



Case Study

AYURVEDA INTERVENTION IN FEMALE INFERTILITY DUE TO OVARIAN FACTOR - A CASE REPORT

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ABSTRACT

Infertility is defined as inability of a couple to conceive after one year of regular unprotected sexual intercourse. Incidence of ovarian dysfunction in the form of Polycystic ovarian disease (PCOD) has become a leading cause of female infertility in today's era. Polycystic Ovarian disease (PCOD) is a heterogeneous, multifactorial and polygenic endocrinal disorder. *Acharya Sushrut* explained about *Bandhya Yonivya pada* where *Nashtartava* is mentioned as the one and only symptom. In Ayurveda text word *Aartava* has been used extensively in different contexts; menstrual blood, ovum and ovarian hormones. Therefore Amenorrhea, anovulation, hormonal dysfunction can be considered as visible manifestations of *Nashtartva*. So, here an attempt has been made to explore *Samshodhan (Virechan)* as a possible line of treatment for *Bandhya (Nashtartava)*. **Material and method:** Following is a case report of a female who was anxious to conceive after 4 years of active married life, along with H/O delayed menses. Her USG reports showed polycystic appearance of ovaries and anovulation was noticed in follicular study. During this case study evaluation of *Shodhan* therapy (*Virechan*) and *Shaman* therapy in infertility due to ovulatory dysfunction was done. **Result:** Before the treatment patient was a known case of infertility due to PCOD and after treatment she conceived and delivered a healthy female baby. **Discussion:** Line of treatment was to enhance potency of ovum and with the help of *Virechankarma*, regularize vitiated *Vata Dosha*, *Shrotoshuddhi* and *Aartava janana*. **Conclusion:** Ayurveda therapy can be used in patients of infertility due to PCOD for better outcome and no adverse drug effect was noticed.

KEYWORDS *Bandhya, Nashtartva, Female Infertility, Ovarian Factor PCOD, Samshodhan, Virechan.*

INTRODUCTION

According to Ayurveda the four main factors responsible for the proper conception^[1] are described as *Garbh sambhav samagri; Ritu* (Fertile period), *Kshetra* (Fertile uterus), *Ambu* (nutrition) and *Beeja* (viable Ovum and Sperm). Absence or abnormality in any of the above factors may result in infertility. Here *Beeja* can be referred as healthy ovum and sperm. While talking about of female infertility, *Beeja dushti* can be considered as ovulatory dysfunction; anovulation. Thus, it is seen that anovulation is an important factor causing infertility as per Ayurveda.

According to WHO Infertility is a disease of the reproductive system in which there is a failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse. This is a multifactorial disease; ovarian, cervical, tubal and

endometrial factors are responsible for female infertility, where ovarian factor causes maximum (30-40%) contribution^[2].

In ovulatory factors PCOD stands on first place as 90-95% of anovulatory women seeking treatment for infertility have PCOD.^[3]

Polycystic ovary syndrome (PCOS) a heterogeneous, multifactorial endocrine disorder and its prevalence is approximately 5.5-19.9%.^[4] For the diagnosis of PCOS ESHRE/ ASRM Rotterdam criteria are available according to that, a woman must have at least two of three criteria after other related health conditions are ruled out: oligo-ovulation and/or anovulation, clinical and/or biochemical signs of hyper- androgenism, and polycystic ovary- is visible by ultrasound^[5,6].

Acharya Sushruta mentioned *Nashtartava* as a cardinal symptom of *Bandhya Yonivyapada*. After discussing about of *Asthaartva- dushthi*, *Nashtartava* has been explained separately. In which *Artava* is not destroyed completely but it is not evident due to obstruction of its channels, as the passage is enclosed by *Vata* and *Kapha* and ultimately it results in amenorrhoea. In this particular case if we hypothesize *Aartava* as ovum then we can consider *Nastartarva* as anovulation which is an important cause of infertility.

Case Report

A female of 29 years came to *Prasuti* and *Striroga* OPD (registration no.10347/26-02-2020) of primary infertility and anxious for conception.

Menstrual History: L.M.P- 22/02/2019, 3-4/40-45 days, delayed menses, moderate flow sometimes with clots, painless.

H/O present illness: K/C/O PCOS for 8 years, was treated by different treatment modalities; Allopathy and Ayurveda as well management for delayed menses when she was unmarried. After active married life of 4 years her USG report was suggestive of polycystic appearance of ovaries and in follicular study anovulation was noticed. She took ovulation induction drugs, hormonal pills. After 2 year of active married life she was advised to go for diagnostic hystero laparoscopy, HSG, and IUI twice but with the failure she finally came to our OPD of *Prasuti & Striroga* at Dr.S.R.Rajasthan Ayurveda University, Jodhpur.

Personal history: Occupation: Ayurveda doctor

Appetite: good

Sleep: disturbed some times

Bowel: constipated some times

Bladder: clear

Psychological status: stressed and anxious

Husband- occupation: Allopathy doctor, addiction: alcohol some times

O/E: B.P- 120/80 mm of hg, Ht- 157cm, Wt.- 65 kg

P/A- soft no palpable mass, no tenderness, P/S- healthy cervix, P/V - uterus AVAF, cervical motion non-tender.

Investigations

Male partner- Semen analysis (24/08/2016)- Vol- 2ml, Count- 103.6million/ml, Motility-70-75%, sluggish- 15-20%, normal morphology.

Female partner- Haemogram- WNL, ESR-12.7mm/hr, HIV, HBsAg, VDRL - non-reactive, RBS- 91mg/dl, LFT, RFT & Lipid Profile - WNL. MT -Negative, TSH- 1.64 mcIU/ml, LH- 10.6mIU/ml, S. prolactin - 8.89mg/ml, S. FSH was not mentioned in any of her reports so as the ratio was being not mentioned in this case report,

although it is also an important diagnostic tool for PCOS.

USG (28/07/2016)- B/L PCO

Follicular monitoring- TVS

(11/12/2017) to 16/12/2017-stimulated, LMP- 3/12/2017, on 16th day no dominant follicle was seen (10/01/2018)- stimulated (letroz2.5 & FSH 150), LMP - 01/01/2018, on 15th day- no dominant follicle was seen.

Diagnostic hysteroscopy & laparoscopy (12/02/2018)- Impression- B/L patent fallopian tubes, PCOD.

IUI- 14/03/2018- first cycle, 25/05/2018- second cycle.

In this particular case semen analysis of male partner was absolutely normal so after excluding that factor we focused on female partner. It was observed that patient was having anovulation as a foremost cause of infertility as her other reports were normal. In her follicular monitoring, even after stimulation with the help of ovulation induction drugs there was no dominant follicle for two consecutive cycles. She also undergone IUI twice but that was failed repeatedly. After detailed history taking and observing previous reports it was very clear that ovum was not formed properly so as the ovulation.

Line of treatment- *Samshodhan karma* (purification therapy) was opted as a first line of treatment after analyzing the condition. According to *Acharya Dalhan* in case of *Aartava dushthi* purification should be only in form of *Vamana*, not *Virechana*. As in *Virechana Pitta* is reduced which results in *Aartvakashya*. But *Acharya Chakrapani* says that use of both purification measures clears upward and downward channel respectively^[7]. By *Virechan karma* specifically vitiated *Pitta* will be evacuated so it will actually purify and clear the channels by removing obstructions and enhance the quality of *Aartava*. In *Virechan karma* there is downwards evacuation of *Doshas* so it will also help to regulate *Apan vayu gati*. *Aacharya Kashyap* has also mentioned that with the help of *Virechan karma* potency of *Beeja* enhances^[8].

Treatment

1. First visit- on 26/02/2019, LMP- 22/02/2019, patient was not on any of Allopathy drugs.
2. *Kunjal kriya* on 27/02/2019, 1/03/2019 and 4/03/2019
3. *Deepen paachan* with *Ajmodadi choorna* started from 5/03/2019 to 11/03/2019
4. Second visit- *Virechan karma* was planned- patient was admitted with IPD no. 517/12865 (12/03/2019)

S.no.	Date	Procedure	Drug and dose	Anupaan & kaal
1.	12/03/2019	Sneh paan	(Phalghrita)- day 1=30ml, day 2=60ml, day 3= 100ml, day 4= 160ml	Lukewarm water, empty stomach early morning
2.	16/03/2019	Abhyanga & Swedan	Til taila, for 3 days (on the day of Virechan included)	
3.	18/03/2019	Virechan	Trivrita avaleh (60gm)	Lukewarm water 10:00am

By Virechan karma Madhyam shuddhi was achieved. Patient was advised to follow Samsarjan karma for 2 Annakal/ 5 days.

Third visit- 06/04/2019 registration no. (16078), LMP - 03/04/2019

Shatavari choorna - 3gm + Pushpdhanwa ras - 250mg + Lakshmana lauh 250mg BD, after meal

Avipattikar choorna 3gm + Shankha bhasm 250mg - before meal, BD, with Kaanchnaar gugglu 2 tab empty stomach.

Follow-up- she was explained about fertile period, advised to do meditation.

OBSERVATION AND RESULT

After one month when she missed her period and her UPT was positive.

USG- 28/05/2019- early intra uterine pregnancy of 5 week 6 days with normal foetal cardiac activity. EDD - 22/01/2020

DISCUSSION

In the present case report, according to the history and clinical examination it was considered as a case of Vandhyatva due to Nashtartava, Artava vaha-shrotorodha and Apan vata vaigunya. In this case of infertility anovulation was the main cause. All menstrual disorders including anovulation are the result of vitiated Asruk/Artava. Nashtartava/Nishphal aartav is caused by obstruction of Artavavah srotas by vitiated Kapha and Vatadosha. For clearance of this Srotorodha and thus maintenance of regular menstrual cycle Shodhan in form of Virechan and Shaman therapy was planned.

1. Kunjalkriya - It mainly acts on Aamashaya, cleans digestive system from mouth to stomach, removes excess Amashayasth vitiated Kapha, pacifies Samanvayu and hence proper metabolism is maintained.
2. Deepen, Paachana helps in preventing the production of Ama and vitiation of Dosha and Dhātu can be reduced.
3. Virechan- Shodhan karma is suggested as the line of treatment for menstrual and other gynecological disorders^[9], Virechan karma is one of the frequently opted choices because of its wide

applicability and simplicity. By having dominion effect on Pitta and Agni it pacifies vitiated Pitta, does cure Asruk/Artava vikar, does detoxification and clearance of Aartava-vaha-srotas. Virechan enhances potency of Shukra, shukra- Vyadhiharam, Apatyam, Vrushataa, balam etc are some benefits can be achieved with the help of Virechana karma.^[10]

4. Shatavari choorna- It is considered as a female tonic in Ayurveda and also beneficial in female infertility^[11], as it enhances folliculo-genesis and ovulation, prepares the womb for conception, and prevents miscarriages^[12].
5. Pushpadhanva Rasa- Chief ingredients of this drugs are having properties; Dhātu vridhikar, Agnidiptikar, Vaajikaran. Dhatura, Bhlanga, Ngavalli etc., are having stimulant effect over Neuro-endocrinal system. It is given in condition as amenorrhea or anovulation. It contains mineral drugs which have activities like- Rasayana, Yogavahi, Aartava janana properties along with Tridosha har and Kapha-Vata shamak property.
6. Lakshmana lauh- It is said to have properties; Balya, Vaajikaran and Vrishya.
7. Avipattikar choorna helped to regularize normal functions of liver and thus enhancing Kayagni and Dhatwagni.^[13]
8. Kanchnar helps to remove blockage in the channels and also works on polycystic ovary due to Kaphanasak and Granthihar property^[14].

CONCLUSION

PCOS is an increasing public health problem which is very common and leading cause of infertility in women. In this particular disease anovulation or Aartava-dushthi plays a crucial role in developing pathogenesis. Virechana is a process of Srotoshodhan (Biopurification), Detoxification, and it also enhances potency of Stree shukra thus, helps in Samprapti vighatan. After eliminating Doshas from their roots patient was treated with Aartavajanan, Vaajikaran, Vata-kaphnaashak, Dhatwagnivardhak, and Granthihar drugs. By all the above-mentioned measures, patient conceived and delivered a healthy child. No adverse effect was noticed so, more studies should be

conducted to explore role of *Virechan karma* in infertility due to ovarian dysfunction.

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