

# Pharmacological Study of Padm-Keshar (*Nelumbo nucifera*) on Dysfunctional Uterine Bleeding (DUB)

Monika Tyagi<sup>1, \*</sup>, Ravikant Tyagi<sup>2, 4</sup>, M. C. Sharma<sup>3</sup>

<sup>1</sup>Dept. of Dravya Guna, A & U Tibbia college Hospital, Karol Bagh affiliated to University of Delhi, Govt of NCT, Delhi, India

<sup>2</sup>Dept. of Kayachikitsa, Bharat Ayurved medical college, Muzaffar nagar affiliated to S.J.M. University Kalyanpur Kanpur, UP, India

<sup>3</sup>Dept. of Dravya Guna Vigyana, Faculty of Ayurveda, National Institute of Ayurveda, Jaipur affiliated to National Institute of Ayurveda, Jaipur (Rajasthan), India

<sup>4</sup>Dept. of Kayachikitsa, Faculty of Ayurveda, Bharat Ayurved medical college, Muzaffar nagar affiliated to S.J.M. University Kalyanpur Kanpur, UP, India

## Abstract

The Lotus (*Nelumbo nucifera*) is most celebrated flower. It usually symbolizes ideas of beauty and immortality in many of the ancient cultures, and religions. In Vedas Upanishad, Puranas, description is found very much. Stamens of *Nelumbo nucifera* is used for the research work. Dysfunctional uterine bleeding (DUB) is an abnormal vaginal bleeding without any pelvic pathology. IN DUB, all types of irregular and abnormal uterine bleeding such as (Polymenorrhagia or epimenorrhagia, metrorrhagia, menorrhagia) include. To find out the action of padm-keshar (*Nelumbo nucifera*) on DUB with the help of modern parameter, the present work has been taken.

## Keywords

Lotus (*Nelumbo nucifera*), Dysfunctional Uterine Bleeding (DUB)

Received: January 11, 2015 / Accepted: March 5, 2015 / Published online: March 12, 2015

@ 2015 The Authors. Published by American Institute of Science. This Open Access article is under the CC BY-NC license.

<http://creativecommons.org/licenses/by-nc/4.0/>

## 1. Introduction

Women's health is prime importance to get a health society. If lady doesn't have regular menstrual period, she can't get good health. Now a days, In women's disease Dysfunctional uterine bleeding is one of the most common disease.

### 1.1. About the Disease

According to modern, Dysfunctional uterine bleeding (DUB) is an abnormal vaginal bleeding, not due to a physical cause that occurs in women in their reproductive years (who have previously started menstruation and not reached menopause). DUB is diagnosed after all other causes of abnormal uterine bleeding are ruled out. This includes infection, tumors, disease, early pregnancy disorders or structure problems.

DUB may be caused by an imbalance of hormones related to

ovulation (Estrogen or progesterone).

DUB is most common at the extreme ages of women's reproductive years, either at the beginning or near the end, but it may occur at any time during her reproductive life. Approximately 20% cases of DUB occur in adolescents and 40% in women over 40.

i.e. irregular and acyclic bleeding in more amount is known as Asrugdara.

Ayurveda Treatment is designed to balance tridoshas, Saptadhatu and malas, thus it focus causes & symptoms of a disease.

There are several drugs are described in Ayurvedic texts. In these drugs Padm-Keshar [*Nelumbo Nucifera*] is selected for the treatment of DUB.

\* Corresponding author

E-mail address: dr.monika0@gmail.com (M. Tyagi)

### 1.2. About the Selected Drug

In Ayurvedic texts it is described as follows |

According to Sushruta Samhita, this drug is described in Priyanguvadi and Ambasthadi gana. It is used in Pittaj Vikara.

Padm-Keshar works as haemostatic agent, due to:-

Madhura, Kasaya & katu Rasa, Madhura Vipaka, Sheeta Virya.

Therefore, Present study is based only on DUB.

### 1.3. Aims & Objectives of the Study

- To evaluate the efficacy of Padm-keshar in the management of Dysfunctional uterine bleeding.
- To provide a drug which is very effective and has no side effects.
- To compare the effect of padm-keshar and tranexamic acid w.s.r. to DUB.

## 2. Material and Methods

For this research work 45 patients were selected randomly.

- 1 Grouping has been done
- 2 In group A (treated group)-30 patients had been treated with Padm - Keshar Churna in a dose of 3gms B.D orally with water for the period of three months regularly.
- 3 In group B (control group)-15 patients had been treated with tranexamic acid 500 mg T.D.S orally with water, for first three days of onset of menstrual cycle consequently for 3 months.

### 2.1. Inclusion Criteria

- Age-16-35 yrs.
- History of irregular and excessive menstrual bleeding.
- Patient which was affected from D.U.B for 3 months.

- Laboratory investigations reveal no systemic illness.

### 2.2. Exclusion Criteria

- The patient accompanied with ovarian cyst, PCOD, Ovarian mass, uterus fibroid carcinoma etc.
- Thyroid problem.
- Non –co-operative patient

## 3. Assessment of Criteria of Severity

### 3.1. Subjective Assessment

Based on the:

- Amount of menstrual flow.
- Duration of flow.
- Interval between menstrual cycle.
- Body ache.
- Weakness.
- Pallor.

### 3.2. Objective Assessment

The objective assessment was done on the basis of the investigation reports of the patients before and after trial.

## 4. Observations

In the present study the efficacy of Padm-keshar churna has been evaluated in the patients of Dysfunctional uterine bleeding. Each and every case has under gone complete clinical examination and laboratory investigations. It is as follows -

*Comparative study of effect of therapy in both groups on symptoms of Dysfunctional uterine bleeding:*

**Table N0. 1.** Showing pattern of clinical Results in the amount of menstruation

Group	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
A	30	1.77	0.73	1.03	58.49	0.67	0.12	8.46	<0.001
B	15	2.13	0.67	1.47	68.75	0.52	0.13	11.00	<0.001

**Table N0. 2.** Showing pattern of clinical Results in the Duration of menstruation

Group	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
A	30	1.27	0.33	0.93	73.68	0.78	0.14	6.51	<0.001
B	15	1.33	0.60	0.73	55.0	0.46	0.12	6.20	<0.001

**Table NO. 3.** Showing pattern of clinical Results in the Interval b/w menstruation

Group	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
A	30	1.40	0.53	0.87	61.90	0.57	0.10	8.31	<0.001
B	15	1.47	1.20	0.27	18.18	0.46	0.12	2.26	>0.05

**Table NO. 4.** Showing pattern of clinical Results in the Bodyache

Group	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
A	25	1.48	0.52	0.96	64.86	0.68	0.14	7.10	<0.001
B	10	1.90	1.50	0.40	21.05	0.52	0.16	2.45	>0.05

**Table NO. 5.** Showing pattern of clinical Results in the Weakness

Group	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
A	29	1.76	1.10	0.66	37.25	0.67	0.12	5.27	<0.001
B	14	1.57	1.50	0.07	4.55	0.27	0.07	1.00	<0.10

**Table NO. 6.** Showing pattern of clinical Results in the Pallor

Group	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
A	28	1.71	1.00	0.71	41.67	0.68	0.13	5.59	<0.001
B	12	1.00	0.58	0.42	41.67	0.49	0.14	2.96	>0.02

**Table NO. 7.** Showing pattern of clinical Results in the Thirst

Group	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
A	20	1.85	0.65	1.20	64.86	0.95	0.21	5.64	<0.001
B	8	1.13	1.00	0.13	11.11	0.35	0.13	1.00	<0.10

**Table NO. 8.** Showing pattern of clinical Results in the Burning sensation (Daha)

Group	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
A	14	1.29	0.64	0.64	50.00	0.99	0.26	2.44	<0.02
B	4	1.00	0.50	0.50	50.00	0.58	0.29	1.73	<0.10

**Table No. 9.** Showing pattern of change in hemoglobin gm/dl

Group -A

Investigation	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
HB	30	10.43	10.87	0.44	4.19	0.57	0.10	4.21	<0.001

Group B

Investigation	N	Mean		Dif.	% of Change	SD	SE	T	P
		BT	AT						
HB	15	10.74	10.81	0.07	0.68	0.17	0.04	1.70	<0.10

## 5. Discussion

*Comparative results of the effect of therapy after treatment in both groups:*

Table No. 1 shows, % of change in the amount of menstruation is 58.49%. 't' value is 8.46, 'p' value is < 0.001,

so it shows highly significant in group-A.

In group-B % of change is 68.75%, 't' value is 11.00, 'p' value is <0.001, it also shows highly significant.

Table No. 2 shows, in group-A % of change is 73.68%, 't' value is 6.51, 'p' value is <0.001, it shows highly significant in the duration of menstruation.

In Group –B, % of change is 55.0%, ‘t’ value is 6.20, ‘p’ value is < 0.001, it shows highly significant.

Table no. 3 Showing that clinical result in interval b/w menstruation in group-A, % of change is 61.90%, ‘t’ value is 8.31, ‘p’ value is <0.001 i.e. highly significant.

In Group-B % of change is 18.18% ‘t’ value is 2.26, and ‘p’ value is >0.05 it shows significant results.

Table No. 4 showing results in Body ache, In Group-A % of change is 64.86%, ‘t’ value is 7.10, ‘p’ value is <0.001 i.e. highly significant.

In group-B % of change is 21.05%, ‘t’ value is 2.45, ‘p’ value is >0.05, i.e. significant results.

Table no. 5 Showing results in weakness. In group-A, % of change is 37.25%, ‘t’ value is 5.27, ‘p’ value <0.001 i.e. highly significant.

In Group B % of change is 4.55%, ‘t’ value 1.00, ‘p’ value is <0.10, so it is insignificant.

Table No. 6, shows in pallor, % of change is 41.67% and ‘t’ value is 5.59, ‘p’ value <0.001 so it is highly significant group-A.

In group-B % of change is 41.67% ‘t’ value is 2.96, ‘p’ value >0.02 i.e. showing significant result.

Table No. 7 showing in the symptom of thirst, in group-A, % of change is 64.86%, ‘t’ value is 5.64, ‘t’ value is <0.001 i.e. highly significant.

In group-B, % of change is 11.11%, ‘t’ value is 1.00, ‘p’ value is <0.10, so it is insignificant.

Table No. 8 Showing results in Burning sensation, in group A % of change is 50%, ‘t’ value is 2.44, ‘p’ value is <0.02, so it is significant.

In group-B % of change is 50%, ‘t’ value is 1.73, ‘p’ value is <0.10 so it is insignificant.

Table no. 9 showing change in Hb gm/dl. After treatment,%of change is 4.19%, ‘t’ value is 4.21 and ‘p’ value is <0.001. It shows highly significance.

In group-B, % of change is 0.68%, ‘t’ value is 1.70, ‘p’ value is <0.10, so it is insignificant.

## 6. Probable Mode of Action

### 6.1. About Padm- Keshar

- In Aurvedic approach, Padm-keshar shows sangrahi activity due to the kashaya Rasa and sheeta virya so, it coagulate bleeding.
- Presence of tannin shows coagulation property.

- Due to the, sheeta virya, resulted in relief in thirst.
- Presence of Iron shows,haematinic property, so Hb gm% of patients is increased.
- Presence of Carbohydrate, fats and oils resulted relief in weakness.
- Padm- keshar being a Ayurvedic drug. It is more effective in the symptoms of DUB.

### 6.2. About the Tranexamic Acid

It is a modern drug. Due to the chemical substance. It acts only in symptom of excessive menstrual bleeding. It has showed recurrence of DUB. and showed insignificance in almost symptoms of DUB except excessive menstrual bleeding.

So it can be said that padm-keshar is more effective than Tranexamic acid in all symptoms of DUB.

## 7. Conclusion

The study entitled “Pharmacological study of padm-keshar on Dysfunctional uterine bleeding.”

The following conclusion was drawn from this research work:

- It is essential to aware women about this disease as they get treatment in early stage.
- Psychological counselling is very effective along with medicine.
- Kaphaja prakriti women are less prone to this disease in comparison to vatic, paittika or dwandwaja prakriti.
- Women prefer to take Ayurvedic drug than modern drug.
- Padm-keshar is used in this study, has proved very effective in treating, symptoms of DUB then control drug.
- Padm–keshar is used is this study, has proved very effective in treating, symptoms of DUB.

## References

- [1] Rigveda: Pub- Dayanand sansthan
- [2] Atharveda Parishisht: Sayam Bhasya
- [3] Agni Purana: Maharshi Veda Vyas 1957
- [4] Garuna Purana: Veda Prakash
- [5] Charaka Samhita: Comm. Pt. Kashinath Pandeya & Dr. Gorakh Nath Chaturvedi, Pub:- Chaukhambha Bharti Academy reprint 1998
- [6] Bhav Prakash Nighantu: Prof. K.C. Chuneekar
- [7] Dravya Guna Vigyan Vol. 1-5: Author – P.V. Sharma, Pub: Chaukhambha Bharti Academy, reprint 1998, Varanasi.

- [8] Handbook of Medicinal plants: Author- Prof. S.K. Bhattacharya, Pub: Pointer Publisher – Jaipur
- [9] Plants in Ayurveda (A Compendium of Botanical and Sanskrit Names: Author: M.Abdul Karim. Pub: Foundation for Revitalization of Local Health Traditions Bangalore.
- [10] Encyclopaedic Dictionary of Medicinal and Economic plants: Author- Dr. Rashtra Vardhana. Pub:- Campus Books International
- [11] Glossary of Indian Medicinal Plants: Author – R.N. Chopra, S.L. Nayar, I.C. Chopra. Pub: Publications & Information Directorate CSIR
- [12] Supplement to glossary of Indian Medicinal Plants: Author – R.N. Chopra, S. L. Nayar, I.C. Chopra, Pub: Publications & Information Directorate CSIR
- [13] Phytopharam- Journal: Herbal Information Centre, New Delhi.
- [14] Ayurvedic clinical Diagnosis Based on Madhava Nidana Part-II: Author- G.D. Singhal & Colleagues. Pub:- Chaukhamba Sanskrit Pratisthan, Delhi
- [15] [www.emedicine.com](http://www.emedicine.com)
- [16] [www.medlineplusEncyclopedia](http://www.medlineplusEncyclopedia)
- [17] [www.Hinduismtodayjuly1999](http://www.Hinduismtodayjuly1999)
- [18] [www.lotusflowerandplant](http://www.lotusflowerandplant)
- [19] [www.nelumbowikipediathefreeencyclopedia](http://www.nelumbowikipediathefreeencyclopedia)
- [20] [www.nelmbonuciferaplantsforAfuturedatasereport](http://www.nelmbonuciferaplantsforAfuturedatasereport)