

Efficacy of Ayurveda Treatment modalities in the management of Poly- Cystic Ovarian Disease: A case report

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ABSTRACT:

Polycystic Ovarian Disease (PCOD), an endocrine illness affects women of reproductive age and alters their metabolism. Because of sedentary behaviors, a diet high in fast food, and an unhealthy lifestyle, PCOD has developed into a lifestyle disorder. Although the exact origin of PCOD is unknown, high levels of obesity, stress, insulin, hormonal disturbance are the main contributors. Menstrual irregularities, Oligomenorrhea, Acne, Hirsutism, Hair loss, weight gain and disturb bowel habit are some of the signs and symptoms of PCOD. Although PCOD isn't mentioned specifically in the Ayurveda texts, but it can correlate clinically with *Nastaartava*. Bio-cleansing therapy is mentioned in the texts to treat PCOD and Ayurveda can help to manage this type of issues. Here in this case *Virechan Karma* (Therapeutic purgation) along with oral medication *Aarogyavardhini Vati* 2 tablets (each 500mg) and *Triphala Churna* 3 gm at night with luke warm water was administered. The result was assessed on the basis of clinical symptoms relief and USG report. The current case study illustrates that the Ayurvedic therapy approach can be used to address PCOD.

KEY WORDS: *Aarogyavardhini Vati*, *Aartavavaha Srotas Dushti*, Poly Cystic Ovarian Disease, *Triphala Churna*, *Virechan Karma*.

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INTRODUCTION:

Globally, the prevalence of poly cystic ovarian disease (PCOD) is estimated to be between 5.5% and 12.6% in women in the age group of 17- 45 years reference. In India, the prevalence estimates are between 8.2% and 22.5% depending on the diagnostic criteria used.^[1] The cause of Polycystic Ovarian Disease is unknown, Insulin resistance and Hyperandrogenism play an important role. There is no defect in Hypothalamo-Pituitary-Ovarian axis but

normal function is masked by inhibition of ovarian follicular development and inappropriate feedback to Pituitary. ^[2] It is a complicated Heterogeneous condition. One out of every ten women are impacted. Endocrinopathy with the highest prevalence is Polycystic Ovarian Syndrome. Patients have many cysts in their ovaries that develop as a result of a disruption in the regular menstrual cycle and leads to excessive secretion of Androgen and Oestrogen resulting into

anovulatory cycle and irregular menstruation. In today's scenarios PCOD is more common now days as a result of sedentary lifestyles, stress, pollution and a high intake of junk food. Individuals experience different signs and symptoms throughout time i.e., menstrual irregularities, Infertility, Obesity, Depression, Sleep apnoea, hair fall, disturbed mood etc. are all negative effects on the reproductive system that, over time, may lead to Diabetes Mellitus,

Endometrial Cancer, Cardiovascular disease, and other conditions. In Modern science, management of PCOD is divided into various categories such as Ovulation induction agents, Insulin sensitizing agents, oral contraceptives, anti-androgenic anti mineralocorticoid agents. But, side effects of these therapies include Vaginal bleeding, blurred vision, obesity, nausea, ovarian hyper stimulation, dyspnoea vomiting, flushing, increased risk of multiple births, strokes, seizures, etc. Hence it is need of time to search for the alternative sources to manage such type of condition.

In Ayurveda PCOD can be put under the umbrella of *Nastaartava*, *Artava* word extensively used in context of menstrual blood, ovum and ovarian hormones. If we narrate *Artava* as menstrual blood, in *Nastartava* due to obstruction of *Artavavaha srotasa* (channels carrying Reproductive tissue) by *Vata (Dosha)* responsible for movement and cognition) and *Kapha Dosha (Dosha)* responsible for regulating body fluids and keeping the body constituents cohesive). So *Artava* is not evident monthly as in regular menstrual cycle bleeding which leads to Amenorrhoea^[3]. If we narrate *Artava* as ovum then we can consider *Nastartava* as anovulatory cycles which causes Infertility. Ovum is a microscopic structure and its presence can be only assumed by

its role in conception. If *Artava* is considered as ovarian hormones, the basic pathology of PCOS can be understood in context of *Avarana* by *Dosha*. This *Avarana* disrupts homeostasis of HPO axis causing hormonal imbalance leading to PCOS. ^[4] *Visham Aahara- Vihara* and vitiated *Doshas* reduces the *Jatharagni* (digestive fire) that produces *Ama* (Immature *Rasa*) resulting into insufficient metabolism and hormonal imbalance due to misaligned enzymatic processes which affect the *Artava*. ^[5] In addition, vitiated *Rasa Dhatu* (Nutrient fluids) affects metamorphosis of *Rakta Dhatu* (Blood tissue) and due to *Upadhatu* of *Rakta Dhatu Artava* also affected. PCOD can be manage by using natural, non-invasive and non-chemical Ayurveda remedies. In texts treatment principle is given for the *Artavavaha Srotas* treatment includes *Sroto Shodhana* (to clear obstruction in the *Srotas*), normalize metabolism by treating *Agni*, regulate the *Apana Karma* by *Vata Anulomana* and *Kaphahara* treatments.^[6]

CASE REPORT:

21 years of female patient visited in outdoor patient department of department of *Kayachikitsa*, Ch. Brahm Prakash Ayurved Charak Sansthan, New Delhi with complaints of Weight gain, Hair growth and Acne on face, scanty menses, irregular menstruation cycle for 1 year and complaining of constipation. According to USG, both ovaries had polycystic patterns. She was tried hormonal therapies with no satisfactory results. Then she opted to get Ayurvedic treatment for the same in disease condition.

On General examination of the patient, her pulse rate was 80/min, with B.P. 110/70 mmHg and body mass index was 27.2 kg/m². Patient had Inadequate bowel and consistency of stool was hard, Frequency of micturition 7-8 times/day and 1-2 times

at night. The patient's appetite was poor. Her tongue was coated. There was less physical activity with stress in her daily routine. Her dietary habits were inappropriate (frequently skipping meals and deep fried and high junk food consumption). In general, the patient exhibited signs of anxiety, sluggishness, and slow movement..

In menstruation history, menarche- at the age of 13 years last menstruation date. - 26 April, 2022, last to last menstruation date. - 2 March, 2022

In past medical history, patient has not any past history of hypertension, diabetes mellitus, Koch's. In family history- Nil. In drug history- Spironolactone (Aldactone) 25 mg and Clomiphene 50 mg orally once/day for 2 month patient had taken

DIAGNOSTIC FOCUS AND ASSESSMENT:

The diagnosis of PCOD was made on the basis of USG report and complaints of the patient. The USG report reveals Polycystic pattern of both ovaries with Right ovary volume 7.8cc and Left ovary volume 5.0cc, with increased follicle number per ovary- usually 10 or greater follicles (2-9mm) arranged in peripheral distribution ("String of Pearls" appearance). [Figure 1]

TIMELINE:

The patient was first time diagnosed with PCOD in September, 2021. She took allopathic treatment from September 2021 to April 2022. Then after she visited CBPACS for the first time in May 2022. On the basis of clinical examination and USG findings we planned for Bio-cleansing (~Therapeutic Purgation) known as *Virechana Karma*. For this, patient was given 3 gm of *Trikatu Churna* with lukewarm water daily twice a day before meal for first five days. The patient reported improvement in her bowel habits, diet, and she also felt lighter in her

body. *Mahatriphala Ghrita* was then recommended for next five days for therapeutic internal oleation at increasing doses (of 30, 60, 90, 120, and 150ml). *Ghee* was given in early morning with warm water on an empty stomach. After five days of internal oleation, *Samyak Sidhhi Lakshana* (appropriate internal oleation's symptoms) was found, including soft, unctuous skin and passing soft stools. After appropriate internal oleation therapeutic massage was given from *Bala Taila* along with sudation therapy with *Dashmool Kwath* for the following three days. *Virechan* was done with 2 tsf of *Trivritta Avleha* with lukewarm water with 15 *Vegas*. After that, a five days plan of therapeutic dietary regime was included, with watery gruel prepared from barley for the first two diets, followed by a thick gruel of rice, soup prepared from green gram, for succeeding two diets each, in that order. The patient was counselled to consume only wholesome foods and lead a healthy lifestyle while undergoing treatment. Then Oral medicine was advised to patient for 12 weeks. Then after patient was asked to after treatment ultrasound report for the assessment. (Table -1)

THERAPEUTIC INTERVENTIONS:

After a thorough examination that considered Ayurvedic principles and after evaluating the patient's strength, humors, body constitution, age, psychological stamina, and digestive capacity, the patient was advised to check into an IPD for *Virechana Karma* (Bio-cleansing therapy) procedure. The patient was scheduled to receive *Virechan Karma* (Therapeutic Purgation). After completion of classical *Virechana Karma* and *Samsarjana Karma* (therapeutic dietary regime), oral medications, 2 tablets of *Aarogyavardhini Vati* (each tablet of 250 mg) daily twice a day with luke warm water before food and

Triphala Churna 5gm at night with lukewarm water was advised for 12 weeks.

Pathya (Wholesome) and Apathya (Unwholesome) ^[7]

The patient was advised to take dietary items such as *Yavak* (Barley), *Shyamak* (Barnyard Millet), *Godhum* (Triticum sativum); Legumes such as *Mudag* (Green gram), *Adaki* (Split pigeon peas), *Chana* (Brown chick peas), *Kulath* (Horse gram), *Maash* (Black gram); Seeds like *Tila* (Sesame seeds), *Atasi* (Flax seeds), Sunflower seeds, Pumpkin seeds; Spices- *Pippli* (Piper longum Linn.), *Hingu* (Ferula asafetida Linn), *Saindhava* (Himalayan rock salt), *Ajaji* (Cumin seeds), *Yavani* (*Trachyspermum ammi* Linn.); Fruits- Use of Citrus fruits like *Dadim* (Pomegranate), *Amalaki* (Gooseberry) and Green Leafy Vegetable.

The patient was asked to avoid Milk,

Curd, Cheese and Dairy products; Heavy foods and fried preparation; fermented and bakery items; avoid Jaggery and carbonated drinks, Canned juices specially Sugarcane juice; junk food, and Caffeine. The patient was instructed to refrain from things like Binge eating, sleeping during the day, and leading a sedentary lifestyle. The patient was advised for *Yoga Aasans* (Poses) which can help in PCOD such as *Suryanamaskar* (Sun salutation), *Halasana* (Plough pose), *Dhanurasana* (Bow pose), *Bhujangasana* (Cobra pose), *Padmasana* (Lotus pose) and *Nokaasana* (Boat pose) were advised in the early morning for 30min. Among *Pranayamas* (Breathing techniques), *Kapalbhati*, *Anulom-Vilom* (Alternate nostril breathing) and *Bhramari* are most effective in PCOD as it increases Insulin sensitivity, boosts self-esteem, eliminates Anxiety, and enhances emotional stability.

Table 1: Timeline of events

Duration	Particular and interventions
September 2021	Polycystic ovarian disorder diagnosed for the first time
September 2021- May 2022	Managed with allopathic treatment - Spironolactone (Aldactone) 25 mg , and Clomiphene 50 mg orally once/day for 2 month patient had taken
10 th May, 2022	Visited CBPACS for the first time . Detailed history of the patient taken and examined in the OPD then advised the detailed course to the patient.
10 th May, 2022 – 14 th May, 2022	<i>Deepan Pachana</i> : 3grams of <i>Trikatu Churna</i> (Dried powder of zingiber officinale Roxb., piper longum Linn. and piper nigrum Linn.) was given twice a day with lukewarm water before meal
15 th May, 2022 – 19 th May, 2022	<i>Snehapan</i> was given with <i>Mahatriphala Ghrita</i>
22 nd May, 2022 – 26 th May, 2022	<i>Virechan Karma</i> (Therapeutic purgation) with <i>Sansarjana Karma</i> (Post-therapy dietetic regimen for revival) was done
1 st June, 2022– 28 th August, 2022	<i>Shamana</i> (palliative procedures) drugs were given in the form of <i>Aarogyavardhini Vati</i> 2 tab daily twice a day and <i>Triphala Churna</i> 5 grams in night with luke warm water
29 th August, 2022	Advised USG for after treatment assessment
18 th September – 2022	In USG report both ovaries were normally visualized
18 th September 2022	On follow up with diet and lifestyle advice

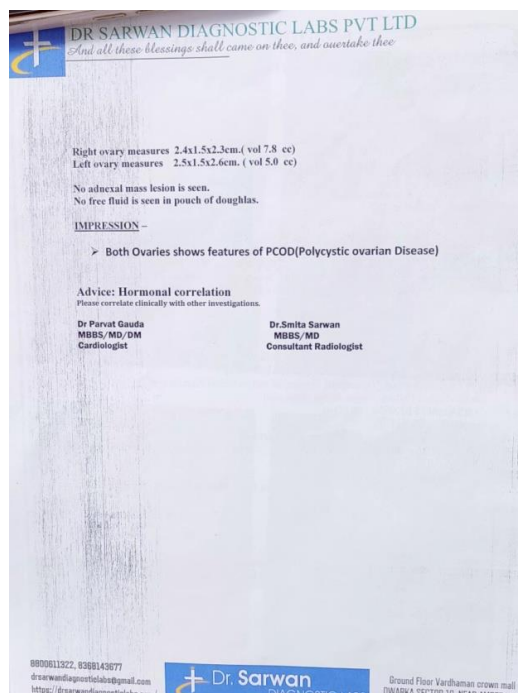


Figure- 1: USG Before Treatment

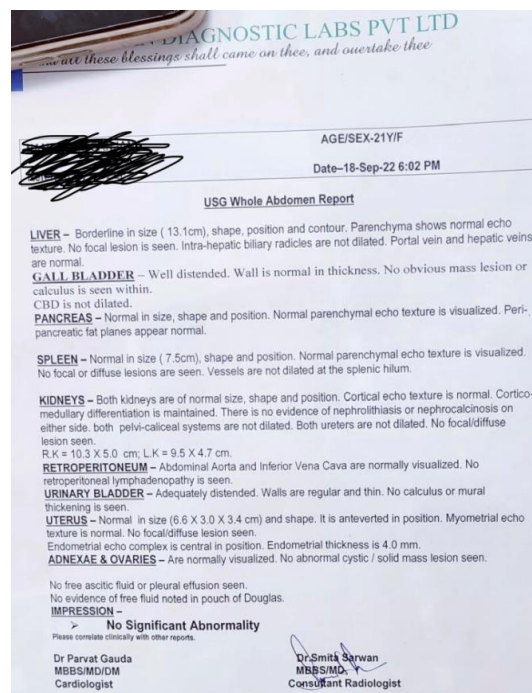


Figure -2:USG After treatment

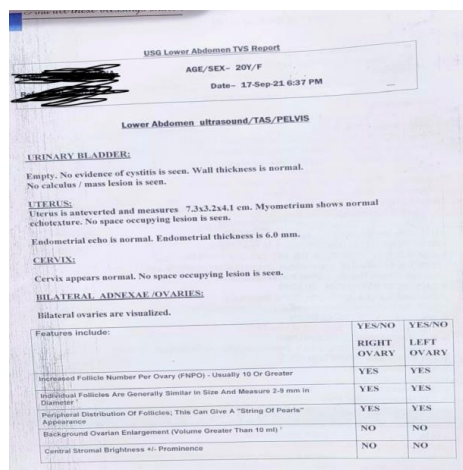


Figure- 3: USG Before Treatment

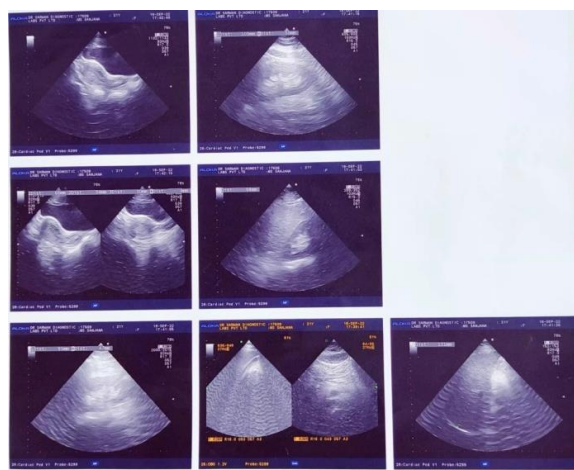


Figure -4: USG Film After treatment

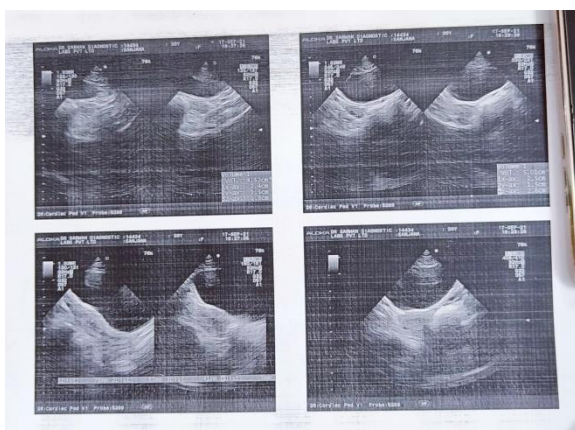


Figure- 5: USG Before Film Treatment

RESULTS:

The result was assessed on the basis of USG changes and an improvement in the general condition of the patient. Before treatment there was Polycystic pattern of both ovaries with Right ovary volume 7.8cc and Left ovary volume 5.0cc, with increased follicle number per ovary-usually 10 or greater follicles (2-9mm) arranged in peripheral distribution ("String of Pearls" appearance) in USG report which turns into normally visualized ovaries and there was no abnormal cystic lesion seen after treatment.[Figure-1-2]

DISCUSSION:**Probable Mode of Action of Virechan (Therapeutic Purgation)-**

According to the classical Ayurvedic scriptures, purgation therapy (*Virechan*) is recommended for *Dosha*-vitiating disorders and tries to achieve "*Bheejam Bhavati Karmukatham*" by conducting *Shodhana* of *Indriya*, *Dhatu*s, and *Srotas*, which finally results in greater *Beeja* (*Shukra/Artava*) efficiency.^[8] *Virechan Karma* has direct effect on *Agnisthana* (hampered *Agni* is one of the initiating factors in formation of vitiated *Raja*). In addition to removing *Srotodushti* that existed at the level of *Rasa*, *Rakta*, *Mamsa*, *Meda*, and *ArtavavahaSrotas*, it also has the quality of *Srotovishodhana* (eliminates waste products, toxins, and aggravated *Doshas* from the body), so it will help in destroying the disease from its root rather than temporary relief from *Artava Vikara* (Menstrual disorders).^[9] As a result, *Virechan* promotes the removal of *Sanga*, regulation of *Agni*, and normal *Vata* function, especially *Apana*, and so helps in the proper development and excretion of *Artava* (regularization of Menstrual cycle and Ovulatory cycle) and maintains its normal function^[10]. *Virechan* can also correct the pathogenesis of G.I.T and its

secretions enhancing the absorption and secondly removal of the morbid waste products from the body. This facilitates the increased drug absorption (Bio availability) and reaches of the drug to the target site for exerting its significant impact^[11]. After *Virechan*, USG showed a decrease in ovarian volume and a drop in the number of non-dominant follicles.

Probable Mode of Action of Aarogyavardhini Vati-

The words "*Aarogya*" and "*Vardhini*" both signify "excellent health." It denotes a formulation known as "*Aarogyavardhini*," which promotes health. This is applied to the three *Dosha* imbalances. *Aarogyavardhini Vati* assimilates the various extra unctuous substances (*Snigdha Dravya*) that are present in the body. Additionally, it does the *Pachana* (~digestion) of *Drava* (~liquid) and *Kleda* (~clammy) and does the *Raktavardhana* (~purifies blood). It diminishes *Dravatva* and *Snigdhata* in *Meda Dhatu*^[12]. *Aarogyavardhini Vati* helps in "*Prasadbhuta Raja Nirmitee*" (i.e., quality follicular development) by acting on the *Rasa* and *Rakta Dhatu*s. It enhances "*Kayagni*" (Digestive fire) and "*Dhatwagni*" (Metabolic factor located in *Dhatu*), and increases the liver's secretions i.e., increase secretions of Sex hormone binding Globulin by Liver, which causes a decrease in the production of androgen. By enhancing the digestive system, it stimulates digestive fire, clears body channels so that nutrients can reach the tissues, balances body fats, and gets rid of toxins. One of the key elements of *Aarogyavardhini Vati* is *Kutki* (*Picrorhiza kurroa Royle ex Benth*), which is *Pitta Virechaka*, then after *Rakta Suddhi* occurs. Ultimately *Suddhi* of *Artavavaha Srotas* occurs^[13]. The herb *Chitra*, also known as *Plumbago zeylancia Linn*, is useful in treating digestive issues like indigestion

and appetite loss. The abnormal functioning of the endocrine glands (low or high hormonal production) is improved by long-term administration of *Aarogyavardhini Vati*. Overall, it aids in maintaining a healthy circulatory, respiratory, excretory, and reproductive systems in addition to the digestive system.^[14]

Probable Mode of Action of *Triphala*-

The drug contains ingredients like *Haritaki* (*Terminalia chebula* Retz.) which is an astringent (*Kashaya Rasa*) and laxative in nature. It is effective in improving Liver metabolism and irregular bowel movement. The herb *Bibhitaki* (*Terminalia bellerica* (Gaertn) Roxb.) is a laxative and a valuable remedy for Digestive disorders and ultimately improving the digestive fire. Another ingredient *Amalaki* (*Embellica officinalis* Gaertn.) is an Antibacterial, Carminative, Hypoglycaemic, Rejuvenating, Hypotensive in nature. It has Antioxidative, and Immune Modulator properties. *Triphala* has metabolism enhancing properties, regularizes the physiological movement of *Vata Dosha*, and cleanse the *Srotas*. Studies have revealed that the *Triphala* extract has the power to scavenge free radicals like superoxide and diphenyl picrylhydrazyl. Most of the radical scavenging action of these extracts is attributed to the phenolic chemicals found in them. These chemicals may also be useful for regulating the many hormonal factors that contribute to irregular menstruation.^[15]

CONCLUSION:

It can be concluded from this core study that Ayurveda modalities along with diet and lifestyle modification definitely helps to treat the hormonal imbalance. In addition with the Ayurveda therapies can maintain the healthy status of patient. Also, it helps to plan such studies in the field of Ayurveda.

REFERENCES:

1. Mehreen TS, Ranjani H, Kamlesh R, Ram U, Anjana RM, Mohan V; "Prevalence of polycystic ovarian syndrome among adolescents and young women in India"; J Diabetol; 2021; 12 :319- 25
2. Deepa Mishra, Mukta sinha; Ayurvedic management of Polycystic Ovarian Syndrome (Infertility Queen); J. Res. Educ. Indian med., 2008 xiv: 33-40
3. Premvati Tewari , Ayurvediya Prasutitantra Evum Striroga Part 2: chapter 2, Ver. 34, Aartav Vyapad, Chaukhambha Orientalia; second edition: 2000; reprint: 2016, page no.168
4. Saroj Kumari, Sarvesh Kumar Singh, Kshipra Rajoria, Avadhesh Kumar; "An Ayurvedic Approach in Management of Polycystic Ovarian Syndrome"; International Journal of Ayurvedic Medicine, Vol 11 (4), 644-649
5. Patel M G, Prajapati D P; "Concept of Polycystic Ovarian Syndrome: Perspectives of Ayurveda and Modern Science"; International Journal of Pharmacognosy and Phytochemical Research 2017; 9(10); 1363-1372
6. Anjali Jain, Diksha Khathuria, Khushwant Joshi, Mahesh Dixit; An Ayurvedic Approach to Manage PCOD- A Case Study; International Journal of Ayurveda and Pharma Research; 2022;10(3):126-129.
7. Thakur Jyotsna & Masand Sameet; A review on life style modification: The mainstay in polycystic ovarian syndrome; Int. J. Res. Ayurveda Pharm. 2018;9(3):8-13
8. SreeLakshmi Chaganti; Evaluation of efficacy of Virechana in Poly Cystic Ovarian Syndrome; Ch-3, The KLE academy of higher education and research; Dissertation, pg. 13
9. Rashmi Sharma, Radhey Shyam Sharma; Role of virechana & ayurvedic

- herbal preparations in infertility - A case report; J. Ayu. Herb. Med. 2017; 3(2): 53-56.
10. Sonal Pandav; Role of Panchakarma in the management of Polycystic Ovarian Syndrome; World Journal of Pharmaceutical Research; Volume 10, Issue 10, 411-416.
 11. SreeLakshmi Chaganti; Evaluation of efficacy of Virechana in Poly Cystic Ovarian Syndrome; Ch-3, The KLE academy of higher education and research; Dissertation, pg. 34.
 12. Santosh Pal, A Ramamurthy, Bidhan Mahajon, "Arogyavardhini Vati: A theoretical analysis", Journal of Scientific and Innovative Research 2016; 5(6): 225-227
 13. Jha, D. K., Dahal, A. ., Shah, B., Tripathi, P., Thasineku, S., & Thasineku, S. (2021). Management of Polycystic ovarian syndrome (PCOS) with Ayurveda - a case study. *Journal of Ayurveda Campus*, 2(1), 133-138.
 14. Santosh Pal, A Ramamurthy, Bidhan Mahajon, "Arogyavardhini Vati: A theoretical analysis", J. Sci. Inn. Research 2016; 5(6): 225-227
 15. Prarthana T, Rao VG. Management of secondary amenorrhea and PCOS by *Vamana* and *Virechana* - a case report. J Res Ayurvedic Sci 2022; 6:11-6.

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