



RESEARCH ARTICLE

A REVIEW ON PHARMACOLOGICAL ACTION OF SINGLE HERBS IN ASRIGDARA W.S.R. ABNORMAL UTERINE BLEEDING

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Abstract

India is one of the nations blessed with a rich heritage of traditional medical systems and rich biodiversity. The recognized Indian Systems of Medicine are Ayurveda, Siddha and Unani, which use herbs and minerals in the formulations. In Ayurvedic system of medicine the treatment of various diseases like Gynecological disorders, Diabetes, cancer and hepatic disorder through herbal plants are pacing its way in today's era. India has 15 agro-climatic zones, 47000 plant species of which 15000 are reported to have medicinal properties varying degrees¹. Due to change in lifestyle and diet pattern women are at a surge of suffering from various gynaecological disorders. Single Herbs such as Ashoka (Saraca Asoka), Udumbara (Ficus racemosa), Durva (Cynodon Dactylon), Kadall (Musa Paradisaca Linn.), Kanchnar (Bauhinia variegata) Gokshura (Tribulus Terrestris), Japa(Hibiscus rosa- sinensis), Vacha (Acorus calamus Linn.) etc. can be used to treat Bandhyatva (Infertility), Garbhadhan (Pre-Conceptional Care), Garbhasrava and Garbhpatha (Abortions And Miscarriages), Pradara roga (Abnormal Uterine Bleeding) and various other Yonivyapad (Gynecological Disorders) as mentioned by Acharyas. In this paper Pharmacological actions of Single Herbs with special reference to various Asrigdara (Abnormal Uterine Bleeding) will be discussed.

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Introduction:-

"Excessive menstrual blood loss which interferes with a woman's physical, social, emotional, and/or material quality of life" is the definition of heavy menstrual bleeding (HMB), which is characterized by cyclic bleeding at regular intervals but bleeding that is either excessive in amount (>80 ml) or length (>8 days) or both.²

In Ayurveda, protracted, frequent, or severe menstrual bleeding is explained by the term "Asrigdara." Menstrual blood is impacted in both amount and quality in this kind of bleeding condition. The healthy state of the female reproductive system is indicated by a regular menstrual cycle. It is symptomatic of an underlying disorder when the

cycle becomes abnormal, i.e., excessive and protracted bleeding, accompanied by discomfort or emerging at irregular intervals.

Heavy menstrual bleeding (HMB) is the focus of many studies, although the prevalence increases to 35% or more when irregular and intermenstrual bleeding are taken into account.³ According to data from the World Health Organization, 18 million women between the ages of 30 and 55 think that their monthly bleeding is excessive.⁴ Between menarche and menopause, 9–14% of women are said to experience AUB. In every nation, the predominance is different. The reported incidence of AUB in India is 17.9%. Approximately 32.7% of Indian women who visit their clinic do so with AUB symptoms.⁵

87% of women reported having dysmenorrhea, 86% premenstrual syndrome, 72% abnormal menstrual flow, and 63% genital infections, according to the study. The average impact of gynecological issues on employed women is 56.13%. Women's social lives and professional performance are negatively impacted by these issues, with 76% perceiving them as moderate, 16% as severe, and 8% as mild.⁶

Numerous pharmacological activities including as anti – inflammatory, antispasmodic and hemostatic properties, can be found in single herbs. The underlying causes of abnormal uterine bleeding may be addressed with the aid of these measures.

This paper will examine the following: Udumbara (*Ficus racemosa* – Gular), Lodhra (*Symplocos racemosa* - Lodh), Shunthi (*Zingiber officinale* - Adarak), Priyangu (*Callicarpa Macrophylla* Vahl., Lajjalu (*Mimosa pudica*), Kadali (*Musa Paradisiaca* L – Banana), Kanchnar (*Bauhinia variegata* – Kachanar), Japa (*Hibiscus rosa-sinensis* Linn – Gudahala), Vasa (*Adhatoda Vasica*) and Musta (*Cyperus Rotundus*)

Aims and Objectives:-

- To Encourage the use of Single Herbs in day to day treatment for the betterment of female Materials and Methods
- Classical texts with their commentaries and other relevant texts of Ayurveda and allied subjects along with various published articles
- Compilation of various form of Single herbs used in Prasuti Tantra Evum Stree Roga

Observation:-

Single herbs used in Asrigdara (Abnormal Uterine Bleeding), organized by Botanical name, Family name, Rasa Panchaka, Part used, Chemical constituents, Therapeutic indications and Pharmacological actions are listed below:

Table No. 1 :- Dravyas arranged with their Pharmacological actions

S.No.	Single Herbs	Botanical name	Family name	Rasa Panchaka	Part Used	Chemical Constituents	Therapeutic indication	Pharmacological Actions
1.	Udumbara ^{7,8,9,10,11} (Cluster Fig Tree)	<i>Ficus Racemosa</i>	Moraceae	Rasa – Kashaya Guna – Guru, Snigdha Virya – Sheeta Vipaka – Katu Dosha Karma- Pitta kapha hara	Bark, Fruit, Latex	Esters of taraxasterol, β -sitosterol, Friedelin (F)	Murcha, Chardi, Trishna, Pradara roga, Raktasrava	Anti-inflammatory, Analgesic, Antioxidant activity
2.	Lodhra ¹² (Symplocos Tree)	<i>Symplocos racemosa</i>	Styracaceae	Rasa – Kashaya, Tikta Guna – Laghu, Rooksha Virya – Sheeta Vipaka – Katu Dosha	Stem, Bark, Flower	3-monoglucuronoside of 7-methyl leucopelagonidin	Raktasangrahan, Raktasthambhak, Raktashodhak, Shothahar	Anti-fibrinolytic activity, Analgesic, Anti-inflammatory and Antioxidant

				Karma- Kapha Pitta Hara				
3.	Shunthi ¹³	Zingiber officinale	Scitamineae	Rasa:-Kashaya Guna:- Laghu, Snigdha Veerya:- Ushan Vipaka:- Madhura Dosha Karma- Kapha- vata shamak	Rhizome	β - Sesquiphellandrene	Raktashodak, Shula Prashamana	Appetizer, Anti-Spasmodic, Anti-inflammatory
4.	Priyangu ^{14,15,16,17} (Beauty berry)	Callicarpa Macrophylla Vahl.	Verbenaceae	Rasa – Tikta, Kashaya, Madhura Guna – Laghu, Rooksha Virya – Sheeta Vipaka – Katu Dosha Karma- Tridosha shamaka	Flower, Bark, Root	β -sitosterol, Oleanolic acid	Jawar, Daha, Raktatisar, Pradara roga , Raktasrava , Dorgandya	Anti-inflammatory activity - inhibits Phospholipase A2 Analgesic, Inhibits haemolytic activity
5.	Lajjalu ^{18,19,20,21}	Mimosa pudica		Rasa-Kashaya, Tikta Guna- Laghu, Ruksha Veerya- Sheeta veerya Vipaka- Katu Karma- Kaph- pitta shamak	Leaves	Beta Sitosterol inhibits prostaglandin PGE2 and PGI217, Alkaloids reduce the endometrial thickness18 D-Pinitol inhibits COX2 interaction pathway19	Raktapittashamak , Raktasthambhak Raktashodak, Shothahar	Anti-prostaglandin activity Anti-inflammatory activity Coagulation activity
6.	Kadalli ^{22,23,24,25} (Banana)	Musa Paradisiaca	Musaceae	Rasa – Madhura Guna – Guru, Snigdha Virya – Sheeta Vipaka – Madhura Dosha Karma- Vata- pitta hara	Tuber, Flower, Fruit, Stem	Stigmasterol, β -sitosterol (Phytosterol)	Mootrakric hra, Raktapradara, Raktapitta	Antioxidant activity, Antifungal, Antimenorrhagic actions
7.	Kanchnar ^{26,27,28,29,30} (Kachnar)	Bauhinia variegata	Caesalpiniaceae	Rasa – Kashaya Guna – Laghu, Ruksha Virya – Sheeta Vipaka – Katu Dosha Karma- Kapha- pitta hara	Stem, Bark, Flower	β -sitosterol, Saponins, Terpinoid	Raktapradara, Pittasara	Anti-inflammatory activity Antimicrobial, Antioxidant Effects
8.	Japa ^{31,32,33} (Hibiscus)	Hibiscus rosa-sinensis	Malvaceae	Rasa – Kashaya, Tikta Guna – Laghu,	Leaf, Flower	β -sitosterol, Thiamine	Raktasthambhak, Samgrahi,	Anti-inflammatory , Analgesic,

	us)	Linn		Rooksha Virya – Sheeta Vipaka – Katu Dosha Karma- Kapha- pitta hara			Raktapradara	Antispasmodic
9.	Vasa ^{34, 35, 36} (Malabar Nut)	Adhatoda vasica	Acanthaceae	Rasa – Tikta, Kashaya Guna – Laghu, Rooksha Virya – Sheeta Vipaka – Katu Dosha Karma- Kapha pitta hara	Leaf, Root, Flower, Whole plant	β -sitosterol, Vasicine, kaempferol, 3-sophoroside, luteolin	Raktapitta	Anti-inflammatory, Anti-bacterial Activity
10.	Musta ^{37, 38, 39, 40, 41} (Nut Grass)	Cyperus Rotundus	Cyperaceae	Rasa – Tikta, Katu, Kashaya Guna – Laghu, Rooksha Virya – Sheeta Vipaka – Katu Dosha Karma- Kapha- pitta hara	Tuber	β -sitosterol, cyperlone, Mustakone, Suganol, isocyperol, isokobusone	Raktaprashadana, Sangrahaka	Anti - Inflammatory Activity, Anti Oxidant property
11.	Khadira ^{42, 43, 44, 45, 46} (Cutch Tree)	Acacia catechu	Mimosoideae	Rasa – Tikta, Kashaya Guna – Laghu, Rooksha Virya – Sheeta Vipaka – Katu Dosha Karma- Kapha- pitta hara	Stem Bark, Heart wood, Flowers	β -sitosterol, oleanolic acid and its glycoside, oleanolic acid-3- (-neohesperidoside along with sitosterol, sesquiterpenes- α - cyperone, cyperene, Bselinine and cyperenone (tubers); luteolin and aureusidin	Raktapitta, Ruchivardhaka, Stambhana, Shonitasthapana	Anti- Inflammatory haemostatic,

Discussion:-

Research on women whose menstrual bleeding is objectively evaluated to be heavy but normal has repeatedly shown that higher levels of local inflammation are linked to higher levels of blood loss during menstruation. In vivo, plant extracts containing β -sitosterol and Stigmasterol demonstrated strong anti-inflammatory and immunomodulatory properties. It was able to guarantee the suppression of cyclooxygenase-2 (COX-2) and the reduction of pro-inflammatory cytokines, nitric oxide (NO), and tumor necrosis factor- α (TNF- α) release. The menstrual effluent of women with HMB exhibited a substantial elevation of the proinflammatory cytokine TNF- α . Prostaglandin signaling was elevated in HMB due to an increase in COX-2, an enzyme involved in prostaglandin production. During menstruation, significant and protracted tissue damage may arise from the ensuing exacerbated inflammation within the endometrium. Therefore, treating women who experience abnormal uterine bleeding may benefit from limiting the generation of inflammatory mediators.

Conclusion:-

One prevalent type of Artavvikara is Asrigdara, which is characterized by severe and prolonged uterine bleeding. The use of hormone therapy and analgesics in modern treatment has drawbacks, adverse effects, and increases the risk of illness recurrence. Many herbal and polyherbal compound medications from Ayurveda are helpful in

managing Asrigdara and its associated symptoms and consequences. Plants have been utilized as herbal remedies for a wide range of illnesses. Many herbal treatments contain concentrated flower or leaf extract. All of these individual herbs are easily accessible and used by natural health practitioners for Menorrhagia, Uterine bleeding management, Contraception etc.

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