated Symptoms	Group	Mean rank	Sum of rank	Mann-Whitney U	P value	Result
<i>Angamarda</i>	A	0.400	430	180	>0.05	NS
	B	0.300	390	180	>0.05	NS
<i>Bhrama</i>	A	0.500	420	190	>0.05	NS
	B	0.450	400	190	>0.05	NS
<i>Daurbalya</i>	A	0.650	420	190	>0.05	NS
	B	0.600	402	190	>0.05	NS

Overall effect of treatment

Table 10: Overall effect of treatment in both groups.

Effect	% Effect	Group-A n=20	%	Group-B n=20	%
No improvement	<25%	0	0%	0	0%
Mild improvement	25%- <50%	2	10%	1	5%
Moderate improvement	50%- <75%	3	15%	2	10%
Marked improvement	75%- <100%	5	25%	3	15%
Completely cured	100%	10	50%	14	70%

DISCUSSION

In total 40 patients had completed the course of treatment (20 patients in each group A and B) had been described.

- Initially it was found that most of the women having excessive bleeding P/V were from age group >35-45yrs and maximum patients were married and multiparous in both groups.
- Majority of women were housewives having 2 or more than 3 history of abortions. Majority of the patients (70%) were vegetarian, maximum patients were of *Lavana*, *Katu* and *Amla Rasa* dominant diet in both groups.
- Majority of the women were from lower middle class families (80% in group-A and 75% group-B) and of *Vata-Pittaja Prakriti* (50% group-A and 40% group-B).
- Age of menarche was within normal range in maximum cases. During local examination most of the cases had normal vagina, healthy cervix with parous cervical os and majority of them had retroverted, normal size and mobile uterus with normal and non-tender fornices in both groups.
- Initially majority of the cases had very excessive bleeding P/V and the duration of illness was >3-6 month in most of the cases in both groups.
- 85%, 82%, 75%, 77%, 60% and 67% patients had *Madhyama Sara*, *Samhanana*, *Stava*, *Satmaya*, *Ahara Shakti* and *Avara Vyayama Shakti* respectively.
- Most of the patients had *Pittaja* type (70% in group-A and 80% in group-B) of *Asrigdara*.
- After the treatment** on observation it was noted that: We observed relief of (80% and 85%), (85% and 95%), (80% and 85%), (80% and 75%), (70% and 80%), (70% and 75%) and (80% and 85%) in group-A and group-B in duration of blood loss,

interval of menstruation, number of pads, pain during menses, Hb%, amount of blood loss and endometrial thickness respectively at the end of study. Also relief in maximum number of patients in associated symptoms at the end of study.

- Relief in duration of blood loss, interval of menstruation and number of pads due to regularization of frequent menses may be due to the hepato-protective activity of *Musta*, *Kiratata Tikta*, *Arka*, *Bilva* to normalize *Agnimandhya* are also normalize formation of *Dhatu* and *Updhatu*.
- Relief in Pain due to anti-inflammatory action of *Darvi* and *Rasanjana*, so it may be maintain the prostaglandin levels and it also reduce uterine congestion, so having positive regulatory effect of dysmenorrheal and also *Vatahara* and *Vedana Shamaka* properties of *Rasanjana*, *Arka*, *Bilva* and *Gandhaka*.
- Musta*, *Raktachandana* and *Bola* has been reduce the Amount of blood loss due to *Raktastambhaka* properties of *Kashaya Rasa*. *Parada*, *darvi* and *Kirata-Tikta* having *Rasayana* and *Vata-Pitta Shamaka* properties help to normalize *Vata* and *Pitta Dusti* so reduce uterine congestion. Haemoglobin level rise may be due to the reduction of blood loss per vagina. Which also helped in the improvement of general condition of the patients.
- Reduce Endometrial thickness may be due to reduce estrogenic effect.
- Relief in *Angamarda* which may be due to *Vatahara* & *Vedanahara* property of *Arka*, *Vilva* and *Rasanjana*. *Vata Shamaka* properties to help to normalize the movement of *Apana Vayu*
- Relief in *Bhrama* due to decrease in amount of blood loss and *Shita Virya* and *Daha Shamaka* properties of *Raktachandana* and *Bola*.
- Relief in *Daurbalya* due to reduction of amount of blood loss and *Madhura Rasa*, *Madhur Vipaka*,

Balya and Rasayana properties of *Raktachandana*, *Vilva*, *Musta*, *Bola*, *Parada*.

- **PROBABLE MODE OF ACTION OF THE DRUG**
- *Darvi* having *Tikta Rasa*, *Ruksha Guna*, *Sheeta Virya*, *Katu Vipaka* and *Rakta- Pitta Shamaka*, *Rakta Shodhaka* and *Rakta Stambhaka* properties thus helps in decrease blood flow.
- *Rasanjana* having *Tikta Rasa*, *Ruksha Guna*, *Ushana Virya*, *Katu Vipaka*, *Vata Shamaka* properties to help to normalize the movement of *Apana Vayu* that has get obstructed by *Pitta* in the *Artavaha Shrotasa*.
- *Darvi* and *Rasanjana* both are anti-inflammatory drugs. So, it may be maintain the prostaglandin levels and it also reduce uterine congestion, so having positive regulatory effect of dysmenorrhea.
- *Musta* having *Kashaya*, *Tikta Rasa*, *Laghu*, *Ruksha Guna*, *Sheeta Virya*, *Katu Vipaka* and *Deepana-Pachana* properties, which help in proper function of *Agni*, There by does *Ama Pachana* and help in *Shroto Shodhana*. *Musta* are having *Balya* properties which tone up the whole reproductive system and general weakness.
- *Rakta chandana* and *Bola* having *Tikta Rasa*, *Ruksha*, *Lagu Guna*, *Katu Vipaka*, *Pittashamaka*, *Asrikadoshahara*, *Sandhaniya* and *Vrana Ropana* properties which reduce the fragility of endometrial capillaries and tone up the endometrial capillaries.
- *Kiratatikta* having *Deepan -Pachana*, properties by virtue of which increases the *Jatharagni* and *Dhatvagni* so help in maintaining the vitiated *Dosha* to equilibrated form.
- *Vasa* are having *Rakta Shodhak* and *Rakta Stambhaka* properties thus helps in decrease blood flow. *Laghu* and *Ruksha Guna* help in *Srotoshodhana*.
- *Parada* having *Yogwahi*, *Rasayan*, *Tridosaghana* properties.

Effect of therapy on both groups

- The effect of therapy on Subjective and Objective parameters of both groups have shown good results, but percentage wise *Bola Parpati* gave so, more relief on Subjective and Objective parameters in both groups due to highly astringent, *Raktastambhana* and *Deepana-Pachana* properties.
- The effect of therapy on Associated symptoms of both groups have shown good results, but percentage wise *Darvyadi Kwatha* gave so, more relief on Associated symptoms, due to anti-inflammatory, analgesics and *Agni Deepana* properties of *Darvyadi Kwatha*.

Inter-group comparative result

These results prove that *Bola Parpati* is more stable and effective drug as compared with *Darvyadi Kwatha*. As in *Bola Parpati* *Bloa* amount of *bola* 2 times more in

comparison to *Parada* and *Gandhaka* and which is *Kashaya Ras* and *Stambhana Karma*

CONCLUSION

- Maximum patients belonged to age group of (>35-45yrs). Because it is synchronous to the fact that DUB occurs in extremes of the age due to hormonal changes in perimenopausal age and stress full life during reproductive age. So this reason maximum patients found in this Age.
- Maximum patients in both groups were registered in *Grishama* and *Sharada Ritu*, Because *Pitta Dosha* provokes in *Grishama* and *Sharada Ritu*. So this state affects the *Artava Utpatti* and leads to *Asrigdara/ DUB*. So this reason maximum patients found in this *Ritu*.
- Maximum patients were registered *Avara Vyayama Sakti* due to heavy blood loss during menses. So this reason maximum patients found *Avara Vyayama Sakti*.
- Proper *Jatharagni* (its due to *Deepana-pachana Karma*) is essential in the treatment of *Asrigdara*, because Production of *Artava* depends upon *Rasa* and *Rakta Dhatu* and proper *Jatharagni* which also helps to proper metabolism of estrogen and progesterone, which is essential for proper formation of endometrium.

Recommendation

- The study should be carried out in the form of *Darvyadi Ghana Vati*, due to bitter taste of *Darvyadi Kwatha*.
- The study should be conducted on larger group of the patients.

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