



Review Article

## ANALYSIS ON ACTION OF RAKTHASTHAMBHAKA DRAVYA'S IN ASRIGDHARA WITH SPECIAL REFERENCE TO ABNORMAL UTERINE BLEEDING

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### ABSTRACT

Rakta is the main constituent in the human body as it is considered as vital. *Sthambhana* means to prevent mobility or block, is one among the *Shadvidopakrama* and can be well-thought-out as a part of *Chaturvidha Chikitsa*. *Raktasthambhana* means to stop excess flow of *Rakta* because *Atyaadhika Raktasrava* (excessive menstrual bleeding) may be life threatening so haemostatic measures should be adopted. *Asrigdhara* defined as excessive and prolonged bleeding during menstruation with or without intermenstrual bleeding. The *Nidana's* leading to vitiation of *Tridosha's* in *Garbhashaya Gata Siras* and *Artavavaha srotas* leading to *Artava Atipravrutti*. Abnormal uterine bleeding is a common gynaecological complaint with various aetiologies and varied pathophysiological origins. Excessive bleeding during menstruation can restrict with her daily activities, disturb her wellbeing and reducing their efficiency in society. Excessive flow of blood during menstrual and intermenstrual period creates a condition of anaemia in the patient. The *Raktasthambhaka Dravya's* are not only helpful for stopping excessive and prolonged bleeding during menstruation but also regularizes menstrual cycle and acts on improving the quality of *Rakta Dhatu* were discussed in detail in the present paper with their clinical researches.

### INTRODUCTION

*Rakta* is considered a subtle factor which sustains the life.<sup>[1]</sup> Menstruation denotes to the regular course of cyclical uterine bleeding that occurs in the reproductive years of the human female. Menstrual flow is a combination of whole blood (with red cells and polymorphonuclear leukocytes), endometrium and a serous endometrial transudate. With the onset of menstrual sloughing and bleeding, the requisite need for local haemostasis depends on various factors. The local vasoconstriction plays the dominant role in securing early haemostasis. Thromboxane (from vascular endothelial and platelet origins), endothelin-1, PGF2 $\alpha$  each contribute to the induction of vasospasm in the spiral arteries of the endometrium.

Increase in local levels of cyclooxygenase that converts arachidonic acid to prostaglandin precursors, increased synthesis of PGE2 compared with PGF2 $\alpha$  and increased expression of PGE2 receptors. There is also a local increase in the synthetic capacity for PGI2 and its receptors. PGE2 & PGI2 can result in vasodilatation of the same vessels and high ratios of PGI2 and /or PGE2 to PGF2 $\alpha$ . PGI2 (Prostacyclin) also a potent natural inhibitor of platelet aggregation. Excessive secretions of local factors of endometrium heparin like activity, TNF- $\alpha$  and VEGF resulting in changes in uterine vascular tone, disturbance of angiogenesis, disordered prostaglandin synthesis and increased nitric oxide production. The coagulation cascade is important for secondary haemostasis following day one of the cycle. Coagulation cascade depicted two distinct pathways, extrinsic and intrinsic, each of which was independently capable of activation of factor X(Xa), which ultimately, with the stimulus of activated factor V, catalyses the conversion of prothrombin to thrombin. Endometrial vascular clot is the process of fibrinolysis that is mediated by the generation of plasmin from plasminogen following its activation by

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plasminogen activator. Enhanced fibrinolysis through increased endometrial levels of tissue plasminogen activator may impede the attainment of local haemostasis.<sup>[2]</sup>

The *Samprapti* of *Asrigdhara* states that the *Prakupita Apana Vata* withholding *Prakupita Rakta Dhatu* due to the etiological factors, increase in its *Pramana* and then reaching the *Rajovaha sira's* (Uterine and ovarian arteries → Arcuate arteries → Radial arteries → Spiral arteries → Basal Arteries) which further increases the amount *Artava* (menstrual blood). This increase in menstrual blood is due to its comparative increase of *Rasa* (plasma contents). The measurable increase in amount of *Asruk* (menstrual blood) is called *Asrigdhara* and due to excessive expulsion of *Raja* (menstrual blood) is termed as *Pradara*.<sup>[3]</sup> The concept of *Ashraya- Ashrayi Bhava*,

*Rakta* and *Pitta* having the same properties, so *Rakta Dhatu* getting easily vitiated by *Pitta Dosha*. The *Chala Guna* of *Vata Dosha*, *Sara* and *Drava Guna* of *Pitta Dosha* increases the amount of *Rakta* and *Guru-Picchila Guna* of *Kapha dosha* does excessive proliferation of endometrium resulting in irregular shedding and ripening of endometrial layer. The ten *Shonithasthapana Gana Dravyas* mentioned by *Acharya Charaka* are *Madhu, Madhuka, Nagakeshara, Mocharasa, Mritkapala, Lodhra, Gairika, Priyangu, Sharkara* and *Laja*.<sup>[4,5]</sup> *Acharya Sushruta* narrated four types of *Upakramas* (therapies) for excessive blood loss namely, (1) *Sandhana* (2) *Skandana* (3) *Dahana* (4) *Pachana*.<sup>[6]</sup> All basic principles of treatment told in *Raktarsha, Raktatisara, Raktapitta, Yonivyapat* and *Garbhasrava* can be applied to treat *Asrigdhara*.<sup>[7]</sup>

#### MATERIAL AND METHODS

**Table 1: Tabulation of *Rasa, Guna, Virya, Vipaka* and *Doshaghnata* of *Raktastambhaka dravyas*.<sup>[8]</sup>**

Name of the Dravya's	Rasa	Guna	Virya	Vipaka	Doshaghnata
Ashoka	Kashaya, Tikta	Laghu, Ruksha	Sheeta	Katu	Kaphapittahara
Atibala	Madhura	Laghu, Snigdha	Sheeta	Madhura	Vatapittahara
Arjuna	Kashaya	Ruksha, Laghu	Sheeta	Katu	Kaphapittahara
Apamarga	Katu, Tikta	Laghu, Ruksha, Tikshna, Sara	Ushna	Katu	Kapha vatahara
Amalaki	Lavanavarjita Pancharasa	Ruksha	Ushna	Katu	Kapha pittahara
Aragvadha	Svadu	Guru	Sheeta	Madhura	Kaphapittahara
Bhumyamalaki	Tikta, Kashaya, Madhura	Laghu, Ruksha	Sheeta	Madhura	Kaphapittashamaka
Bola	Madhura, Katu, Tikta	Laghu, Ruksha	Sheeta	Katu	Kaphapittashamaka
Badara	Madhura	Guru	Sheeta	Madhura	Pittahara
Bimbi	Madhura	Guru	Sheeta	Madhura	Pittavatahara
Chandana	Tikta, Madhura	Laghu, Ruksha	Sheeta	Katu	Kaphapittahara
Daruharidra	Tikta, Kashaya	Laghu, Ruksha	Ushna	Katu	Kaphapittahara
Durva	Madhura, Kashaya, Tikta.	Laghu, Snigdha	Sheeta	Madhura	Kaphapittahara
Dhataki	Kashaya	Laghu, Ruksha	Sheeta	Katu	Kaphapittahara
Dhanvana	Kashaya, Madhura	Laghu, Ruksha, Picchila	Sheeta	Katu	Kaphapittahara
Gokshura	Madhura	Snigdha	Sheeta	Madhura	Vatahara
Indrayava	Katu	Laghu	Sheeta	Katu	Tridoshashamaka
Jambu	Kashaya, Madhura, Amla	Laghu, Ruksha	Sheeta	Katu	Kaphapittahara, vatahara
Japa	Kashaya, Tikta	Laghu, Ruksha	Sheeta	Katu	Kaphapittashamaka
Jhandu	Tikta, Kashaya	Laghu, Ruksha	Sheeta	Katu	Kaphapittashamaka
Jeevanthi	Svadu	Snigdha	Sheeta	Madhura	Tridoshahara
Kadambha	Tikta, Kashaya	Ruksha	Sheeta	Katu	Tridoshahara
Kutaja	Tikta, Kashaya	Laghu	Sheeta	Katu	Kaphapittahara

<i>Kakoudumbara</i>	<i>Tikta, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Pittashamaka</i>
<i>Kanchanara</i>	<i>Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kapha pittahara</i>
<i>Kushmanda</i>	<i>Madhura</i>	<i>Laghu, Snigdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vatapittahara</i>
<i>Kadali</i>	<i>Madhura, Kashaya</i>	<i>Guru, Snigdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vatapittashamaka</i>
<i>Khadira</i>	<i>Tikta, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittahara</i>
<i>Koshamra</i>	<i>Amla</i>	<i>Guru</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphavatahara</i>
<i>Kusha</i>	<i>Madhura, Kashaya</i>	<i>Laghu, Snigdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Tridoshagna</i>
<i>Kumari</i>	<i>Tikta, Madhura</i>	<i>Guru, Snigdha, Picchila</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Vatahara</i>
<i>Lodhra</i>	<i>Kashaya, Tikta</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittahara</i>
<i>Laksha</i>	<i>Tikta, Kashaya</i>	<i>Laghu, Snigdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Kaphapittahara</i>
<i>Lajjalu</i>	<i>Kashaya, Tikta</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittahara</i>
<i>Madayantika</i>	<i>Tikta, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittahara</i>
<i>Mayaphala</i>	<i>Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittashamaka</i>
<i>Musta</i>	<i>Katu, Tikta, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittahara</i>
<i>Mudgaparni</i>	<i>Tikta, Svadu</i>	<i>Ruksha, laghu</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Tridosahara</i>
<i>Mashaparni</i>	<i>Tikta, Madhura</i>	<i>Ruksha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vatapittaraktahara</i>
<i>Manjishta</i>	<i>Tikta, Kashaya, Madhura</i>	<i>Guru, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphapittahara</i>
<i>Narikela</i>	<i>Madhura</i>	<i>Guru, Snigdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vatapittahara</i>
<i>Nagakeshara</i>	<i>Kashaya, Tikta</i>	<i>Ruksha, Tikshna, Laghu</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphapittahara</i>
<i>Nyagrodha</i>	<i>Kashaya</i>	<i>Guru, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittashamaka</i>
<i>Padma</i>	<i>Kashaya, Madhura, Tikta</i>	<i>Laghu, Snigdha, Picchila</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Kaphapittahara</i>
<i>Plaksha</i>	<i>Kashaya</i>	<i>Guru, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittashamaka</i>
<i>Punarnava</i>	<i>Madhura, Tikta, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Ushna Sheeta (Rakta)</i>	<i>Katu</i>	<i>Kaphavatahara</i>
<i>Punnaga &amp; Surapunnaga</i>	<i>Madhura, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Kaphapittahara</i>
<i>Pashanabheda</i>	<i>Kashaya, Tikta</i>	<i>Laghu, Snigdha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Tridosahara</i>
<i>Patranga</i>	<i>Kashaya, Madhura, Tikta</i>	<i>Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Pittakaphahara</i>
<i>Priyangu</i>	<i>Tikta, Kashaya, Madhura</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Tridosahara</i>
<i>Palasha</i>	<i>Katu, Tikta, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Ushna (Pushpa-sheeta),</i>	<i>Katu</i>	<i>Kaphapitta shamaka (Pushpa)</i>
<i>Parpata</i>	<i>Tikta</i>	<i>Laghu</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Pittaraktahara</i>
<i>Shala</i>	<i>Tikta, Kashaya</i>	<i>Guru</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Pittakaphanashaka</i>
<i>Shalmali</i>	<i>Kashaya</i>	<i>Laghu, Snigdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vatapittashamaka, Kaphapittashamaka (Mocharasa, Pushpa and Phala)</i>
<i>Sharapunkha</i>	<i>Tikta, Kashaya</i>	<i>Laghu</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kaphapittashamaka</i>

<i>Sariva</i>	<i>Madhura, Tikta</i>	<i>Snigdha, Guru</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Tridosahara</i>
<i>Usheera</i>	<i>Tikta, Madhura</i>	<i>Ruksha, Laghu</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittashamaka</i>
<i>Udumbara</i>	<i>Kashaya</i>	<i>Guru, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittashamaka</i>
<i>Vata</i>	<i>Kashaya</i>	<i>Guru, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittashamaka</i>
<i>Vasa</i>	<i>Tikta, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Katu</i>	<i>Kaphapittashamaka</i>
<i>Vamshalochana</i>	<i>Svadu, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Raktapittahara</i>
<i>Yastimadhu</i>	<i>Svadu</i>	<i>Guru, Snigdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Pittavataaraktaahara</i>

## DISCUSSION

*Shuddha Artava* formed from *Aahara rasa/Rasadhatu* and follicle stimulating and luteinizing hormones are made up of proteins and estrogen and progesterone are formed from cholesterol. The *Raktasthambhaka Dravya's* with *Ruksha, Laghu Gunas, Tikta, Kashaya Rasa* and *Sheeta Virya* acts on *Sara, Drava, Ushna Guna* of *Pitta Dosha* and as vasoconstrictors on the *Garbhashayagata sirah* (uterine arteries) and the level of hormones decreases production of unopposed oestrogens (Estradiol :E<sub>2</sub>) from cholesterol (Fatty acids)→Phospholipids→Arachidonic acid synthesis, abnormal angiogenesis, decreases uterine congestion, reduces capillary fragility, promotes fibrin formation over decapitated stumps of spiral arteries, regeneration and reduces abnormal proliferation of endometrium (Endometrium Hyperplasia).

Extraoral distribution of taste receptors in the female reproductive system are mainly solitary or clustered cells, not grouped in buds but may be a part of large diffuse chemosensory system, the taste buds representing only the most visible portion but the extraoral taste receptors are the larger "submerged" part like a glacial mass. [9]

Estrobolome is a collection of bacteria in the gut which is capable of metabolizing and modulating the body's circulating estrogen. When the gut microbiome is healthy, the estrobolome is producing optimal levels of an enzyme called betaglucuronidase which helps in conjugation of estrogen in the liver and this conjugated estrogen is delivered to the bile for excretion into the gut, lessens reabsorption of estrogen from the gut letting safe removal as waste in stool and urine again guaranteeing hormonal equilibrium. If there is an excess of bacteria that produce betaglucuronidase, that reverts estrogen back into its unconjugated active form and it is then reabsorbed back into the blood stream resulting in estrogen dominance leading to fibroids, endometriosis, polycystic ovarian disease etc.[10] So, the *Deepana, Pachana* and *Yakrututteja* properties of the *Dravya's* might help in maintaining the healthiness of gut which in turn normalizes estrogen metabolism.

*Ashoka twak* is used in treating metrorrhagia and menorrhagia. Pure phenolic glucoside (P2), isolated from stem bark, exhibited highly potent oxytocic activity on different mammals, and was similar in nature to pitocin and ergometrine. A case study of patient aged 48 years with complaints of increased flow and duration of menstruation with clots for 3 years with endometrial hyperplasia. The patient was treated with 50ml *Ashoka Valkala kshirapaka* morning and evening on empty stomach and *Musthamruthadi Kashaya* 30ml thrice daily before food for consecutive 2 months. The results showed that there was absolute reduction in the amount of bleeding and duration of menstrual flow without clots and observation was for total 3 months starting from the 30th day of treatment. *Ashoka Valkala Kshirapaka* and *Musthamruthadi Kashaya* helps to tone up the uterine muscles, corrects the excessive bleeding, irregular shedding and irregular ripening of endometrium during menstruation due to its astringent property (vasoconstrictor). [11]

A Clinical Evaluation of effect of *Chandrakala Rasa & Ashoka Ksheera Paka* in *Asrigdhara* w.s.r to Dysfunctional uterine bleeding: Group A: *Chandrakala Rasa*= 250mg (2 *Ratti*) B.D in tablet form orally, *Ashoka Ksheera paka*= 48ml B.D orally. Duration of treatment= 30 days (two menstrual cycles). Group B: Progesterone hormone= 5mg B.D orally. Duration of treatment= 10 Days (two menstrual cycles). *Chandrakala rasa* and *Ashoka* possessing *Garbhashaya sankochaka, Rakthasthambhaka, Rasayana* properties and liquid extract from the bark is strongly astringent, contain beta sitosterol, acts directly on muscular fibres in the uterus, stimulating effect on the endometrium and on the ovarian tissue. *Chandrakala rasa* and *Ashoka ksheera paka* have marked good results in treating *Asrigdhara*. [12]

A case study *Ashoka Ghrita* two teaspoon half an hour before food once a day in patient complaining of excessive bleeding during menstruation. The constituents of *Ashoka* include glycosides, flavonoids, tannins, saponins, and sterols. Research has shown that it has antibacterial, antifungal, oxytocic, uterotonic, anti- cancerous, anti- progestational, anti-

estrogenic, anti-inflammatory and anti-oxidant. Phytoestrogens which are also present in *Ashoka* bark modulate the raised levels of hormones in cases of primary dysmenorrhea.<sup>[13]</sup>

Bark of *Arjuna* acts as an astringent, demulcent, expectorant, cardiogenic, styptic, anti-dysenteric, urinary astringent and has shown to be useful in fracture, ulcers, leucorrhoea, diabetes, anaemia, cardiopathy and cirrhosis. *Acharya Chakradatta* recommended it to be given as a decoction of bark with *Ksheera* or as a *Ghrita*. Tribals of Orissa used dried bark powder of *Arjuna* along with rice washed water to treat blood in urine. Major chemical constituents are triterpenoids, glycosides, flavonoids, tannins,  $\beta$ -sitosterol etc. are inotropic, anti-ischemic, antioxidant, blood pressure lowering, antiplatelet, hypolipidemic, anti-atherogenic and antihypertrophic.<sup>[14]</sup>

*Atibala* plant contains mucilage, tannins, asparagines, gallic acid, sesquiterpenes, alkaloids, leucoanthocyanins, flavonoids, sterols, triterpenoids, saponins and cardiac glycosides. Ayurvedic pharmacopoeia of India indicates use of the root in hemorrhagic diseases. A comparative clinical study of *Atibaladi churna* and *Pushyanuga churna* in *Asrigdara*, Group A: *Pushyanuga churna* – 6gm BD with *Madhu* orally before food from 8<sup>th</sup> day of menstrual cycle to till the bleeding stops for 2 months and follow up is on next consecutive month. Group B: *Atibaladi churna* (*Atibala*, *Nyagrodha*, *Dhataki*, *Nagakesara*, *Lajjala*, *Lodhra*)- 6gm BD with *Madhu* orally before food from 8<sup>th</sup> day of menstrual cycle to till the bleeding stops for consecutive 2 months and follow up is on next consecutive month. There was significant effect in treating *Asrigdara*.<sup>[15]</sup>

*Amalaki*, in randomized controlled study to evaluate efficacy of '*Amalaki Rasanjana Haritaki choorna*' in *Asrigdara*. Group A: *Amalaki Rasanjana Haritaki choorna*. Group B: *Ashok Twak choorna*, 5 grams - two times daily before food. Total duration of the study was 12 months. Treatment was given and follow up were taken up to 3 consecutive menstrual cycles. *Amalaki-rasanjana-haritaki choorna* and *Ashoka twak choorna* both were equally effective to reduce *Rajasrava pramana & Kala, Angamarda, Adho udara & Katishula, Daurbalyata*, to increase Haemoglobin %.<sup>17</sup> *Bhunyamalaki mula Churna* with *Tandulodaka* given orally. Acts on *Pitta dosha* helps in treating *Raktapradara*.<sup>[16]</sup>

The bark of *Chandana* contains a triterpene – urs-12-en-3 butyl- palmitate, essential oil from heart wood is alpha and beta santalol and shows action against any type of abnormal proliferation. The Hydrolysed Exhausted Sandalwood Powder (HESP) has properties like anti-inflammatory, anti-mitotic,

anti-cancerous, anti-hypertensive, sedative, ganglionic blocking etc.<sup>[17]</sup>

*Durva swarasa*, 30ml morning and evening for seven days given to 18 years old female patient. It was observed that bleeding decreased from 6 pads to 2 pads per day after 3 days, after 7 days the bleeding completely stopped and associated symptoms like abdominal pain, weakness, giddiness, irritability etc. were decreased after 3 days and completely absent after 7 days. *Durvaswarasa* is a detoxicant, alkaline, easily absorbed in the blood, coagulant, strengthens the uterus due to its *Madhura rasa*, *Garbhashayashodhaka* due to *Tikta and Kashaya rasa* and reduces endometrial hyperplasia. *Durva* contains 65% of chlorophyll thus is natural remedy for treating anaemia, giddiness, generalised weakness, relieves stress and strengthens the nervous system.<sup>[18]</sup>

Russian therapists, American Indians and also in traditional system of medicines used *B. aristata* (*Daruharidra*) plant to cure menorrhagia. Fruit is rich in Vitamin C. Reported clinical and experimental studies showed alkaloid Berberine possesses various pharmacological properties like antimicrobial, anti-inflammatory, antineoplastic, analgesic, hepatoprotective, immunomodulatory etc.<sup>[19]</sup>

Effect of polyherbal drug on menorrhagia and its evaluation by assessing biomarker serum VEGF-A. 40 patients were divided into three groups: Oral drug alone/ intrauterine instillation of the oil alone/ oral drug with intrauterine instillation of the oil. Treatment was given orally for three months, 20ml of decoction in twice daily dose with honey/ intra-uterine instillation (3-5ml of oil in increasing order) was given for three days in each month, after clearance of menses for three months. Improvement in symptoms were statistically significant in all the three groups along with reduction in Serum VEGF-A but improvement in the patients of Group C was more. There are eight *Dravya's* in *Darvyadi Kwatha* i.e., *Daruharidra*, *Rasanjana* (extract of *Berberis Aristata* in milk), *Kiratatikta*, *Musta*, *Bilva*, *Arka*, *Vasa* and *Chandana*. *Daruharidra* also acts as anti-oxidant activity and inhibits vascular permeability.<sup>[20]</sup>

A clinical comparative study of *Dhataki churna* with Tranexamic acid in *Asrigdhara*, *Dhataki pushpa churna* was equally effective as Tranexamic acid, useful in increasing haemoglobin and no adverse effects found. A clinical study of *Majuphala powder & Dhataki pushpa powder* to assess the effect in leucorrhoea is undertaken on 30 patients, were divided in three groups. Group A of 10 patients were received *Majuphala churna* for 21 days & *Yonidhavana* done with *Majuphala Kwatha* for 10 days. Group B of 10 patients received internally *Dhataki pushpa powder*

and *Yonidhavana* with *Dhataki pushpa Kwatha* for 10 days. Group C of 10 patients (control group) were received wheat flour in above said same manner. Group A (*Majuphala*) & B (*Dhataki*) had shown highly significant results in both cordial & associated symptoms of leucorrhoea as compared to control group. In local pathology, Group A (*Majuphala*) showed significant results in cervicitis. Group B (*Dhataki*) showed significant results in improving Hb%.<sup>[22]</sup>

The dried *Shatavari* root yields sitosterol, 4,6-dihydroxy-2-0-(2' hydroxyisobutyl) benzaldehyde, undecanyl cetanoate and contains a large amount of saccharine matter, mucilage and minerals – Ca (0.172), Cu (0.033), Na (14.60), K (8.32), Mg (0.169), Mn (0.0074), Ni (0.105) and Zn (0.072) mg/g (dry weight). Use of the tuber for disorders of female genitourinary tract (bleeding disorders and hematuria). A study on Ayurveda poly herbal compound of *Yogaratanakara* (17-A. D) w.s.r *Raktapradara* (AUB) was conducted on 30 patients divided into three groups: Group 1- *Shatavari Yashti yoga* - 5gms twice daily with *Tandulodaka* as *Anupana* before meals for 2 menstrual cycles, Group 2- *Shatavari Yasti yoga* - 5gms, twice daily before meals and in Group 3: *Tandulodaka* 50ml twice daily before meals. In Group 1, extremely significant results were found in the main symptoms like amount and duration of bleeding, pain, increased hemoglobin levels, burning sensation and generalized weakness.<sup>[23]</sup>

A Randomized comparative clinical study of two groups consisting 20 patients in each group suffering from *Asrigdhara*. Group A - *Shatavarigopakanyadi Kashaya* 50ml BD with *Anupana* of *Sita* and *Madhu*, Group B - *Vasaadi Kashaya* 50ml BD with *Anupana* of *Sita* and *Ghritha* was given for 2 consecutive cycles starting from 5<sup>th</sup> day of menstruation in each cycle. Both the groups showed statistically significant results for all assessment criteria.<sup>[24]</sup>

The flowers of *Kanchanara* consists of flavonoids, kaempferol-3-galactoside and kaempferol-3-rhamnoglucoside and buds' decoction is given in menorrhagia. *Kanchanara pushpa choorna*, orally 12grams in three divided doses on empty stomach for three consecutive cycles for first 5 days of menstrual flow with *Tandulodaka* (30ml) in *Asrigdhara*. The treatment is done for the duration of 3 months. The response to the treatment is recorded and therapeutic effects were evaluated with the help of symptomatic relief.<sup>[25]</sup>

*Kutaja*, a case study of female patient suffering with *Asrigdhara* was treated with *Kutajashtakaleha* 10gm BD with cow's milk for 20 days consists of *Kutaja*, *Shalmali*, *Patha*, *Samanga*, *Ativisha*, *Musta*, *Bilva*

and *Dhataki*. Duration of menses and amount of blood loss was reduced with remarkable improvement in quality of life. *Deepana*, *Pachana*, *Raktastambhana*, *Raktaprasadana* and *Balya* properties were present in all the *Dravya's*. While *Dahaprashamana* was found in *Shalmali*, *Patha*, *Dhataki*, *Trishna nigradhana* in *Musta*, *Yakritottejaka*, *Pittasaraka*, *Kaphavatashamaka* in *Bilva*. All the components were *Kaphapittashamaka*, while *Patha* and *Ativisha* were found *Tridoshashamaka*.<sup>[26]</sup>

*Kakoudumbara*, the fruits, seeds and bark contain beta-sitosterol, beta-amyrin, n-triacontanyl acetate, gluacol acetate, hispidin, a phenanthraindolizidine alkaloid etc. The juice of the fruits of *Kakodumbara* is mixed with honey and same mixture is given orally in females suffering from *Pradara*. *Kadambha*, the dried bark contains alkaloids, steroids, reducing sugars and also tannins (4.61%). The ether-soluble alkaloid of the bark shows antibacterial activity. Leaves juice or decoction of bark or dried stem bark is indicated in disorders of female genital tract and bleeding conditions. *Kamala*, filaments are astringent, haemostatic and prescribed for bleeding piles and menorrhagia.<sup>[27]</sup>

A Clinical evaluation of the effect of *Khanda Kushmanda Avaleha* in *Raktapradara* (AUB) was done and 12 gm after food once daily for 30 days was given. More relief was observed on chief complaints, as it contains *Kusmanda*, *Pippali*, *Shunthi*, *Jeeraka*, *Danyaka*, *Patra*, *Ela*, *Marich*, *Twaca*, *Madhu* and *Ghritha*. *Kushmanda* is best *Brimhana Dravya*, helps in subsiding *Pitta* and increases *Rakta Dhatu*. *Kushmanda* contains lutein, both alpha, beta carotene, vitamins B1, B2, B3, B5, B6, B12, vitamin C & E, calcium, magnesium, phosphorus, potassium, sodium, iron & folate. Iron & folate helps in increasing the blood volume, also beneficial in psychosomatic diseases due to its *Medhya Guna* and can regulate hypothalamus pituitary ovarian axis.<sup>[28]</sup>

*Kadali* fruit boiled in cow's urine or fried (or roasted) on charcoal is orally given in excessive discharge of menstrual blood. *Kadali* fruits mixed with ghee is given internally prescribed in menometrorrhagia. The Ayurvedic Pharmacopoeia of India recommends the fresh rhizome in dysuria, polyuria (in females) and menstrual disorders; the flowering in asthma, bleeding disorders, vaginal discharges and leucorrhoea. A clinical evaluation of *Kadali Pushpa* (*Musa Paradisiaca*) in *Asrigdhara*, 20 patients with *Kadali Pushpa Churna*, 4 grams/ day with *Ushnodaka* for 3 menstrual cycles. On fourth day, there was gradual decrease in the amount of bleeding during menstruation from cycle 1 to 3 with a t- value of 0.1525. Endometrial thickness was found to be 7.5mm before treatment, which was reduced to 6.0mm after

treatment which is statistically significant with  $t = 3.408$  and  $p < 0.005$ .<sup>[29]</sup>

The concentrated extract of *Khadira* contains tannins (2-20%), catechin (25-33%), catechu (20-50%); flavonoids including quercetin, quercitrin, fisetin, gums, resins, pigments. The heartwood contains a hepatoprotective chemical composition called cyanidanol. The astringent (in urinary and vaginal discharge), hemostatic and antibacterial properties of catechu results from its high tannin content. *Koshamra* bark contains 9.4% tannin, acts as astringent (*Raktastambhaka*) used in treating *Pradara*. *Madayantika* leaves contains flavonoids, luteolin, beta-sitosterol-3-O-glucoside; all parts contain tannins. Leaves are astringent, anti-haemorrhagic, antispasmodic, oxytocic, antifertility, antifungal, antibacterial.<sup>[30]</sup>

Extracts of *Yashtimadhu* (*Glycyrrhiza Glabra*) roots is a natural occurring angiogenic inhibitors and antitumor activity. The results suggest that the extract from the roots of *G. glabra* may be a possible additional source for cancer therapy. Anti-proliferative effect of licochalcone A (a flavonoid found in licorice root) on vascular smooth muscle cells, anti-microbial activity and its reported ability to inhibit cancer cell proliferation.<sup>[31]</sup>

Randomly selected 60 patients were further divided into two groups viz. Group A (Trial) and Group B (Control). Group A patients were treated with 'Yashtimadhu Sita Choorna (5gms) with Tandulodaka' while Group B patients were treated with 'Ashoka Twak choorna' (5gms) with Tandulodaka on empty stomach. Both *Yashtimadhu -Sita choorna* with *Tandulodaka* and *Ashoka twak choorna* were significantly effective to reduce *Rajasrava pramana*, *Rajasrava kala*, *Angamarda*, *Adho udara shula* & *Katishula* in *Asrigdara*. The Trial drug 'Yashtimadhu-Sita choorna with Tandulodaka' is *Raktastambhaka*, *Vata- Pittaghna*, *Rakta-Pittagna*, *Jivaniya* etc.<sup>[32]</sup>

*Kusha*, used for urinary calculi and other diseases of the bladder. Clums used in menorrhagia, dysentery, diarrhoea and in skin diseases. Use of the rootstock in dysuria, vaginal discharges and erysipelas.<sup>[33]</sup>

The leaf of *Lajjalu* is astringent, alterative, antiseptic, styptic, blood purifier. Used for *Atisara*, *Raktapitta*, *Yonirogas*, piles, fistula, hydrocele and glandular swellings. Roots used in gravel and urinary complaints. Aqueous extracts of *Lajjalu* root powder in pilot studies on patients with dysfunction uterine bleeding gave promising results.<sup>[34]</sup>

*Lodhra*, contains 3- monoglucuronoside of 7-methyl leucopelagonidin, which makes it glycosidic in nature, exerts vaso-constrictive action and reduces the

permeability of cell membrane. Ethanolic extract from bark acts as an anti-fibrinolytic activity analgesic, anti-inflammatory and antioxidant. *Pushyanuga choorna* (5 gms) was given orally thrice a day with *Durva swarasa* & *Lodhrasava* (30 ml) in combination for 46 cases and the treatment was found to be highly significant ( $P < 0.001$ ). In a published in-vivo study, *Lodhra* has been shown to have an effect on regularizing menstrual cycle and in ovulation. Another report to test the hepato-protective effect of *Symplocos racemosa* Roxb, showed normalizing the conjugation and metabolism of female hormones, which results in maintaining a normal menstrual cycle. *Bhrama* occurs due to blood loss, the haemostatic effect (*Raktasrava nashaka*) of *Lodhra* might have effect in controlling *Bhrama*. The main component of *Lodhra* is large amount of loturine alkaloid and a-spinosterol. It is suggested that *Lodhra* might have influenced the endometrial prostaglandin apparatus, thereby acting effectively in the control of dysfunctional uterine bleeding.<sup>[35]</sup>

*Shunthi Churna* (2gms) and *Lodhra Churna* (3gms) mixed with *Sharkara* (5 gms.) i.e., total (10gms) thrice daily with cold water, after food was given for 45 days with *Sharkara*. Previous clinical research has shown that ginger, one of the forms of *Shunthi* can reduce symptoms of dysmenorrhea in some women when taken in a specific extract composition (*Zintoma*, *Goldaru*). The extract of ginger blocks the formation of inflammatory compounds such as thromboxane, leukotrine and prostaglandins, thus acts as an anti-inflammatory substance, this could have positive regulatory effect on dysmenorrhea. Due to anti-inflammatory effect, it is expected to pacify the pelvic congestion (high vascularity), thus the amount of menstrual blood loss gets reduced.<sup>[36]</sup>

A comparative study on *Bharangi -shunthi churna* (3gms) and *Pushyanuga churna* (3 gms) before food for 90 days, two times daily with *Tandulodaka* as *Anupana* in *Asrigdhara*. There was significant reduction in the symptoms but, statistical analysis has revealed that *Pushyanuga churna* has significant results as compared to *Bharangi- Shunthi*. *Shunthi* due to its *Ushna virya*, *Snigdha guna* and *Madhura vipaka*, acts as *Vataghna*. Due to its *Katu rasa*, *Ushna virya* and *Madhura vipaka*, there is no vitiation of *Pitta* further but improves *Agni* and does *Amapachana*. *Bharangi* due to its *Ushna virya*, acts as *Vataghna*, *Tikta rasa* is *Pitta shamaka*, *Rakta shuddhikara*, *Deepana* and *Pachana*. *Kashaya rasa pradhana dravya's* are *Rakta stambhaka* and *Pitta shamaka* specially indicated in diseases like *Raktapitta*, *Asrigdara* etc.<sup>[37]</sup>

*Narikela mula* and *Pushpa*, astringent- used in urinary and uterine disorder. Tender branches of *Padma* plant are crushed, soaked in water and taken

internally to avert abortion. Decoction of *Palasha* flowers is given in diarrhoea and haematuria and also to puerperal women which contains butrin, coreopsin, monospermoside and their derivatives etc. Bark is styptic (prescribed in bleeding piles, ulcers, haemorrhages, menstrual disorders), anthelmintic. *Punarnava*, an antifibrinolytic agent, 'Punarnavoside' has been found to stop intrauterine contraceptive device induced bleeding and also contains quinolizidine alkaloids. *Pashanabheda*, leaf and root are astringent used in treating menorrhagia. The rhizome contains an active principles bergenin (0.6%), gallic acid, glucose (5.6%), tannins (14.2-016.3%), mucilage and wax; a C- glycoside and beta -sitosterol. *Shala*, bark contains tannin 72% which is obtained after boiling in water (likewise catechu or *Khadira sara*). Tree trunk exudes oleogum resin (by incision) commonly known as 'Ral' (*Sal niryasa*) which is acting as *Raktasthambhana*. Indicated in *Pradara* and *Yonivyapad*.<sup>[38]</sup>

A comparative study was done to evaluate the efficacy *Patrangasava* and *Jeerakavaleha* with *Nisha lauha*. The study was carried out in 34 patients who were randomly divided into two groups. 17 patients in group I were given *Patrangasava* with *Nisha lauha* and 17 patients in group II were given *Jeerakavaleha* with *Nisha lauha*. Group I patients showed more improvement than group II but intergroup comparison was non-significant. Many *Dravya's* like *Patranga*, *Khadira*, *Vasa*, *Shalmali*, *Japa*, *Amrasthi*, *Dhataki*, *Vanshaja*, and *Lodhra* were *Raktashodhaka* and *Stambhaka* which caused *Shodhana* of *Dushita pitta* and *Rakta* and thus haemostasis. Due to *Shothahara*, *Sandhaniya* and *Vranaropaka karma* reduced uterine congestion, fragility of uterine capillaries and helped in their toning. The *Deepana*, *Pachana* properties corrected the *Agnimandyata* and formation of *Artava*. Due to *Rasayana*, *Balavardhana*, *Raktavardhaka*, *Pandughna Karma* of drugs improved general condition of body, replenished blood loss, and corrected anaemia.<sup>[39]</sup>

*Shalmali*, ethanolic extract of *Shalmali* has significant cytotoxicity effect on T HESCs (Human endometrial stromal cells) in a concentration range between the dose range 10 µg/ml to 200 µg/ml as compared with the negative control. The selected plant has significant cytotoxicity on T HESCs cells at 200µg concentration. The extract might have reduced the T HESC's cell count, which is very much near similar to the standard drug Tranexamic acid. The therapeutic effect of *Shalmali* is partially due to the existence of flavonoids, sesquiterpenoids, bombamalosides, phenolics, shamimicin, bombamalones, bombasin 4-o-glucoside, bombesin, and bombalin. It is described to contain phytoconstituents like naphthol,

polysaccharides, naphthoquinones, anthocyanins, lupeol, and shamimin, which plays a beneficial role in uterine bleeding problems.<sup>[40,41]</sup>

The inhibitory effect of Flowers of *Bombax ceiba* over cell growth in abnormal formation of layer of endometrium (Anti -proliferative effect). *Bombax malabaricum* stem's bark methanolic extract was found to exhibit a significant anti angiogenic activity on tube formation of human umbilical venous endothelial cells (HUVEC). Shedding of endometrial wall following each menstrual cycle require angiogenesis for endometrial repair and regeneration. Any disruption in above mentioned process leads to menorrhagia which is manifested as excessive bleeding. *Bombax*, thus by anti-angiogenic effect helps to check excessive uterine bleeding and *Mocha rasa* contains tannic and gallic acids acts as astringents and helps in restoring the damaged epithelial mucosal lining of the ulcerated mucosa. Fatty acid synthesis (FAS) had been found to be over expressive and hyperactive in most of proliferative diseases (like cancer). To test the inhibitory effort of flavonoid extracts of *Shalmalia malabarica* on FAS, cancer cell A549 was used as a cell model and was found effective. Thus, *Shalmali* shows inhibitory effect on fatty acid synthesis which in turn limits proliferation of effected tissues of endometrium in abnormal uterine bleeding disorder. <sup>[42]</sup>

*Nagakeshara* acts as haemostatic by constricting the blood capillaries and prevents the bleeding. Stamens contains bitter principles, two novel biflavanones as mesuaferrones -A and mesuaferrone, α and β- amyryl, β-sitosterol, bioflavonoids etc. The comparative study of *Indrayava churna* & *Nagakeshara churna* as haemostatic action in *Raktapradara* wsr to AUB. Group A- *Indrayava churna* (6gms B.D.) with *Sharkara* & *Jala*. Group B-*Nagakeshara churna* (6gms B.D.) with *Ghrutha*. *Nagakeshara* is anti-inflammatory, antiseptic, antifungal, analgesic, hepato-protective, antioxidant, antispasmodic in action. The Extract of *M. ferrea* has also been shown to possess estrogen and progesterone-like effects which were anticipated to be helpful in the correction of hormonal imbalance during menstrual disorders.<sup>[43]</sup>

The therapeutic use of *Sharapunkha moola churna* along with *Tandulodaka* was first mentioned in *Bhaishajya Ratnavali*. Research works proved that it is anti-inflammatory, analgesic, antioxidant, hepato-protective etc. *Sharapunkha moola churna* 5 gms twice a day with *Tandulodaka* as *Anupana* before meal for 7days in *Raktapradara* was proved to be helpful in treating the disease. <sup>[44]</sup>

*Japa*, contains tannins, flavonoids, steroids, alkaloids, saponins etc. Hibiscus flowers and leaves are used for the treating menorrhagia etc. *Jhandu*, flower



juice or paste of the flowers is fried in butter and given in patient suffering with *Pradara*. *Jambu beeja churna* is used for treating *Rakta pradara*.<sup>[45]</sup>

The Pharmacotherapeutic study of '*Dandotpaladi yoga*' (*Kalpita yoga*) in the management of '*Raktapradara*' with special reference to menorrhagia. Total 40 female patients who had the sign and symptoms of *Raktapradara* were randomly allocated into two groups: 20 patients in each group. Group-A received *Dandotpaladi yoga*, orally in powder form 3gms, twice daily for 7days per menstrual cycle for 3 consecutive months while Group-B received *Pushyanuga churna* 3gms orally with water twice daily for 7days per menstrual cycle for 3 consecutive months. There was significant difference found between the groups in days of bleeding (p- 0.0075) and amount of flow (p-0.0198) and group A showed better relief in these symptoms. *Tridax procumbens* and *Ficus racemosa* possess anti-inflammatory & decongestant functions. It helps to stop bleeding by constricting blood vessels & promoting clotting. Due to *Dahaprashmana property* of *Udumbara*, it helps to combat signs & symptoms caused by loss of blood like *Daha*, *Daurbalya*, *Bhrama*, *Murccha*, *Trishna*, etc. *Udumbhara* used for *Raktasrava*, *Pittaja Atisara*, *Bhagnasandhan*, *Vrana-shodhana* etc.<sup>[46]</sup>

A case study on *Raktapradara* was done with indigenous combination of six drugs namely *Erka*, *Nagakeshara*, *Udumbara*, *Mochrasa*, *Durva* and *Guduchi* were taken in the form of granules and are easily palatable. 12 grams in two divided doses with cows' milk for 2 cycles. Medicine will be given from first day of menses continuously for two cycles every 15 days up to 2 cycles and for next one cycle without medicine. There was significant relief in all the symptoms of *Raktapradara*.<sup>[47]</sup>

*Bola*, diterpene resin acids compounds exhibited obvious inhibitory effects on human umbilical vein endo epithelial cells proliferation and implied that the anti-proliferative activity on four human gynaecological cancer cell lines that are human ovarian cancer cell lines A2780, SK-OV-3, cervical carcinoma cell line SiHa, and endometrial carcinoma cell line Shikawa and associated with their potential anti-angiogenic properties.<sup>[48]</sup>

*Vasa*, the chief quinazoline alkaloid vasicine. It is uterotonic and fresh leaf juice used to treat menorrhagia. A case study was done on 40 years old woman who was suffering from prolonged heavy menstruation was managed with *Yoni vasti* (intravaginal instillation of medicine) with *Panchavalkala* (*Nyagrodha*, *Udumbhara*, *Aswattha*, *Parisha*, *Plaksha*) *kwatha* at the dose of 200ml and internal medication with *Vasa putapaka swarasa*, 50ml

with honey was given for 5days as an emergency management. Bleeding was effectively reduced owing to the properties and action of treatment modalities used.<sup>[49]</sup>

A study was conducted on clinically diagnosed 30 patients of *Asrigdara*, *Drakshadi Yoga* (*Draksha*, *Sita*, *Tiktakarohini* and *Mulethi*), dose 5gms twice daily with *Sheetala Jala* and *Kutajashtaka ghana* (*Kutaja*, *Shalmali*, *Patha*, *Samanga*, *Ativisha*, *Musta*, *Bilwa* and *Dhataki*), dose 500mgs twice daily with *Sheetala Jala*. Comparing the symptomatic improvement in both groups and the average percentage of relief was a little bit higher in *Kutajashtaka Ghana* i.e., 74.79 % followed by *Drakshadi Yoga* i.e., 74.21%.<sup>[50]</sup>

A clinical study was done to evaluate the efficacy of *Elaadi Kwatha* (*Ela*, *Samanga*, *Shaalmali*, *Haritaki* and *Magadhika*) in *Asrigdhara*, *Kashaya* was prepared and given with *Sharkara* and *Madhu*. Dose - 1 *Pala* (48ml), orally early morning on empty stomach, follow up for the oncoming next two cycles gave very good results without complications.<sup>[51]</sup>

*Apamarga Varti*<sup>[52]</sup>, the presence of tannins and glycosides in the plant is having astringent property. The flowers are grounded and mixed with sugars are given for menorrhagia

Some of the simple therapies used for treating *Shwetha Pradara* (*Leucorrhoea*) can be adopted for *Asrigdhara chikitsa*:<sup>[53]</sup>

1. *Alabu*- (*Cucurbita Lagenaria*) Bottle Gourd has to be cut into small pieces and finely dried and powdered. The Powder is to be added with equal quantity of sufficient sugar and honey and prepared 500mgs pill. 1-2 tabs /2-3 times a day and given with rice washed water.
2. *Ashoka twak churna* added to ½ glass of water and ½ glass of milk to prepare *Ksheera paka*. Add little quantity of sugar to taste. 1 cup (150ml) of the *Ksheera paka* consumed every day morning to relieve the *Pradara* even though associated for long time.
3. Leaves of *Vasa* is to be crushed to get the juice. The juice is mixed with sugar and 1 teaspoon full of honey consumed every day morning.
4. *Kadali*- 1 banana fruit with cow ghee of 2 teaspoonful twice daily/ take 2 grams each quantity of banana fruit and fruits of *Badari* (*Ziziphus jujuba*) *churna* add to equal quantity of jaggery and taken twice daily.
5. *Japapushpa*- 10-12 buds of *Japa pushpa* instantly crushed with milk and taken with the honey. Rice with milk is the food for the patient. The flower of *Japa* is to be fried with *Ghee* and consumed daily.
6. *Tanduleeyaka mulam* (*Amarantus tricolour*), it is rich in iron. Used as a green vegetable but the roots

are not used. Roots have good medicinal value. Roots are crushed and made into paste given with rice washed water. It can be used in another way also. Collect the roots and dry it, 1 teaspoon powder every day morning to be given with *Tandulodaka*.

7. *Kashaya of Nyagrodha with Lodhra* paste consumed every day morning or both can be powdered and consumed 1-2 grams twice daily.
8. Powder of *Amra bheej* (Mango seeds) in a small quantity of 1/2gm to 1 gm added to sufficient quantity of honey and consumed. Then have a glass full of *Tandulodaka* in the morning. The mango seed powder in small dose of 250mg- 500mg can be taken twice with honey for the good action and quick relief.

### CONCLUSION

*Raktasthambhana* plays an important role to prevent the excessive flow of menstrual blood and complications caused for the same. Excessive loss of blood during the menstrual cycles with irregularity will have an impact on her quality of life, if left untreated may be life threatening and at the end she may opt for hysterectomy. The *Dravya's* are mainly *Kashaya* and *Tikta rasa pradhana, Laghu- Ruksha Guna* with *Sheeta virya* helps in coagulation of blood (*Shonithasthapana*) but also helps in improving quality (*Raktashodhana*) and quantity of blood (*Raktavardhana*) without any side effects.

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