



(REVIEW ARTICLE)



## Udumbara (*Ficus racemosa* Willd.): A challenging drug in the management of Heavy Menstrual Bleeding

Megha Gupta \* and Anuradha Roy

Department of Prasuti Tantra, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India.

World Journal of Advanced Research and Reviews, 2023, 20(01), 121–126

Publication history: Received on 14 August 2023; revised on 24 September 2023; accepted on 27 September 2023

Article DOI: <https://doi.org/10.30574/wjarr.2023.20.1.1934>

### Abstract

Women of reproductive age frequently have heavy menstrual bleeding (HMB), a common gynecological disease. It is characterized by excessive or prolonged menstrual bleeding that can interfere with a woman's daily activities and physical, emotional, social, and psychological quality of life. It is defined as cyclic bleeding at normal intervals, the bleeding is either excessive in amount (>80ml) or duration (> 7 days), or both. In India reported prevalence of AUB is around 17.9%. HMB can have various impacts on a woman's health. In Ayurveda, it may be explained in terms of asrigdara. In traditional drug practices, distinct parts (leaves, stem, root, fruit, seeds, latex, or even entire plant) of *Ficus racemosa* Willd. are used to manage HMB. Its Sanskrit name is Udumbara. *Ficus racemosa* Willd. has confirmed various pharmacological actions like hypoglycemic, hypolipidemic, anti-carcinogenic, antidiuretic, hepatoprotective, anti-ulcer, and antifungal.  $\beta$ -sitosterol and glaucanol acetate are the phytoconstituent found. In the present review management of HMB with Udumbara as ekal dravya (single drug) with the expected mode of action has been explained. Most of the drug reviews have not explained the mode of action for managing HMB. Understanding the mode of action of Udumbara at different stages of shadkriyakala (stages of disease manifestation and management) of asrigdara will help better administration of the herb and also prevent complications.

**Keywords:** Ayurveda; Asrigdara; Udumbara; Shadkriyakala

### 1. Introduction

HMB is a common gynecological condition that affects many women. It can have various impacts on a woman's health. Anemia: Prolonged and HMB can lead to a significant loss of blood, which may result in anemia. Physical discomfort: HMB can cause pelvic pain and cramping, leading to discomfort during the periods. This can reduce the overall quality of life and interfere with daily activities. Emotional and psychological discomfort: HMB can be emotionally distressing for some women. The constant worry associated with managing heavy flow can lead to increased stress and anxiety. Disturbance of daily activity: It can force women to limit or avoid certain activities during their menstruation, affecting work, social life and exercise routines. Interference with intimacy: Women may feel discomfort or embarrassment during sexual activities due to the heavy flow. Impact on sleep: It can disturb sleep patterns, leading to reduced energy levels. Social isolation: Fear of leaks and the need to manage bleeding can cause social withdrawal, leading to feelings of isolation. Reduced fertility: It may sometimes be associated with underlying reproductive issues that can affect fertility.

\* Corresponding author: Megha Gupta

## 2. Scientific uses

- Antioxidant activity- *Ficus racemosa* contains phenolic compounds and flavonoids that exhibit strong antioxidant properties. These compounds help neutralize free radicals in the body, protecting cells from oxidative stress and reducing the risk of various chronic diseases.
- Anti-inflammatory effects- The plant's extracts have demonstrated anti-inflammatory properties, which can help reduce inflammation in the body and provide relief from inflammatory conditions.
- Antimicrobial activity- *Ficus racemose* extracts have been found to possess antimicrobial properties, which may help inhibit the growth of various bacteria, fungi, and other microorganisms.
- Hepatoprotective activity- The plant has been traditionally used for liver disorders, and research suggests that its extracts may have hepatoprotective properties, protecting the liver from damage and promoting its healthy functioning.
- Antiulcer activity- The plant's extracts have been investigated for their antiulcer potential, which may be helpful in reducing gastric ulcer formation.

### 2.1. Udumbara

- Botanical name – *Ficus racemosa* Willd.
- Family - Moraceae
- English name - Cluster fig
- Used part - Fruit, bark, latex

### 2.2. Properties

- Rasa (taste) - Kashaya (astringent)
- Guna (qualities) – Guru (heaviness), Ruksha (dryness)
- Vipaka- Katu (pungent)
- Veerya - Sheeta (coolant)
- Karma – Pitta Kaphahara



Figure 1 Fruit of Udumbara

## 3. Asrigdara or Pradara

रजः प्रदीर्यते यस्मात् प्रदरस्तेन स स्मृतः । (च० सं० चि० ३०/२०९)

Due to pradirana (excessive excretion) of raja (menstrual blood), it is named as pradara and since, there is dirana (excessive excretion) of asrk (menstrual blood) hence, it is known as asrigdara.

### 3.1. General etiology and pathogenesis

याऽत्यर्थं सेवते नारी लवणाम्लगुरूणि च। कटून्यथ विदाहीनि स्निग्धानि पिशितानि च ॥२०५॥

ग्राम्यौदकानि मेद्यानि कृशरां पायसं दधि । शुक्तमस्तुसुरादीनि भजन्त्याः कुपितोऽनिल २०६ ॥

रक्तं प्रमाणमुक्लम्य गर्भाशयगताः सिराः । रजोवहाः समाश्रित्य रक्तमादाय तद्रजः । । २०७ ॥

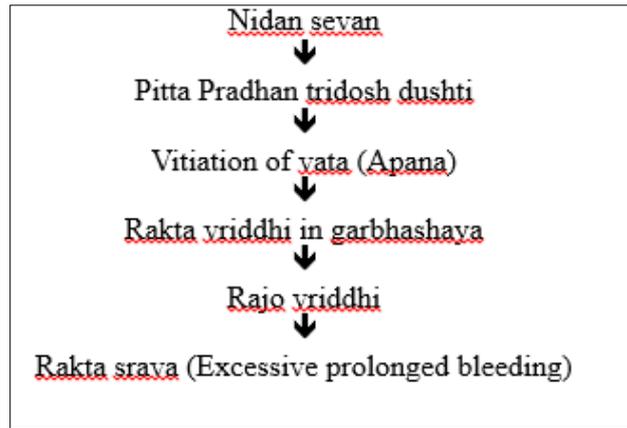
यस्माद्विवर्धयत्याशु रसभावाद्विमानता । तस्मादसृग्दरं प्राहुरेतत्तन्त्रविशारदाः ॥ २०८ ॥

(च० सं० चि० ३०/२०४ से २०९)

Woman who consumes excessive salty, sour, heavy, katu (hot), vidahi (producing burning sensation) and unctuous substances, meat of domestic, aquatic and fatty animals, krsara (olio made with rice and pulses), payasa (rice cooked with milk and sweetened) curd, sukta (vinegar), mastu (curd water) and wine, her aggravated vayu, withholding the rakta (blood) vitiated due to above causes increases its amount and then reaching raja carrying vessels (branches of ovarian and uterine arteries) of the uterus, increases immediately the amount of raja (artava or menstrual blood), in other words the increase in amount of raja is due to its mixture with increased blood. This increase in menstrual blood is due to relative more increase of rasa (plasma contents). Because of increase in the amount of blood the expert of this treatise named it asrigdara.

**Table 1** Asrigdara Nidan

Rasa	Guna	Aahara
Lavana – Potato chips, salted ground nuts, Indian papad, pickles Amala – tamarind, lemon, curd, vinegar Katu – ginger, garlic, onion, chili, pepper, hingu, radish	Snigdha – bhajji/pakoda, dosa, fried rice, paratha, ice cream, milkshakes, biscuits, chocolates Guru – cheese, payasa/kheer Vidahi – katu rasa pradhana dravyas	Mamsa – cow, goat, sheep, pig, conch shell, oyster shell, crab, tortoise, fish Krishara – rice+pulse boiled together Payasa – milk+rice+sugar boiled, lastly added sugar Dadhi – curd Shukti – vinegar Mastu – curd water Sura - wine



**Figure 2** Samprapti of Asrigdara

### 3.2. Rasa Panchak of Udumbara

उदुम्बरो हिमो रूक्षः कषायो मधुरो गुरुः ।(भा.प्र.नि./9)

Kashaya rasa

कषायो रसः संशमनः सङ्ग्राही सन्धानकरः पीडनो रोपणः शोषणः स्तम्भनः श्लेष्मरक्तपित्तप्रशमनः शरीरक्लेदस्योपयोक्ता रूक्षः शीतोऽलघुश्च। (Ca.Su 26/43)

Drugs possessing Kashaya rasa (astringent in taste) acts as mentioned under:

- Samsamana (palliative), sangrahi (constipative) and sandhanakara (promotes union).
- Pidan (produces pressure on the affected part)
- Ropana (causes healing), soshana (absorbing or drying) and stambhana (arresting).
- Alleviates slesma, rakta and pitta.
- Sarira kledasya upayokta (absorbs the body fluid)
- Possesses the attributes like ruksa (dry), sheeta (cold) and alghu (heavy).



Figure 3 Properties of Kashaya rasa

### 3.3. Samprapthi vighatana

Table No. 2 Different stages of Shadakriyakala

Sanchaya (stage of a dosha increasing in its own location)	Prakopa (stage of a dosha reaching the threshold)	Prasara (stage of a dosha spreading beyond its own location) and sthansamshraya (stage of a dosha localizing outside its location)
At the level of guna	At the level of dosha	At the level of dhatu



Figure 4 Samprapthi Vighatana at the level of different stages of Shadakriyakala

**Table 3** Samprapti Vighatana of Asrigdara by Udumbara

	<b>Asrigdara</b>	<b>Udumbara</b>
At the level of guna	Ushna, Tikshna dravya	Sheeta, Kashaya, Madhura
	Laghu, Chala	Guru, Manda
At the level of dosha	Vata shaman	Madhura rasa, Guru guna
	Pitta shaman	Sheeta virya
	Kapha shaman	Ruksha guna, Katu vipaka
At the level of dhatu	Rakta has ashraya ashrayi bhava with pitta dosha	As udumbara has kashaya rasa it is pitta shamaka

#### 4. Discussion

Asrigdara is a disease manifesting as excessive bleeding per vaginum. The majority of the lakshanas of Asrigdara are due to aggravated vayu, withholding the rakta (blood) & pitta vitiated due to nidana sevana (ahara, vihara & manosambandhi nidana), increases its amount and then reaching raja carrying vessels (branches of ovarian and uterine arteries) of the uterus, increases immediately the amount of raja (artava or menstrual blood). Vitiation of tridosha leads to agnimandya (depressed or weak state of digestive metabolic factors) which leads to vikrit ahara rasa nirmana and rasagni vaishamy & due to this vikrit rasa dhatu (primary circulating nutrient fluid) nirmana takes place. Artava being upadhatu (supportive structural component) of rasa is also vitiated and because of this vikrit artava pramana vriddhi occur which affect the garbhashayagata sira (uterine congestion/ increased uterine circulation) which leads to apana vayu (decending vata) dushti and atyadhik and ch拉克ala artavastrava (Asrigdara). The general principles of treatment of bleeding per vaginum as follows- dosha shodhana and shamana, rakta-sthapana & sangrahana, use of tikta rasa and eradication of the cause. Udumbara have rakta-sthapana and rakta-sangrahana, kashaya, tikta and madhura shothara and grahi effect which helps to manage the condition of asrigdara (HMB) .

#### 5. Conclusion

Udumbara (*Ficus racemosa* Willd.) being kashaya, madhura rasa, sheeta veerya, katu vipaka and ruksha guna acts as pitta kapha shamaka (pitta-pacifying and kapha-pacifying) and is a drug of choice in this condition. Asrigdara manifests due to the increased ushna, tikshna, chala and drava guna. Udumbara has sheeta veerya, manda, guru and ruksha guna which are opposite to the qualities increased due to the etiological factors of asrigdara. Madhura rasa (sweet taste) can reduce the ushna (hotness) and tikshna guna. Asrigdara is a condition where the tridoshas get vitiated with predominance in pittadosha. Sheeta veerya, Kashaya madhura rasa and guru guna of Udumbara reduce the vitiated pitta. Vata dosha gets pacified due to Madhura rasa and guru guna. Kashaya rasa, katu vipaka and ruksha guna help in pacifying kapha dosha. Rakta is the major dhatu affected in the general condition of asrigdara. Pitta dosha has a close relation with Rakta dhatu. Hence vitiation of pitta ultimately causes vitiation of raktadhatu. Udumbara has kashaya, madhura rasa and sheeta veerya. Therefore, it pacifies pitta and purifies raktadhatu.

#### Compliance with ethical standards

##### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

#### References

- [1] D C Dutta, Text Book Of Gynecology, 6th Edition, Jaypee Brothers Medical Publisher (P) Limited, Chapter 14, Page No.185
- [2] Tripathi Bhrahmanand, Charak Samhita Volume 2, Chaukhamba Surbharti Prakashan, Varanasi Cha.Chi.30/209 Pg.1044
- [3] Tripathi Bhrahmanand, Charak Samhita Volume 2, Chaukhamba Surbharti Prakashan, Varanasi Cha.Chi.30/205-209 Pg.1044

- [4] The Bhavprakash Nighantu with elaborated Hindi commentary by Padmashri prof. K.C. Chunekar, edited by Dr. G.S. Pandey: Edition of 1998, verse 8-9, page no. 516 to 517.
- [5] Role of Udumbara (*Ficus racemosa* Linn) In The Management of Vidradhi – A Drug Review Dr.Nycy. B.S, Dr.Rajkumar Gupta, Dr. Bharat Rathi and Dr.Pramod Khobragade
- [6] Pt. Kashinath Shastri, Dr. Gorakhnath Chaturvedi, Commentary: Vidyotini Hindi Commentary On Charaka Samhita Of Agnivesha, Volume- 2, Chikitsa Sthana, 30/206-207, Chaukhamba Bharti Academy, Varanasi, reprint 2013.
- [7] Sushruta Samhita. Edited By Ambikadutta Shastri. Sutra sthana, 15/21, Chaukhambha Sanskrit Sansthan, Varanasi, reprint 2015.
- [8] Management of asrigdara with Kutajashtaka avaleha and yashtimadhu ghrita matra basti – An open-label, double arm, randomized clinical trial Stuti Sharma, Meenakshi Pandey
- [9] Shweta NR, Vasudevan A, Shrinivas J. Review on ayurvedic management of asrigdara (menorrhagia). Int J Health Sci Res. 2020; 10(1):104-110.
- [10] Agnivesha, Charaka, Dridhabala, Chakrapanidatta. Sutrasthana, Chapter 26, verse 43. In: AcharyaJT (eds.) Charaka Samhita with Ayurveda Deepika commentary. Reprint 2011 ed. Varanasi:Chaukhamba Orientalia; 2011. P146.
- [11] *Ficus racemosa* linn: A comprehensive review Satish A Bhalerao, Deepa R Verma, Nikhil C Teli, Vinodkumar C Didwana and Saurabh S Thakur 2014, 3(4): 1423-1431
- [12] Yadav RK, Nandy BC, Maity S, Sarkar S, Saha S. Phytochemistry, pharmacology, toxicology, and clinical trial of *Ficus racemosa*. Pharmacogn Rev. 2015 Jan-Jun;9(17):73-80. doi: 10.4103/0973-7847.156356. PMID: 26009696; PMCID: PMC4441165.
- [13] Usha V.N.K Streerogavignana, Varanasi: chaukambasurabharatiprakashana, 20014; P.130, 131.
- [14] Tripathy Brhmaanand, Astanga Hrudayam, 1 st edition, Varanasi: chaukambasurabharatiprakashana, p.96-101
- [15] Preethi Agarwal & Sandhya Rao K: Understanding Nidanans Of Asrigdara In Ayurveda. International Ayurvedic Medical Journal {online} 2017 {cited March, 2017}
- [16] WHO international standard terminologies on Ayurveda. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO.
- [17] Ibrahim M.A. Hassanin, Ahmed Y. Shahin, Ahmed T. Abdel-Hafeez, Hosam T. Salem, Sherif A. El-Nashar, Bilateral uterine artery ligation via mini-laparotomy for heavy menstrual bleeding, International Journal of Gynecology & Obstetrics, Volume 103, Issue 3,2008,
- [18] [www.easyayurveda.com](http://www.easyayurveda.com) > 2014/12/16 > udumbar-ficus *Ficus racemosa* Uses, Research, Side Effects - Easy Ayurveda
- [19] Apurva Joshi, & Rashmi Sharma. (2023). An Ayurvedic approach in management of Asrigdara w.s.r. to Abnormal Uterine Bleeding. Journal of Ayurveda and Integrated Medical Sciences, 8(5), 83 - 89. <https://doi.org/10.21760/jaims.8.5.14>
- [20] MANAGEMENT OF ASRGDARA (MENORRHAGIA)- AYURVEDIC REVIEW Shashikumar B. Wankhede<sup>1</sup> and Shruti S. Wankhade BAMS2 1 (B.A.M.S. M.D.) Associate Professor, Strirog & Prasutitantra Department, Government Ayurved College, Nagpur. 2 (B.A.M.S.) General Physician and Strirog Chikitsak. wjpmr, 2023, 9(2), 146-149 SJIF Impact Factor: 5.922 Review Article ISSN 2455-3301 Wjpmr