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Research Article

EFFECTIVE MANAGEMENT OF ARTAVA KSHAYA BY AYURVEDA TREATMENT: A CASE REPORT

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ABSTRACT

Artava Kshaya is the condition in which menstruation does not occur at the appropriate time, which can be correlated with oligomenorrhea with scanty menstrual blood flow. The principle of treatment is focused on Agni Deepana, Sroto Shodhan, Artava Pravartana and Vata Kapha Shaman. Hence in the current case report treatment scenario was selected for the management and follow-up was done every 15 days. The present case study was carried out by following good clinical practice guidelines, studies on irregular menstruation, and Ayurveda textual references. Written informed consent of the patient was taken before starting the treatment. A detailed history of the patient with all necessary clinical and physical examination and laboratory investigations were carried out. The patient had got her menstruation regularly with normal duration while taking medicine. Also, the amount of flow was improved, and the intensity of pain was reduced effectively from moderate to mild. Even after the cessation of medicine, she got her menstruation in 30 days with a normal amount of flow. Hence, the most common gynecological problem in adolescent girls is mostly amenorrhea or menorrhagia due to frequent ovulation that can be triggered by the presence of oligomenorrhoea which is a physiological condition after menarche, and which usually happens after a period of a regular cycle. Therefore, Artava Kshaya can be correlated with oligomenorrhoea or hypomenorrhoea. Artava Kshaya is explained by Acharya Sushruta in Sushrut Samhita Sutra sthan chapter 15 with the characteristics of Yathochit Akal Darshan with Alpartava and sometimes featured with Yoni Vedana.

Keywords: Irregular menstruation, Artava Kshaya, oligomenorrhea, hypomenorrhea

INTRODUCTION

Menstruation is an essential physiological function of women during their reproductive age and is an indicator of healthy and normal reproductive organs. According to classics, normal menstruation is when the intermenstrual bleeding cycle is 1 month, duration of bleeding is 5-7 days (which differs according to different opinions of acharyas) with no pain or burning sensation.

Increased physical and emotional stress in the routine lifestyle of women alters the physiology of the Hypothalamic-Pituitary-Ovarian axis which leads to gynecological disorders.

According to Ayurveda, the majority of the menstrual disorders have been described under Yoni Vyapada, Artava Vyapad which includes Asta Artava Dushti, Asrigdara, Artava Kshaya and Nastartava. Majorly, Artava Kshaya is described as a symptom of many gynecological disorders and not as a disease.

Artava Kshaya Lakshana has been described by Acharya Sushruta in the chapter “Dosha Dhatu Mala Kshaya Vriddhi Vignanam” along with the clinical features of Kshayas of all Doshas, Dhatus, Upadhatus and Malas, etc. which appears to be the description of deficiency of Artava which is a Upadhatu. In other words, it is the description of estrogen deficiency.

Chakrapani described artava as responsible for filling the reproductive system.¹

In modern science, Lakshana of Artava Kshaya can be correlated with estrogen deficiency which can lead to the following Lakshanas:

- Yathochitakala adarshanam as delayed menses or Oligomenorrhoea.
- Alpartva as Hypomenorrhoea
- Yoni Vedana as Dysmenorrhoea.²

Pain in the vagina, a clinical feature sometimes noted in estrogen deficiency; however, is never present in cases with hypomenorrhoea due to general debility or loss of body Dhatus. Ksheena Artava is also characterized by oligomenorrhoea which can be due to deficiency of either rasa and Rakta, etc. Dhatus or estrogen or both. However, Artava Kshaya is due to estrogen deficiency. The salient features of Vataja artava dushti, Ksheena artava and Artava Kshaya are characterized by oligomenorrhoea.³

Artava Kshaya is caused due to the involvement of Vata and Kapha Dosha which leads to Marga Avrodha of Artava Vaha Strotas which are also explained as the cause of Vandhyatva. Thus, Artava Kshaya can be correlated with oligomenorrhoea or hypomenorrhoea. In this condition, menstruation is delayed, menstrual blood is scanty and associated with pain during menstruation.⁴

So, when we compare the disease Artava Kshaya with modern medical science Oligomenorrhoea and Hypomenorrhoea can be correlated based on their signs and symptoms.

Oligomenorrhoea is defined as menstrual bleeding occurring more than 35 days apart and which remains constant at that frequency.⁵

Hypomenorrhoea is defined as when the menstrual bleeding is unduly scanty and lasts for less than 2 days.⁶

The incidence of oligomenorrhoea in PCOS is 87% which is the highest among other menstrual irregularities in PCOS. Many causes have been described in modern science for Oligomenorrhoea and hypomenorrhoea including hormonal factors, ill health of the patient, poor nutrition, may be constitutional in origin, and may be related to the uterine or endometrial origin.⁷

Treatment modalities in modern science include reassurance, improving the general health of the patient, hormonal therapy and various other modalities based on the underlying aetiology for treating this condition.⁸

CASE REPORT

An 18-year-old nulliparous moderately built unmarried female presents to the OPD on 19/07/2021 with chief complaints of irregular menstrual cycles with an increased interval between two menstrual cycles, mild abdominal pain, joint pain, and body pain in the last 2 years. She has irregular menstrual cycles with an interval of 2 months between cycles lasting for 3 days. Requires 3-4 pads/day on day 1, 3 pads/day on day 2, and 3 pads on day 3. She has mucous discharge during, and after menses. Her menarche was in 2018 at 15 years of age. Her last menstrual period was on 07/07/2021, and her previous LMP was on 07/05/2021.

USG done of the pelvis on 27/10/2020 revealed normal sized uterus with bilateral polycystic ovaries. Few cysts each measuring 3/3 mm observed in the echofield of both ovaries. Endometrium measured 6 mm with no evidence of focal lesion. Myometrial echotexture is normal.

Treatment

DATE	LMP	PRESENT M/H	C/O	O/E	RX
1 st visit: 19/07/2021	07/07/2021	Days: 3 days Interval: 60 days Regularity: Irregular Pain: Present Clots: Absent Foul smell: Absent Flow: Moderate Discharge: White moderate mucous discharge present. Pad history: Day 1: 3-4 pads/day Day 2: 3 pads Day 3: 3 pads	Delayed menstruation with abdominal cramps, joint pain, body pain, and body heaviness. Has moderate mucous discharge present after menses.	Bowel movement: 1 time/day. Micturition: 4-5 times/day Appetite: Normal. Sleep: Reduced sleep. Timings: 12:00 am to 04:00 am. Has disturbed sleep.	1. Syp. Dashmoolarishta 20 ml with Kumari asava 40 ml with 60 ml warm water BD for 15 days. 2. Tab. Rajapravartini Vati 2-0-2 for 15 days. 3. Hingavashtak 2-0-2 for 15 days.
04/08/2021			The pain was completely reduced. No body heaviness.	Bowel movement: 1 time/day. Micturition: 4-5 times/day Appetite: Normal. Sleep: Disturbed sleep. Timings: 12:00 am to 04:00 am. Feels mildly better on medications.	1., 2., 3. as prescribed on 19/07/2021 4. Rajapravartini Vati 1-0-1 for 15 days.

Her weight is 50 kg. Her height is 156 cm with a BMI of 20.54 kg/m². General, as well as Systemic examination, was found to be normal. A blood investigation was done on 29/06/2021. Fasting blood glucose was 90 mg/dl, and post-prandial blood glucose level is 100 mg/dl. HbA1c done was 4.9%. Insulin fasting was 18.5 IU/dL, LDL cholesterol direct was 117 mg/dL, and CRP-high sensitivity was 2.1 mg/dl.

A thyroid level assessment done on 06/02/2022 revealed free T3 as 2.91 pg/mL, free T4 was 1.25 mg/mL and, TSH was 1.610 mIU/mL. Baseline hormone assessment shows LH as 5.52 mIU/mL, FSH as 4.30 mIU/mL and Prolactin as 20.20 ng/mL.

Ashthavidha Pareeksha	Dashavidha Pareeksha Bhava
Nadi: 76/min Mala: Nirama, once a day Mutra: 4-5 times/ day and 1 times/night Jivha: Alipta (uncoated) Sparsha: Anushna sheet Druka: Avisheha Akruti: Madhyama	Prakruti: Vata-pittaja Vikruti: Vishama samveta Sara: Rasa Samhana: Avara Pramana: Madhyama Satmya: Avara Ahara Shakti: Abhyavaran Shakti: Madhyama Jarana Shakti: Madhyama Vyayama Shakti: Madhyama Vaya: Madhyama

Diagnosis (Ayurveda): Artava Kshaya.

Diagnosis (Modern science): Oligomenorrhoea and Hypomenorrhoea.

HPI with treatment

On the first visit on 19/07/2021, the patient has increased the interval between two menstrual cycles in the past 2 years. Also has mild pain, joint pain and body pain with no body heaviness. Has mucous discharge during and after menses. States that she has normal bowel movements, urination, and appetite. She states that she eats a lot of spicy food in her regular diet. Has curd every day in the evening. She has Dosa and idly every day in her dinner. She also eats non-vegetarian food at least twice a week. She also has reduced and disturbed sleep from 10:00 pm to 04:00 am. Does yoga every day for 1 hour.

19/08/2021	09/08/2021	Days: 4 days Interval: 28 days Pain: Absent Clots: Absent Foul smell: Absent Flow: Moderate Pad history: Day 1: 4 pads/day Day 2: 3 pads Day 3,4: 2 pads	No pain. No body heaviness.	Bowel movement: 1 time/day. Micturition: 4-5 times/day Appetite: Normal. Sleep: Normal. Has no sleep issues.	1. Dashmoolarishta 40 ml + Kumari asava 60 ml with lukewarm water BD. 2. Rajapravartini Vati 1-0-1 for 15 days. 3. Tab. Hingavashtak churna 2-0-2 for 15 days.
07/09/2021			Hair fall ++ Stress + States that she has her exams coming up.	Bowel movement: 1 time/day. Micturition: 4-5 times/day Appetite: Normal. Sleep: Disturbed sleep from 10:00 pm to 06:00 am.	1., and 3. same as prescribed on 19/08/2021
21/09/2021			Has 5-15 minutes of pulling type of pain in the lower abdomen. Hair loss present. Fatigue.	Bowel movement: 1 in 2 days. Is constipated. Micturition: 4-5 times/day Appetite: Normal. Sleep: Mild disturbed sleep for 4 hours.	1. Shata Pushpa Churna 5 gm BD with honey 2. Ushira asava 20 ml + Kumari asava 20 ml + Warm water 40 ml BD 3. Vayu Gulika 2-0-2 4. Avipatikara Churna 5 gm BD with warm water
08/10/2021	24/09/2021	Days: 4 days Interval: 42 days Pain: Painless Clots: Absent Foul smell: Absent Flow: Moderate Pad history: Day 1-4: 4 pads/day	Hair fall: Reduced. Has stress due to exams.	Bowels: Clear Micturition: 4-5 times/day Appetite: Normal. Sleep: Disturbed sleep due to exams.	1. Sukumara Kashaya 20 ml + lukewarm water 40 ml BD on empty stomach for 1 month 2. Tab. Hingvashtak churna 1-0-1 just before food for 1 month
29/11/2021	15/11/2021	Days: 4 days Interval: 52 days Pain: Painless Clots: Seen on the 2 nd day of menstruation Foul smell: Absent Flow: Moderate Pad history: Day 1: 1 pad/day Day 2: 3 pads/day Day 3: 3 pads DAY 4: 1 pad	Stress reduced. Hair fall: Reduced. Has completed her exams.	Weight: 50 kg. Bowels: 1 time/day Micturition: 4-5 times/day Appetite: Normal. Sleep: Normal.	1. Same as prescribed on 08/10/2021 2. Kutaja Triphala ½ tsf BD on empty stomach for 1 month 3. Dhanwantaram Gulika 2-0-2 for 1 month.
29/12/2021			Has fatigue, and back pain. States constipation after eating non-vegetarian food. Stress: Present. Hairfall: Reduced.	Weight: 51 kg. Bowels: Once in 2 days Micturition: 4-5 times/day Appetite: Normal. Sleep: 11 pm – 5.30 am.	1. Chitraka Granthyadhi Kashaya 20ml BD with 40 ml lukewarm water on an empty stomach 2. Vayu Gulika 1-0-1 after food
11/01/2022				Weight: 53 kg Bowels: Normal Micturition: 4-5 times/day Appetite: Normal. Sleep: Normal	1., 2. Same as prescribed on 29/12/2021 2. Rajapravartini Vati 2-0-2 A/F 3. Kutaja triphala ½ tsf BD ES
28/01/2022				Normal Micturition: Normal. Appetite: Normal. Sleep: Normal	1. Dashmoolarishta 20 ml + Kumari asava 20 ml + Lukewarm water 40 ml BD 2. Kutaja triphala ½ tsf BD on ES
14/02/2022	05/02/2022	Days: 4 days Interval: 82 days Pain: Painless Clots: Seen on the 2 nd day of menstruation Foul smell: Absent Flow: Moderate Pad history: Day 1: 4 pads/day Day 2: 3-4 pads/day Day 3: 2 pads DAY 4: 1 pad	Bleeding increased on the 1 st day of menstruation. Has lower abdominal pain after the 4 th day of the menstrual cycle.		1. Sukumara Kashaya 20 ml + Lukewarm water 40 ml BD on ES 2. Shata Pushpa Churna with Ghrita BD A/F
26/03/2022	05/04/2022	Days: 4 days Interval: 59 days Pain: Painless	White discharge: Present	Bowel: Normal. Micturition: Normal. Appetite: Normal	2. as prescribed on 14/02/2022 1. Chitraka Granthayadi Kashaya 20 ml + Warm water 40 ml ES for 1 month

		Clots: Seen on the 2 nd day of menstruation Foul smell: Absent Flow: Moderate Pad history: Day 1: 3 pads/day Day 2: 4 pads/day Day 3: 2 pads DAY 4: 1 pad	Has bloating on the 4 th day of the menstrual cycle. Clots: Absent Dysmenorrhea: Absent Headache: Absent	Sleep: Normal	
02/05/2022					1. Kutaja triphala ½ tsf BD with hot water ES 2. Dashmoolarishta 40 ml + Kumari asava 40 ml + Warm water 40 ml BD for 1 month
06/06/2022	3/05/2022	Days: 4 days Interval: 28 days Pain: Painless Clots: Absent Foul smell: Absent Flow: Moderate Pad history: Day 1: 3 pads/day Day 2: 4-5 pads/day Day 3: 3 pads DAY 4: 1 pad	Backache: Negative Headache: ++ Clots: Negative. White discharge: Present in a scanty amount Diarrhoea: Positive Breast tenderness: Present before and on 1 st day of the menstruation Mood swings: Present	Bowel: 1/ day Micturition: 4-5 times/ day Appetite: Normal. Sleep: Undisturbed sleep.	1. and 2. as prescribed on 02/05/2022 for 1 month 3. Triphala guggul 1-0-1 for 15 days 4. Triphala churna for LA
01/07/2022	5/06/2022	Days: 4 days Interval: 28 days Pain: Painless Clots: Absent Foul smell: Absent Flow: Moderate Pad history: Day 1: 3 pads/day Day 2: 4-5 pads/day Day 3: 3 pads DAY 4: 1 pad	Backpain: Absent Lower abdominal pain: Absent White discharge: Absent Breast tenderness: Negative Mood swings: Positive Hair fall: Mildly present	Bowel: 1/ day Micturition: 4-5 times/ day Appetite: Normal. Sleep: Undisturbed sleep.	1. Sukumara Kashaya 20 ml BD with hot water ES 2. Kutaja triphala 1 tsf BD with Kashaya 3. Chandra Prabha Vati 1-0-1 BD for 1 month

RESULTS AND DISCUSSION

Before treatment	After treatment
The interval between two cycles: is 60-90 days.	The interval between two cycles: is 30-45 days.
An increased interval between menses.	The interval between menses was reduced.
Irregular menses.	Regular menses.
Dysmenorrhea present.	Dysmenorrhea absent.
Joint pain present.	No joint pain.
Body pain present.	No body pain.
Body heaviness present.	No body heaviness.
Sleep disturbance present.	Sleep pattern normalized.
Hair fall present.	Hair fall reduced.

Artava Kshaya is a common menstrual disorder nowadays. If we consider the dosha involved in Artava Kshaya, it is caused due to the vitiation of Vata and Kapha dosha. Vata is responsible for the Gait of Dhatu in our body and vitiation of Vata leads to hampering the Gati of Dhatus which in turn affects the Gati of Updhatus thus leading to Samprapti of Artava Kshaya. Also, Vata is said to be the main etiological factor behind all gynecological disorders. Kapha due to its Avrodhaka properties will lead to the Strotorodha leading to Samprapti of Artava Kshaya⁹

Polycystic ovary syndrome (PCOS) is a complex endocrine disorder characterized by oligomenorrhea and abnormal hormone levels including hyperandrogenism, hyperinsulinemia, and gonadotropin imbalance. One of the most prominent features of PCOS is the history of ovulatory dysfunction (i.e., amenorrhea, oligomenorrhea, or other forms of irregular uterine bleeding) of pubertal onset. Like secondary amenorrhea, a common cause of oligomenorrhea in adolescents is a hyperandrogenic state secondary to polycystic ovarian disease.¹⁰

PCOS mainly occurs due to derangement of Dhatwagni which causes metabolic disorders like obesity, dyslipidemia, etc. which leads to hormonal disorders. According to Ayurveda, the food digested by the Pachakagni is further digested by Dhatwagni mainly at the liver for proper assimilation in the body.¹¹

Rajapravartini Vati mentioned in Yoni Vyapat Rog Adhikara (Sen and Ratnavali, 2015b) (diseases of the genital tract) and Stiroga Adhikar (diseases of females) possess properties like Katu-Tikta Rasa (spicy and bitter taste), Tikshna Guna (penetrating), Ushna Virya (hot potency) Katu Vipaka (bitter taste at the end of digestion) thereby increases Agneya Guna of dhatu in the body and Vata- Kapha Shamaka it consists of Kanya, Kasees, Tankan, Ramatha. Raja Pravartini Vati contains Kumari Satwa which is a good liver stimulant drug and also acts as Raja pravartak.¹¹

Shata Pushpa churna or Phalasarpi promotes infertility by providing strength to the uterus, as Phalasarpi improves the

chances of conceiving. According to Vagbhata, Phalsarpi helps the woman to conceive and is best for curing all female genital tract disorders. It is Balya, Vatahara, Brihaniya, Garbhada, and rasayana.¹²

Kumari Aasava, which is indicated in Strotodushti, Daurabalya (Acharya and Samhita, 2013) (debility), also acts on ovaries to correct the function and induce ovulation. It may also influence female hormones and help in the treatment of disturbed menstrual cycles. It contains Kumari, Haritaki, and Jatamansi as main ingredients with many other herbal drugs which exhibit hepatoprotective activity, help in the proper metabolism of hormones in the liver, Improves digestion etc. Acts as Vata Kapha Shamak and Pitta Vardhak.¹³

Dashmoolarishta with 5 Brihat panchmoola and 5 Laghu panchmoola has been named times and again in several ancient scriptures of Sushruta and Charaka for their Balya, Aam Nashak, Deepana, Rochana, Kapha-Vaat Hara, Rasayana and Anulomana properties. Due to its Kashaya and Madhura rasa, Guru and Ruksha Guna with Ushna Virya and Katu Vipak causes Tridosha Nashak properties and has a positive effect on Rasa, Mamsa, and Asthi to improve PCOS symptoms and regularity of the menstrual cycle.

Sukumara Kashaya is a classical ayurvedic medicine available in either decoction liquid form or concentrated extract table form. It contains main ingredients like Bael, Bhadra, Shatavari and Punamava.

According to Ashtanga Hridayam, it helps treat indigestion, intestinal spasm, abdominal pains, hernia, menstrual disorders, female infertility, PCOD, ovarian cysts and uterine fibroids. It controls ovarian and endocrine functions while reducing the circulation of androgens.

CONCLUSION

Thus, we can conclude from this study that Artava Kshaya is well treated with this Ayurveda regimen. Although Artava Kshaya is not directly explained in classic Ayurveda textbooks, it has been described as a symptom of Artava Vikaras in many texts. The main line of treatment is mentioned to keep the Doshas in equilibrium which can be achieved by Samshodhana and Sanshaman Chikitsa. Hence for the present study, Shamana's line of treatment was selected as the medicines are easily available, palatable, and cost-effective.

Raja Pravartini Vati gives good results in the initiation and regulation of the menstrual cycle. Kumariasava and Dashmoolarishta are best effective in Strotodushti and Vataj Dosh Dushti, respectively.

Artava Kshaya is one of the commonest gynecological disorders nowadays. Many causes of it such as stress, faulty lifestyle and dietary habits, hormonal imbalances etc. have been laid out. Artava Kshaya is also a precursor of many other further gynecological and general disease entities like infertility, obesity, depression etc. So, it is a need of the hour to cure it at the earliest to prevent future events.

No treatments can slow down ovarian ageing and truly prevent diminished ovarian reserve. However, treatments opted for regularizing the markers of ovarian reserve can improve the quality of ovum which may enhance the success rate of conception and prevent associated health issues.

PCOS cannot be co-related to a single condition in Ayurveda. A symptom complex has to be analyzed based on the clinical presentation. Treatment should be planned considering the Nidana, doshas involved, samprapti and the Vyadhi Avastha. After Shodhan and Shaman, one can undergo Rasayana therapy.

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REFERENCES

1. Tiwari P. Artava Vyapad: Artava Kshaya. In: Ayurvediya Prasutitantra Evam Striroga. 2nd ed. Varanasi: Chaukhambha Orientalia; 2000. p. 165. Date accessed: 01 August 2022.
2. Sharma Priya Vrat. Sutra Sthan chapter 15. Susruta Samhita of Maharsi Susruta Volume 1. Edition Reprint, 2018. Varanasi: Chaukhamba Surbharati Prakashan; 2010. p. 77. Date accessed: 03 August 2022.
3. Tiwari P. Artava Vyapad: Artava Kshaya. In: Ayurvediya Prasutitantra Evam Striroga. 2nd ed. Varanasi: Chaukhambha Orientalia; 2000. p. 166. Date accessed: 01 August 2022.
4. Gayathri Bhat NV, Priyanka Singh, Ashok Lamani. Effect of Kusumasanjanani Yoga in the management of Artava Kshaya (oligomenorrhoea) - A Case Report. J Ayurveda Integr Med Sci 2022; 3:172- 176. Page no. 172.
5. Dutta DC. Abnormal uterine bleeding: Oligomenorrhoea In: Konar H, editor. DC Dutta's textbook of gynaecology: Including contraception. 6th ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2014. p. 186. (Revised Reprint). Date accessed: 04 August 2022.
6. Dutta DC. Abnormal uterine bleeding: Hypomenorrhoea; In: Konar H, editor. DC Dutta's textbook of gynecology: Including contraception. 6th ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2014. p. 187. (Revised Reprint). Date accessed: 04 August 2022.
7. Priyanka Singh, Gayathri Bhat NV, Ashok Lamani. Effect of Kusumasanjanani Yoga in the management of Artava Kshaya (oligomenorrhoea) - A Case Report. J Ayurveda Integr Med Sci [Internet]. 2022 Jun.10 [cited 2022Aug.19];7(3):172 - 176. Available from: <https://www.jaims.in/jaims/article/view/1797>
8. Physiology and Pathology of the Female Reproductive Axis Shlomo Melmed MB ChB, MACP, in Williams Textbook of Endocrinology, 2020 Diagnosis of Polycystic Ovary Syndrome and Laboratory Testing.
9. Poonam Kumari, Hetal H. Dave, Poonam Choudhary, Sonu. Effective management of artava kshaya by ayurveda: A case report. Int J Ayu Pharm Res [Internet]. 2021Feb.9 [cited 2022 Aug.19];9(1):77-0. Available from: <https://ijapr.in/index.php/ijapr/article/view/1774> Published: 09-02-2021
10. Harris HR, Babic A, Webb PM, et al. Polycystic Ovary Syndrome, Oligomenorrhoea, and Risk of Ovarian Cancer Histotypes: Evidence from the Ovarian Cancer Association Consortium. Cancer Epidemiol Biomarkers Prev. 2018;27(2):174-182. DOI: 10.1158/1055-9965.EPI-17-0655
11. Susheela Choudhary, Khushboo Jha, B. Pushpalatha, K. Bharathi. Ayurvedic approach to manage PCOS related primary infertility: A case study. Int J Ayu Pharm Res [Internet]. 2021 Feb.9 [cited 2022Aug.19];9(1):67-0. Available from: <https://ijapr.in/index.php/ijapr/article/view/1772> Published: 09-02-2021
12. Ghose A, Panda PK. Clinical efficacy of Shatapushpa (Anethum Sowa Kurz.) powder in the management of Artava kshaya (oligomenorrhoea). Ayu. 2010 Oct;31(4):447-50. DOI: 10.4103/0974-8520.82039. AYU [serial online] 2010

[cited 2022 Aug 19]; 31:447-50. Available from:
<https://www.ayujournal.org/text.asp?2010/31/4/447/82039>

13. Bhagyashri Vijay Chaudhari. Artava Kshaya with Hypothyroidism: A case study. International Journal of Research in Pharmaceutical Sciences. [Internet]. 2021 Jan. 18 [cited 2022 Aug. 19];12(1):120-4. Available from: <https://ijrps.com/index.php/home/article/view/126>

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