

THERAPEUTIC ROLE OF UDUMBARA PHALA NASYA IN ASRIGDARA: A CASE SERIES ON HEMOSTASIS AND NEUROENDOCRINE REGULATION

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DOI: 10.63001/tbs.2025.v20.i04.pp14-18

KEYWORDS

Asrigdara, Nasya Karma, DUB, LH, FSH, Hormonal Imbalances

Received on:

22-08-2025

Accepted on:

20-09-2025

Published on:

28-10-2025

ABSTRACT

Introduction: Nasya Karma, an Ayurvedic nasal therapy, provides a holistic, non-invasive approach to hormonal menstrual irregularities. By modulating the hypothalamic-pituitary-ovarian (HPO) axis, it influences GnRH, LH, and FSH secretion, thereby balancing estrogen and progesterone. In Ayurveda, Dysfunctional Uterine Bleeding (DUB) is closely correlated with Asrigdara, caused by Pitta-Rakta Dushti. Udumbara (Ficus racemosa), endowed with Kashaya Rasa, Sheeta Virya, and Raktastambhaka properties, is indicated in Asrigdara Chikitsa. Clinical Findings: Three patients presented with complaints of heavy or prolonged menstrual bleeding per vaginam (PV). There was no history suggestive of systemic illness such as diabetes mellitus, hypertension, thrombophilia, or thyroid dysfunction. Diagnosis: To exclude structural and systemic causes of abnormal uterine bleeding, patients were evaluated as per PALM-COEIN classification through ultrasonography and investigations including RBS, thyroid profile, and BTCT. After ruling out pathological etiologies, all were diagnosed as cases of DUB (Asrigdara). Baseline hormonal evaluation included LH and FSH levels. Intervention: Patients received Udumbara extract Nasya for 7 days after cessation of menses, for two consecutive cycles. No additional systemic therapy was administered. Follow-up and Outcomes: Administration of Udumbara nasal drops resulted in a marked reduction in both frequency and volume of uterine bleeding. Notably, prolonged cycles and early recurrence of menses were completely resolved. Post-treatment evaluation revealed improved LH and FSH levels, correlating with better hormonal regulation. **Discussion:** The observed clinical improvements suggest that *Udumbara Nasya* acts through modulation of the hypothalamicpituitary axis, regulating GnRH, LH, and FSH secretion, which ultimately balances estrogen and progesterone levels. Additionally, its Raktastambhaka effect, coupled with Kashaya Rasa and Sheeta Virya, pacifies aggravated Pitta and Rakta, thereby reducing excessive menstrual blood loss. The therapy demonstrated both Shamana and Stambhana effects without adverse outcomes. Conclusion: Udumbara extract Nasya shows promising efficacy in managing DUB associated with hormonal imbalance. Its integrative mechanism of action aligns modern neuroendocrine regulation with Ayurvedic principles, offering a safe, effective, and non-invasive therapeutic option.

INTRODUCTION

Asrigdara is defined as Excessive and prolonged menstrual

bleeding, or even scanty bleeding occurring between menstrual cycles. It is termed *Pradara* due to the excessive discharge of *Raja*, and when there is an excessive excretion of *Asrk* (blood), it

is specifically referred to as Asrigdara. [1] Acharya Charaka has described Asrigdara as a distinct disease entity along with its management in the Yoni Vyapada Chikitsa Adhyaya. [2,4] He has also classified it under Raktaja Vikara and mentioned its pathogenesis as Pitta Avrita Apana Vayu. [3,4] Acharya Sushruta has described Asrigdara as an independent disease in the Sharira Sthana, specifically in the Shukra Shonita Shuddhi Sharira Adhyaya. [1,4] In classics many causative factors like Atilavana, Amala, Katu rasa sevana, Viruddaahara and Vihara like Chinta, bhaya, krodha etc. are explained as causative factors of asrigdara. Vitiated Vatadi Doshas affect the Artava Vaha Strotasa and contribute to the pathology of Asrigdara. If not properly managed, Asrigdara can lead to several complications (Upadrava) such as Bhrama, Moorcha, Daha, Angamarda, Pralapa, Pandutva, and Tandra, among others. Acharya Charaka describes 4 types of Asruadara -Vataia, Pittaia, Kaphaia and Sannipataia, Madhavanidana, Bhavaprakasha and Yogaratnakara also states the same. Acharya Charaka whlie describing treatmen he mentions treatment of Pitta-vataja Asrugdara also which means he accepts Dwidosha Asrugdara.

Dysfunctional Uterine Bleeding (DUB) refers to irregular uterine bleeding that occurs without any underlying pathology or systemic illness. Also known as anovulatory bleeding, it differs from normal menstrual bleeding, which is typically triggered by progesterone withdrawal. In DUB, disruption of the hypothalamic-pituitary-ovarian (H-P-O) axis leads to the absence of ovulation. This results in unopposed estrogen stimulation of the endometrium, causing endometrial hyperplasia and manifesting as excessive or prolonged bleeding. Despite following a seemingly regular cycle, the bleeding in DUB is abnormal and non-cyclical in nature. [6] DUB

is one of the most common causes of abnormal uterine bleeding seen mostly in post-menarche and pre-menopausal ages. Currently, Dysfunctional Uterine Bleeding (DUB) is defined as abnormal uterine bleeding characterized by excessive, prolonged, and irregular endometrial bleeding lasting more than 7 days, often requiring the use of more than one sanitary towel or tampon per hour or every two hours. It typically occurs without associated pain and in the absence of any identifiable organic cause. Prolonged Menorrhagia causes Iron deficiency Anemia among women, being one of the most common causes of iron deficiency anaemia in females. [7]

Among the three *Doshas*, *Vata* plays a significant role in both the physiology and pathology of the reproductive system, and *Basti* is regarded as the most effective treatment for *Vata*-related disorders. ^[8,9,11] Along with *Basti*, *Nasya Karma* (transmucosal nasal administration) is also commonly recommended in the management of *Vandhyatva* (infertility) and various menstrual disorders. ^[10,11] *Acharya Kashyapa* explains use of *Nasya* in *Atyartava* and *Artavakshaya* in the chapter *Shatapuspa Shatavari Kalpa Adhyaya* which is clinically found effective. ^[12] According to *Acarya Kasyapa*, *Nasya Karma* just after Menstruation can cause *Sosana* of *Yoni* [dry ness due to less Estrogen], so we can say Nasya can cause a stage of less estrogen, which is the treatment modality to be followed in case of Menorrhagia due to hormonal imbalance. ^[12]

2. PATIENT INFORMATION

All the basic demographic profile and history of the three patients enrolled in this case series is summarized below in **Table 1**.

Table 1: Patient's information in summarized form

the bleeding in DUB is a	bnormal and non-cyclical in nature. 🕫	1 DOR		
PATIENT	1	2	3	
Date of Visit	17/09/24	05/02/25	11/02/25	
Age (Years)	25	25	25	
Sex	Female	Female	Female	
Marital Status	Unmarried	Married	Unmarried	
BMI (kg/m²)	25.4	19.5	18.8	
Menarche (Age)	13 years	12 years	14 years	
LMP	06/09/24	02/02/25	08/02/25	
Presenting	Heavy menstrual bleeding with	Excessive bleeding with reduced interval	Prolonged and heavy bleeding	
Symptoms	abdominal pain	cycles and pain	with pain	
Duration of	9-10 months	4 months	1 year	
Complaints				
Cycle Length	20-25 days	15-20 days	28-30 days	
Menstrual Duration	7-8 days	7-8 days	9-10 days	
Pads per Cycle	28-30	27-30	30-34	
Clots	Present	Present	Present	
Pain (Dysmenorrhea)	Severe	Severe	Severe	
Associated	Excess clots, severe pain	Severe pain, early cycles	Severe pain, prolonged	
Symptoms	•		bleeding	
CLUMENT ENIBRIES				

3. CLINICAL FINDINGS

History and symptom details at the time of enrolment are summarized below in Table 2.

Table 2: Clinical features of all patients

Parameter	Case 1	Case 2	Case 3
Menstrual Cycle Interval	20-25 days	15-20 days	28-30 days
Duration of Bleeding	7-8 days	7-8 days	9-10 days
Pads per Cycle	28-30	27-30	30-34
Pain during Menses	Severe	Severe	Severe
Passage of Clots	++	++	++
USG Findings	Normal uterus (55×40×46 mm), ET 16.8 mm, ovaries normal	Retroverted uterus (63×34×41 mm), ET 9 mm, ovaries normal	Normal uterus, ET 9.2 mm, ovaries normal, minimal free fluid in cul-de-sac
CBC	Hb 11.8 gm%, normal counts	Hb 12.7 gm%, normal counts	Hb 9.4 gm%, normal counts
Thyroid Profile	Normal	Normal	Normal
Other Systemic Illness	None	None	None

4. DIAGNOSTIC ASSESSMENT

All baseline investigations performed before treatment for assessment are presented below in Table 3.

Table 3: Investigations before treatment

Investigations	Case 1	Case 2	Case 3
Hb	11.8 gm%	12.7 gm%	9.4 gm%
RBC	4.06 mil/cmm	4.25 mil/cmm	4.12 mil/cmm
WBC	5800/cmm	5400/cmm	6800/cmm

Platelet Count	243000/cmm	237000/cmm	304000/cmm
RBS	106 mg/dl	108 mg/dl	107 mg/dl
BT	1:40 min	2:36 min	1:14 min
CT	3:43 min	5:10 min	3:52 min
TSH	2.69 mcIU/ml	1.437 mcIU/ml	3.744 mcIU/ml
T3	1.88 ng/dl	1.38 ng/dl	1.17 ng/dl
T4	50.5 mcg/ml	86.6 mcg/ml	66.10 mcg/ml

5. THERAPEUTIC INTERVENTIONS

The patients were treated with **Udumbara Phala extract Nasya** prepared in aqueous form as Swarasa preparation was practically difficult due to the need for fresh daily administration.

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Parameter	Details		
Drug	Udumbara (Ficus racemosa) Phala Extract		
Part Used	Phala		
Drug Form	Distillate (Aqueous Extract)		
Mode of Administration	Nasya (Nasal instillation)		
Dose	4 drops in each nostril		
Duration	7 days after cessation of menses, for 2 consecutive cycles		
Concomitant Oral Medications	None		

Reference - Bhavaprakasha (Vatadi Varga)

6. OUTCOME

The outcome of this case series revealed that all three patients experienced marked relief in signs and symptoms. The difference in subjective and objective findings before and after treatment is summarized in **Table 5**.

Table 4: Protocol for Intervention

Table 5: Changes in signs and symptoms before and after treatment

Sign and Symptoms	Case 1 (Before Tx)	Case 1 (After Tx)	Case 2 (Before Tx)	Case 2 (After Tx)	Case 3 (Before Tx)	Case 3 (After Tx)
Menstrual Cycle Duration	7-8 days	6 days	7-8 days	4-5 days	9-10 days	5 days
Interval	20-25 days	28 days	15-20 days	20-22 days	28-30 days	28-30 days
Pads per Cycle	28-30	15	27-30	12	30-34	17
Pain during Menses	Severe	Mild	Severe	Absent	Severe	Present
Passage of Clots	Present	Absent	Present	Absent	Present	Absent
Menorrhagia	Present	Absent	Present	Absent	Present	Absent
Polymenorrhoea	Present	Absent	Present	Reduced	Absent	Absent
Dysmenorrhoea	Severe	Mild	Severe	Absent	Severe	Mild
Nature of Cycles	Irregular	Regular	Irregular	Improved	Regular	Regular

Hormonal assessment of **LH and FSH** was done before and after treatment to evaluate changes in hormonal balance. The differences are shown in **Table 6**.

Table 6: Difference of LH and FSH levels before and after treatment

Case	LH (B/T)	LH (A/T)	FSH (B/T)	FSH (A/T)
1	4.13	5.23	5.73	4.98
2	11.02	3.46	7.66	7.43
3	5.73	4.86	4.25	7.24

DISCUSSION

The present case series involved three women diagnosed with Asrigdara, which can be correlated with Dysfunctional Uterine Bleeding (DUB) in modern gynecology. DUB is defined as abnormal uterine bleeding in the absence of organic pathology such as fibroids, polyps, systemic disease, or coagulation disorders, and is primarily attributed to hormonal imbalance of the Hypothalamic-Pituitary-Ovarian (HPO) axis [13,14]. In Ayurveda, Asrigdara is characterized by Atipravritti of Artava due to Pitta-Rakta Dushti and Apana Vata Vaigunya, leading to excessive or irregular uterine bleeding [15,16]. Acharya Charaka and Sushruta have emphasized the dual involvement of Pitta and Vata in producing excessive, painful, and irregular menstrual flow [17].

In modern terms, DUB arises from anovulatory cycles, luteal phase defects, or irregular hormonal surges, leading to unopposed estrogen and excessive endometrial proliferation [18]. This corresponds with *Pittaja Asrigdara* in Ayurveda, where *Pitta* aggravation causes excessive bleeding, while *Vata* involvement explains the irregularity and pain. Case 2 in this series, for instance, showed elevated LH (11.02 mIU/mL) before treatment, suggesting an abnormal LH surge, while Case 3 demonstrated low FSH (4.25 mIU/mL) prior to treatment, reflecting a deficient follicular phase. Both are examples of hormonal dysequilibrium described in modern literature [19].

Nasya Karma, indicated by Acharya Kashyapa in both Artavakshaya (scanty menses) and Atyartava (excessive menses), is considered a direct therapeutic pathway to influence the Shiras (head)—seat of the HPO axis [20]. The nasal mucosa provides

transmucosal absorption, allowing drugs to reach the hypothalamic-pituitary centers, thereby modulating GnRH, LH, and FSH secretion ^[21]. This explains the significant post-treatment reduction in LH in Case 2 and the rise in FSH in Case 3, reflecting normalization of ovulatory dynamics.

Udumbara Phala (unripe fruit of Ficus racemosa) is described in Sahasrayoga and other classical Ayurvedic texts as having potent Raktastambhaka (hemostatic), Pittahara, and Srotoshodhaka properties [22]. Its Kashaya Rasa, Sheeta Veerya, and Guru-Ruksha Guna help pacify aggravated Pitta and stabilize excessive Artava Pravritti [23]. Modern pharmacological studies show that Ficus racemosa contains tannins and flavonoids, which may reduce endometrial prostaglandins (PGE2) and enhance vascular constriction, thereby reducing menstrual bleeding [24,25]. The aqueous extract form used here ensured the delivery of pure phytoconstituents, without the need for Ghrita or Taila processing, which also made it acceptable, tasteless, and easy to administer in young women.

Clinical Outcomes: Across all three cases, significant reduction was observed in the quantity and duration of bleeding, regularization of cycles, and decrease in dysmenorrhea and clot passage. Hormonal assessments further confirmed that *Udumbara Phala* Extract *Nasya* influenced LH and FSH levels toward physiological balance. Importantly, no oral medication was used, ensuring that improvements could be attributed solely to Nasya therapy. No adverse events were reported, affirming its safety and tolerability.

Strengths and Limitations: The present case series demonstrates that *Udumbara Phala* Extract *Nasya* may offer a non-invasive,

safe, and effective therapy for DUB, addressing both symptoms and underlying hormonal imbalance. Unlike conventional management of DUB, which relies on hormonal pills, NSAIDs, or surgical interventions (often associated with recurrence and side effects) [26], this Ayurvedic intervention offers a natural, homeostatic approach.

However, being a small case series (n=3), the findings cannot be generalized. Larger clinical trials with biochemical, ultrasonographic, and long-term follow-up data are needed to validate the reproducibility and sustained benefits of this therapy.

CONSLUSION

Udumbara Phala (Ficus racemosa) Nasya demonstrates promising therapeutic efficacy in the management of Asrigdara, clinically correlating with Dysfunctional Uterine Bleeding (DUB). Its unique action appears dual—on the Ayurvedic level, pacifying aggravated Pitta, Rakta, and Vata within the Artavavaha Srotasa, and on the modern level, modulating the hypothalamic-pituitary-ovarian (HPO) axis. The phytoconstituents of Udumbara, particularly tannins and flavonoids, contribute to its Raktastambhaka and Pittahara properties, promoting hemostasis through vasoconstriction, reduction of endometrial capillary fragility, and prostaglandin regulation.

The transmucosal nasal route ensures direct access to the olfactory-limbic-hypothalamic system, influencing GnRH pulsatility and thereby stabilizing downstream secretion of LH and FSH. This mechanism supports physiological regulation of estrogen and progesterone, correcting menstrual irregularities without introducing exogenous hormones. Importantly, no adverse effects were observed, and therapy was well tolerated, underscoring its safety in reproductive-age women.

Unlike conventional hormonal therapies, which may cause side effects or disrupt natural cycles, *Udumbara Phala Nasya* offers a bio-regulatory, non-hormonal, and sustainable approach, addressing both symptomatic heavy bleeding and underlying endocrine imbalance. These findings highlight its potential as an integrative therapy for menstrual disorders, meriting further validation through larger controlled clinical trials.

9. PATIENT'S PERSPECTIVE

Patient 1: "I was suffering from irregular and heavy bleeding for many months, which made me very weak and tired. I had taken different treatments before, but the problem always returned. After taking Udumbara Phala Nasya, my bleeding reduced and my cycle became more regular. Even after stopping the medicine, I feel much better and can continue my routine work without stress."

Patient 2: "I used to have prolonged bleeding during my periods, which made me anxious and disturbed my studies and daily activities. I was worried about taking hormonal medicines because of side effects, so I preferred Ayurveda. With Udumbara Nasya treatment, my flow became normal, and I feel more confident and healthier now."

Patient 3: "Before treatment, I had to miss my college and social activities because of heavy periods and weakness. After this therapy, my bleeding has reduced, and I feel more energetic. Most importantly, I did not experience any side effects, which makes me trust this treatment more."

10. INFORMED CONSENT

Written permission for the publication of this case study was obtained from the patient.

Declaration Of Patient Consent: The authors certify that they have obtained all appropriate patient consent forms. In the form, the patients have given their consent for other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and

Funding: Funding is provided by Intramural Research Grant from Research and Development cell of Parul University.

due efforts will be made to conceal their identity.

Visualization, Review & editing, Supervision

Author Contributions: Dr. Keya: Conceptualization, Methodology, Formal analysis, Investigation, Resources, Data curation, Visualization, Writing - original draft, Review & editing, Supervision.

Dr. Shriniwas: Conceptualization, Methodology, Formal analysis, Investigation, Visualization, Review & editing, Supervision.
Dr. Anitha: Drug preparation, Drug analysis, Methology,

Acknowledgment: "I gratefully acknowledge the Parul University."

Conflict of interest: No conflicts of interest to declare Declaration of generative AI in scientific writing: The authors utilized ChatGPT for language editing assistance. After using AI, they thoroughly reviewed and refined the content, taking full responsibility for the final publication.

Data Availability statement: All data related to the outcome are included in the manuscript.

Ethics approval and consent to participate: Yes

Clinical trial number: CTRI/2024/04/066545 [Registered on: 30/04/2024]

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