



A Critical Review of *Raktapradara* (DUB/Menorrhagia) and its Ayurvedic & Yogic Management

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Abstract

Raktapradara is one of the most leading gynecological problems in women associated with severe bleeding; it may or may not be accompanied by menstruation. According to Charaka, due to *Pradirana* (excessive excretion) of *Raja* (menstrual blood), it is named *Pradara* and since there is excessive excretion of *Asruk* (menstrual blood) hence it is known as *Raktapradara*. According to Ayurveda it is mainly due to vitiation of Vata and Pitta dosha. The Vata Dosha after getting vitiated increases the volume of Rakta (blood), takes this Rakta to Rajovaha Sira and increases the quantity of Rajah those flows through the Rajovaha Sira and causes *Raktapradara*. The disease *Asrugdara* also referred to as *Raktapradara* described in Ayurveda texts resembles Abnormal Uterine Bleeding (AUB). Prolonged and excessive bleeding may provoke of exacerbated anemia. *Asrigdar* eventually be life threatening if left untreated. As per modern science, menorrhagia is defined as cyclic regular bleeding which is excessive in amount (>80ml) or duration (>7 days) or both. There is a wide range of treatments in modern medicine which are non-hormonal, hormonal, surgical, antifibrinolytic agents. These have not proven their definitive efficacy in spite of high costs; their side effects have led to hormonal imbalances hence it is need of time to have an integrated and comprehensive therapeutic intervention. In Ayurveda to prevent recurrence & would overcome the modern medicine limitations. Many herbal & herbo-mineral preparations, Shodhan & Shaman Chikits as per Rughnabala are mentioned in Ayurveda to cure *Raktapradara* and related symptoms. It is observed that *Pathya- Apathya* with medication has a significant role in relieving symptoms of *Raktapradara*. Since *Raktapradara* is mainly due to Vata Pitta Dosha; Kashaya Rasa and Pittashamaka Chikitsa may be adopted. Ayurvedic formulations help in breaking down the pathogenesis of *Raktapradara* and its recurrence.

Keywords: *Asrugdara*, *Raktapradara*, Menorrhagia, Abnormal Uterine Bleeding, *Pathya-Apathya*.

Introduction

Introduction

Women have great importance because she creates a life. If she is healthy physically and mentally then only she can give birth to a healthy child. Normal regular menstrual flow with normal quantity and duration is the one of the part of her physical fitness. But because of some reasons if this get disturbed then she has to face problems regarding that. The word *Asrigdar* has described in *Brihatrayi* also in *Sharangadhara Samhita*, *Bhavaprakash*, *Yoga Ratnakara*, and in *Chakrapani*.

Rakta Pradara is one among the *Rakta Pradoshaja Vikara* ^[1] and it is characterized by *Artava Ati Pravrutti*, *Deerga Kala Pravrutti*, *Anruta Kala Pravrutti*, *Daha* in *Adho Vankshana Pradesha*, *Sroni*, *Prushta* and *Kukshi*, *Shoola* in *Garbhashaya Angamardha* etc. ^[2]. It is a *Pitta Pradhana Tridoshaja Vyadhi*. By considering the symptoms mentioned above, it resembles with the condition Menometrorrhagia in modern literature. It is an irregular inter menstrual bleeding caused

due to DUB, uterine polyp, cervical endometriosis, and CA cervix ^[3].

A woman's menstrual cycle is a crucial physiological manifestation that contributes to her unique motherhood. In females, menarche marks the beginning of menstruation, which concludes with menopause. The monthly hormonal fluctuations associated with the female menstrual cycle have an impact on a woman's emotional and physical well-being. The endometrium sheds during the menstrual cycle. A typical menstrual cycle lasts 7 to 9 days, occurs every 24 to 38 days, and results in blood loss of 5 to 80 millilitres ^[4].

Menorrhagia is associated with *Asrigdara* or *Raktapradara* in modern times. It is characterized by cyclic bleeding that occurs at regular intervals and is either excessive in volume (>80 ml), excessive in length (>7 days), or both.⁵ The incidence of excessive and irregular menstrual bleeding is rising daily in the modern world due to changing dietary and lifestyle habits. As a result, women are being forced to take time off work due to excessive bleeding, which has an impact

on their quality of life and not just their physical health but also their social, emotional, and psychological well-being. Women who are of reproductive age frequently struggle with this issue. An excessive amount of blood loss during menstruation affects a woman's physical, emotional, social, and psychological well-being. In India reported prevalence of AUB is around 17.9%.

According to estimates from the WHO, around 24% of women between the ages of 40 and 55 have menometrorrhagia. Menometrorrhagia is a form of abnormal menstrual flow that affects women of all ages and results in excessive menstrual blood loss. Heavy menstrual bleeding is caused by an imbalance between the hormone's progesterone and oestrogen, which leads to excessive endometrial formation and irregular endometrial shedding. It can also be brought on by pathologies in the uterus and ovaries, such as adenomyosis, polyps, and uterine fibroids. According to the explanation given above, *Raktapradara* is described as a *Rakta pradoshaja Vikara* involving *Raktavaha Srotas* and appears to be a sickness of *Rakta Dhatu* and *Pitta Dosha* and it can be treated like that of *Raktatisara*, *Raktapitta*, *Raktarsha* and *Garbha Srava* [6].

According to *Charaka Samhita*, *Raktapradara* can be managed on the lines of *Yonivyapad*, *Raktatisara*, *Raktapitta* and *Raktarsha* [7]. The management for *Raktapradara* can be divided into mainly 4 types, viz. *Nidana-Parivarjana*, *Dosha-Shodhana*, *Dosha-Shamana* and *Raktasthapana* (*Raktastambhaka*). The drugs and formulations used to control excessive blood loss are *Kashaya* and *Tikta Rasatmaka* i.e., having *Raktastambhaka* action. Some of the commonly used herbs are *Nagakeshara*, *Mocharasa*, *Laksha*, *Vasa*, *Ashoka*, *Lodhra*, *Doorva*, *Gairika*, *Pushyanuga-choorna*, *Ashokarishta*, *Pradarantaka Loha*, etc.

Aims and Objectives

Review on *Raktapradara* (menorrhagia) and its management

Materials and Methods

Review of literature from *Brihatrayee* and other Ayurveda & Modern literatures related to *Raktapradara*, DUB and from e-sources were compiled.

Conceptual Study

Definition of *Asrigdara* according to Ayurveda:

The volume increase in blood is termed as *Asrigdara* and excessive flow of blood is termed as *Pradara*.⁸ Excessive flow and prolonged duration of menses during menstrual cycle or inter-menstrual bleeding known as *Asrigdara*.⁹ All type of *Asrigdara* associated symptoms with body ache and pain [10] in lower portion of groin, pelvic region, back renal angle [11].

According to modern *Asrigdara* is cyclic bleeding at normal intervals, the bleeding is either excessive in amount i.e. >80ml or duration i.e. > 7 days or both.

Classification

There are four types of *Asrigdara* i.e. *Vataja*, *Pittaja*, *Kaphaja* and *Sannipataja Asrigdara* [12]. Acharya Sushruta has mentioned 'all types of *Asrigdara*' along with general clinical features but has not described any classification. Most of Acharyas have mentioned four types of *Asrigdara* in their texts.

- ***Vataja Asrigdara***: Menstrual blood is frothy, thin, blackish, *kinshukodaksankasha*, *Pishitodaksankabha*, *lohagandhi*, expelled with or without pain, discharge

repeatedly in small amounts. Severe pain in sacral groin, chest region, flanks, back and pelvic, *vatika* type of pain.

- ***Pittaja Asrigdara***: Menstrual blood is blue, yellow colour, hot, expelled profusely and repeatedly with pain. *Aamgandhi*, *Katurasa*, does not clot, *Gruhadhuma*, *Rasanjana sadrasa*, *Katurasa* spreads evenly when dropped in water.
- ***Kaphaja Asrigdara***: Menstrual blood is Pale, Heavy, Cold, Mucoid, Thick and discharged with Mild pain. Relatively more bleeding, *Gairikodaka*, excreted slowly, clots like *mamsapeshi*, *vasangandhi*, *kovidarpushpa-sadrashya*, *lavanrasa* associated with vomiting, loss of appetite nausea *kasa*, *swasa*.
- ***Sannipataja Asrigdara***: Menstrual blood is *Kanjikabham*, blue, yellow, foul smell, the flow resembles ghee, *vasa* and *Majja* associated with thirst, burning sensation, anemia, weakness and all combine symptoms of *Tridosha*.

Samanya Lakshan

The Phase of *Purvarupa* of the *Raktapradara* is not mentioned in the texts. (Probably there may not be any premonitory Symptoms).

- *Charaka* says that excessive bleeding per vaginal during menstruation is the only symptom of *Asrigdara* [13].
- According to *Sushruta Samhita*, there are body ache and pain symptoms present in all types of *Asrigdara* with excessive vaginal bleeding [14].
- *Dalhana* says in his commentary on *Sushruta Samhita* that burning sensation and pain in lower portion of groin, pelvic region, back, renal region and flanks and severe pain in uterus as symptoms present in *Asrigdara* [15].
- *Vridha Vagbhata* has described excessive bleeding during menstrual or intermenstrual period as symptom of *Asrigdara*.
- *Bhava Prakash*, *Madhava Nidana*, and *Yoga Ratnakar* have described the same as in *Sushruta Samhita* i.e. body ache and pain in *Asrigdara*.

Nidan

- ***Aharaja Nidana***: *Amla*, *Lavan*, *Katu*, *Guru*, *Snigdha*, *Ushna*, *Sara*, *Sukshma*, *Tikshna*, *Katu*, *Dhatvagnimandya*, *strotodushitikara*, *Rakta atipravrutti*, *Raktavikaras* *Daurbalyata*, *Vidaha*, *Abhishyand*, *PanduGramya* and *Oudaka*, *Mamsa*, *Dadhi*, *Payasa*, *Sukta*, *Mastu*, *Sura*, *Krushra*, *Virudhaahaa*, *Madhya*, *Adhyasan*, *Ajirna* [16, 17, 18]
- ***Viharaja Nidan***: *Atimaitihun*, *Ati Yana*, *Atiadhva*, *Atikarshan*, *Bharvahan*, *Garbhaprapata*, *Diwa swapna* *Manasika-Shoka*, *Krodha*, *Bhaya*.
- ***AnyaNidan***: *Abhigataja*, *Vatapurita Kshseeranadi*

Samprapti Ghataka:

- *Dosha - Vata-Pitta Pradhana*,
- *Dushya - Rakta (Pradhana) and Artava, Rasa*
- *Agni - Jathragni mandya*
- *Adhishthana - Garbhashaya, Artavavahi Strotasa*
- *Strotasa - Rakta Vahi, Artavavahi, Rasavahi*
- *Sroto Dusti Prakara - Atipravritti*
- *Roga Marga - Aabhyantara*
 - *Raja Atipravrutti* (Excessive bleeding)
 - *Deergha Kala Nibandh* (Prolonged menstruation)
 - Inter-menstrual bleeding

- Along with or without *Angamarda* (body ache) and *Vedana* (pain)

Treatment

General Treatment

General treatment consists of external and internal both.

- Use of treatment that is described for *Yonivyapada Raktayoni*, *Raktaaatisara*, *Rraktapitta*, *Raktarsh*, *guhya rog* should be used.
- Acharya told Shodhan and shaman chikitsa for *Raktapradara*. But if the patient weak to don't take give shodhan chikitsa. Then only shaman chikitsa is given.
- According to *Charaka Samhita*, *Raktapradara* has to be treated on the lines of *Yonivyapad*, *Raktatisara*, *Raktapitta* and *Raktarsha*.
- Acharya Dalhana has clearly mentioned that *Raktapradara* should be managed on the similar lines as that of *Adhoga Raktapitta*.
- According to Acharya Kashyapa, all menstrual disorders should get treated by *Virechana* (purgation).

- According to Acharya Chakrapani, the Management of *Raktapradara* runs parallel to the management of *Raktapitta* treatment.

External Use

- Root of *Vyaghranakhi* tied in waist of patient [19].
- Inhalation and massage of *Shatapushpa* oil [20]
- Use of *uttarbasti* i.e. *Chandanadi Niruhabasti*, *Rasnadi Niruhabasti*, *Rasnadi Asthapanabasti* and *Mustadi Yapanabasti* are used in *Asrigdara*.

Internal Use

- Stambhana Dravyas* – as *kashay ras* dominant drug has *stambhan* property it reduces excessive blood flow
- Pitta Shamaka* – *Vitiated pitta* get balanced by *pittashamak dravyas*.
- Vatanulomak* – *Vata dosha* balances by *vata anuloman* property drugs.
- RaktaPrasadaka Dravyas* – *Rakta prasadan* and *rakta vardhan* occurs.

Table 1: Drugs for Internal Use

Kashaya	Kalka And Churna	Ksheer Prayoga	Avaleha	Ghrita	Arishta	Vati Kalpana
Pradarhara Kashaya [21] Asrgdarahara kashaya [22] Vasadi Kashaya [23]	Kalka of <i>Tanduliyaka Mula</i> with <i>Madhu</i> or <i>Rasanjana</i> with <i>Madhu</i> and <i>rice water</i> [24]. <i>Pushyanug Churna</i> : with <i>honey</i> followed by <i>rice water</i> [25].	<i>Ashoka Ksheer Paka</i> : Properly prepared cooled milk with decoction of <i>Ashoka Valkala</i> [26].	<i>Madhukadhyavleh</i> [27] <i>Jirakavaleha</i> [28] <i>Khanda</i> <i>Kushmanda</i> <i>Avaleha</i> [29]	<i>Shit kalyanak ghrita</i> [30] <i>Mahatikta ghrita</i> [31] <i>Shatavari ghrita</i> [32] <i>Ashoka ghrita</i> [33]	<i>Ashoakarishtha</i> [35] <i>Patrangasav</i>	<i>Gokshuradi Guggulu</i> [34]

Yoga

Integrated Approach of Yoga Therapy is also useful

- Loosening* (*Shithalikaran vyayama*) 10 min *Suryanamaskara* (sun salutations)
- Asnas*: *Badhakonasana*, *Yoga mudra*, *Vakrasana*, *Sarvangasana*, *Matsyasana*, *Shavasana*, *Ardhakati Chakrasana*, *Ushtrasana*, *Bhujangasana*, *Viparita karani*.
- Pranayama*: *Nadi-Shodhan Pranayama* or *Anulom-Vilom Pranayama*, *Sheetali* and *Sheetkari*, *Chandrabhedi* or *Surya bhedi* acc. to need.
- Kapalabhati*, *Bhramari*, *Meditation Om* meditation

There was evidence of significant reducing of the anxiety score in women suffering from PCOS [36]. *Nidhi et al.* also shoeing his study enhanced hormonal profile in women suffering from PCOS following a 12- week integrated yoga intervention [37].

The earlier studies indicated beneficial effects of yoga practice on sleep in patients with DUB [38]. We postulate that yoga may influence the CRH and corticosteroid levels through reduction of perceived stress and anxiety. These hormones are known to inhibit the GnRH secretion and thereby responsible for the ovarian dysfunction in patients suffering from DUB [39].

Therefore, IAYT might be play an important role in reducing the stress and anxiety and thereby balancing the H-P-O and H-P-A axes. The endocrinal profile could be used as a variable in future studies to understand the underlying mechanisms of beneficial effects of yoga in DUB.

Aahar

Madhur, *kashay rasatmak aahar*, *laghu*, *sheet*, *pitta* and *vat shamak aahar*.

Pathya ahara vihara follow is the way of maintaining healthy lifestyle. This concept of Ayurveda science described for making a person healthy mentally and physically both and for his wellbeing. By following *Pathya aahara vihara* hance life span, lustre, enthusiasm, memory, *Ojas*, *Agni* [40]. *Pathya ahara* provide *Ojas* (immunity and strength) to our body so than future disease stay away from us and give s strength to body so one can do his daily tasks enthusiastically.

Discussion

Shudha artava is one of the most important factors for the healthy progeny. *Asrigdara* is Sanskrit word which means excessive bleeding from uterus during menses or intermenstrual. It can be correlate with DUB. As the disease characterized by excessive flow of blood out of the body and blood (*rakta*) is known to be as vital (*Jeeva*) its *Chikitsa* becomes very important. Different type of *Samprapti*, *Dosanubandha* and *Anubandhita Lakshana* are seen in every patient of *Asrigdara*. So the treatment should be depends on the basis of *Doshanubandha* and *Samprapti Vighatana* that is *Avasthika Chikitsa*.

The drugs and formulations used in treatment of *Asrigdara* are mainly rich in *Kashaya rasa* and *Tikta rasa*. Because both *rasas* have the property of *Stambhana guna* and thus due to astringent property, bleeding will be stopped. Another aim of treatment should be rising of hemoglobin level in body and for that, *Raktasthapana* drugs should be used.

Vata pradhan Raktapradara treated with *Madhur Amla Lavana Snigdha Guru Ushna Anuloman Aushadhi* i.e. *Tila taila*, *Madhu Lavan Ela Nagar Mamsa rasa* etc. and *Basti chikitsa*. *Pitta pradhan Raktapradara* treated with *Madhur Tikta Kashaya Snigdha Shita Stambhan Dipan Pachan Aushadhi* i.e. *Ghrita Madhuka Lodhra Musta Triphala Nimba Guduchi* etc. and *Virechan chikitsa*. *Kapha pradhan*

Raktapradara treated first with *Aama pachana chikitsa* and then treated with *Tikta Katu Kashaya Laghu Stamban Aushadhi* i.e. *Madhu Nimba Lodhra Triphala* and *Vaman chikitsa*. *Virechan* is appropriate *Samanya Chikitsa* for *Raktapradara* as it is mainly use for the *Pitta dushti* and as *pitta* and *rakta* have *ashraya ashrayi bhava virechan* is also beneficial for *Rakta dushti*.

Conclusion

Asrigdara is a common *Artavvikara*, characterized by excessive uterine bleeding with complications. Modern treatment with analgesics and hormonal therapy has limitations, side effects and which also leads to the recurrence of disease. Ayurveda have number of herbal and polyherbal compound drugs, Yoga therapy and Pathya Ahara are useful to manage *Asrigdara* and related symptoms and complications.

References

1. Vd. Harischandra singh Kushwaha, Charaka Samhita Vimana Sthana, Ayushi Hindi commentary 28th Chapter verses 11, Varanasi: Choukambha orientalia; first edition 2005, p.475.
2. Prof P.V Tiwari, Ayurvediya Prasooti Tantra evam Stree Roga 2nd part Chapter 2nd Artava vyapad, Chaukambha orientalia, second edition reprinted on 2005, Varanasi –, p. 180
3. D.C Datta, Text book of gynaecology edited by Hiralal Konar, chapter no 14th, abnormal uterine bleeding, New Delhi, New Central Book agency 5th edition revised reprint 2009, p.182.
4. Davis E, Sparzak PB. Abnormal Uterine Bleeding. [Updated 2022 Sep 9]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK532913/>
5. DC Dutta, Text Book Of Gynecology, 6th Edition, Jaypee Brothers Medical Publisher (P) Limited, Chapter 14, Page No.185
6. Prof P.V Tiwari, Ayurvediya Prasooti Tantra evam Stree Roga 2nd part Chapter 2nd Artava vyapad, Chaukambha orientalia, second edition reprinted on 2005, Varanasi, p.196.
7. Agnivesha, Charaka Samhita with Ayurveda Dipika commentary of Chakrapanidatta; Edited by Vaidya Jadavji Trikamji Acharya; Chaukambha Orientalia; Varanasi; Reprint 2007; Chikitsa Sthana 30/228.
8. Nhp.Gov.In
9. Patil Vasant, M.N. Rajendra, Susruta Samhita, Volume 2, Chaukhamba Publications, New Delhi, Su, Sha. 2/18, 19, Page No.128
10. Vijayarakshita, Srikanthadatta, First Edition 2014, Chaukhamba Surbharti Prakashan, Varanasi, Ma.Ni.61/2 Pg.999
11. Patil Vasant, M.N. Rajendra, Susruta Samhita, Volume 3, Chaukhamba Publications, New Delhi Su.S.U 45/44. Page No.378
12. Charaka, Charak Samhita (Chikitsa sthana), Hindi Translation by Pandit Kashinath Nath Shastri and Dr Gorakh Nath Chaturvedi, Reprint, Varanasi, Chaukhambha Sanskrit Series, 1997; 778.
13. Acharya Charaka, Charak Samhita (Chikitsa sthana), Hindi Translation by Pandit Kashinath Nath Shastri and Dr Gorakh Nath Chaturvedi, Reprint, Varanasi, Chaukhambha Sanskrit Series, 1997; 777.
14. Acharya Sushruta, Sushruta Samhita (Sharira Shana), Ayurveda Tatva Sandipika, Hindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Series, 2003; 12.
15. Acharya Sushruta, Sushruta Samhita (Uttara Tantra), Ayurveda Tatva Sandipika, Hindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Series, 1998; 310.
16. Vijayarakshita, Srikanthadatta, First Edition 2014, Chaukhamba Surbharti Prakashan, Varanasi, Ma.Ni.61/2 Pg.999
17. Tripathi Bhrahmanand, Charak Samhita Volume 2, Chaukhamba Surbharti Prakashan, Varanasi Cha.Chi.30/205 Pg.1044
18. Vaidhya Jayamini Pandey Harit Samhita, Chaukhamba Visvabharti Pra.8/10.
19. Vidhyasagar Pandit Parshuram Shastri, Sharangdhar Samhita, Edition 2006, Sha.Sa. Pratham Khanda, Chaukhamba Surbharti Prakashan, Varanasi, 7/176 Pg.126
20. Tripathi Bhrahmanand, Charak Samhita Volume 2, Chaukhamba Surbharti Prakashan, Varanasi Cha.Chi.30/211 Pg.1045.
21. Patil Vasant, M.N. Rajendra, Susruta Samhita, Volume 2, Chaukhamba Publications, New Delhi, Su.Su.14/21, Pg.178
22. Mitra Jyotir, Astang Sangraha, Chowkhamba Sanskrit Series Office Varanasi, Astang Sangrah Sutrasthan 36/16 Pg.24
23. Tripathi Bhrahmanand, Charak Samhita Volume 2, Chaukhamba Surbharti Prakashan, Varanasi Cha.Chi.30/214 Pg.1045
24. Patil Vasant, M.N. Rajendra, Susruta Samhita, Volume 2, Chaukhamba Publications, Neh Delhi, Su.Sha.2/19, 20, Pg.128
25. Pandit Shri Bhrahma Sankar Mishra Bhavaprakash Volume 2 Chaukhamba Sanskrit Bhavan 68/8 Pg.761
26. Vaidya Jaymini Pandey Harita Samhita, Chaukhamba Visvabharti Dwi 4/37 Page No.377 Pandit Shri Bhrahma Sankar Mishra Bhavaprakash Volume 2 Chaukhamba Sanskrit Bhavan 68/12 Pg.762
27. Ramnias Sharma. Sahastrayoga, Chaukhamba Sanksrut Pratishthan Kashay Prakaran Pg.7
28. Ramnias Sharma. Sahastrayoga, Chaukhamba Sanksrut Pratishthan Kashay Prakaran 23 Page No.10
29. Ramnias Sharma. Sahastrayoga, Chaukhamba Sanksrut Pratishthan Kashay Prakaran 54 Page No.29
30. Tripathi Bhrahmanand, Charak Samhita Volume 2, Chaukhamba Surbharti Prakashan, Varanasi Cha.Chi.30/97 Page No.1026
31. Angadi Ravindra, Bhaisajya Ratnavali, Volume 2 Chaukhamba Surbharati Prakashan 66/25-31 Page No.1616
32. Ramnias Sharma. Sahastrayoga, Chaukhamba Sanksrut Pratishthan
33. Pandit Shri Bhrahma Sankar Mishra Bhavaprakash Volume 2 Chaukhamba Sanskrit Bhavan 68/14page No.762
34. Pandit Shri Bhrahma Sankar Mishra Bhavaprakash Volume 2 Chaukhamba Sanskrit Bhavan 68/17 page No.762
35. Tripathi Indradeva, Yogaratnakar, Chaukhamba Krushnadas Akadami Varanasi
36. Pandit Shri Bhrahma Sankar Mishra Bhavaprakash Volume 2 Chaukhamba Sanskrit Bhavan 949-57 Page No.118.
37. Nidhi R, Padmalatha V, Nagarathna R, Amritanshu R. Effect of holistic yoga program on anxiety symptoms in

- adolescent girls with polycystic ovarian syndrome: A randomized control trial. *Int J Yoga*. 2012; 5:112-7
38. Nidhi R, Padmalatha V, Nagarathna R, Amritanshu R. Effects of a holistic yoga program on endocrine parameters in adolescents with polycystic ovarian syndrome: A randomized controlled trial. *J Altern Complement Med*. 2013; 19:153-60.
39. Wang F, Eun-Kyoung Lee O, Feng F, Vitiello MV, Wang W, Benson H, *et al*. The effect of meditative movement on sleep quality: A systematic review. *Sleep Med Rev* 2016; 30:43-40. Farrell E. Dysfunctional uterine bleeding. *Aust Fam Physician*. 2004; 33:906-8.
40. Sushruta.Chi24/68. In: YT Acharya (eds.) *Sushruta Samhita*. Varanasi: Chaukhambha Publications; 2006.