Case Report

Ayurveda management of infertility associated with Poly Cystic Ovarian Syndrome: A case report

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ABSTRACT

Infertility associated with Poly Cystic Ovarian Syndrome (PCOS) is a major cause of concern in the present generation among the reproductive age groups due to undesirable lifestyle changes. This is a case report of an infertile couple who had not been able to conceive since 11 yrs. The wife was diagnosed with PCOS. They underwent conventional treatments of primary infertility including IUI (Intra Uterine Insemination) and hormonal therapy both the treatments were unsuccessful. The objective of the present treatment included Ayurvedic management of PCOS, ensuring regular ovulation and thereby helping to develop healthy pregnancy and successful childbirth. Based on the parameters of Ayurvedic science this case was diagnosed as Vandhyatva (Infertility) due to Nashtartava (Amenorrhea). Treatment plan included both Shodhana (Purification) and Shamana (mitigation) therapies. During the treatment period she lost 20 kg of weight and regained regular menstruation thereafter. The outcome of the Ayurvedic intervention was the conception of the patient within 8 months of treatment and delivery of a healthy baby girl.

1. Introduction

Infertility is one of the predominant health issues faced by the married couple nowadays. Infertility is defined as the inability to conceive after 1 year of uninterrupted intercourse of reasonable frequency [1]. It is common in 10–15% of couples [2]. As per the current statistics male infertility problems constitutes 30–40% and Female infertility problems constitutes 40–55% and both are responsible in about 10% cases. Remaining 10% unexplained [3]. A critical evaluation on female infertility shows that ovulatory factors contribute almost 30–40% of the case. Among anovulatory causes of infertility, Poly Cystic Ovarian Syndrome (PCOS) plays a major role [4]. Diagnosis of PCOS is based on anovulation, elevated androgen levels and presence of multiple ovarian cysts on USG findings [5]. Most of the time these conditions are presented with signs and symptoms such as obesity, amenorrhea and hirsutism [6]. A direct description of Poly Cystic Ovarian Syndrome in classical Ayurveda Texts is not available. After considering clinical features, Dosha involvement management principles of Vandiya, [Nashtartava, Sthauthya (obesity)] [1–12] were adopted.

2. Patient information

Married couple who were school teachers, presented at private consultation OPD of home clinic with the complaint of inability to conceive even after 11 years of regular unprotected sexual life. The semen parameters of husband were found to be within normal limits. The wife, aged 32, had menstrual irregularities since past 9yrs. The menstrual history of the patient showed 6 days duration with an interval of 6–7 months between the next cycles. They underwent 10 years of hormonal treatment and Intra Uterine Insemination twice. Rapid weight gain observed during this time period. At their first OP visit her last LMP was 10/6/2018 which of course may be due to hormone induced withdrawal bleeding with the duration of 6 days. Patient complained itching on vagina along with abnormal vaginal discharge. Painful intercourse was also one of the main concerns Table 1.

3. Clinical findings

The patient was obese with a body weight of 95 kg and BMI of 34.89. There were clear evidences of acanthosis nigricans on neck and hirsutism with prominent hair growth on chin and upper lip during physical examination. The findings obtained on per vaginal...
and per speculum examinations were clitoromegaly, bulky uterus, eroded cervix and abnormal vaginal discharge. USG reports showed both ovaries with polycystic morphology, and 12 cc volume of each ovary. Uterus measured 75 × 34 × 38 mm and ante-verted.

4. Diagnostic assessment

On detailed evaluation of subjective and objective parameters patient was diagnosed as primary infertility associated with PCOS. From Ayurvedic perspective this condition could be considered as Vandretyava associated with Nashtartava where Avarana (enclosure) of Artavavavaha srotas (channel transporting Artava) Kaptha Medodushti and Srotorodha became the causative factors. Detailed analysis of her signs and symptoms showed the increase of Kapha and reduction of Pitta [7]. Considering all those factors treatment principles of Vandra, Nashtartava and Medohara were followed in this case.

5. Therapeutic intervention

Table 2.

| Date          | Observation/remarks | Treatment                                      |
|---------------|---------------------|------------------------------------------------|
| 9/9/2012      | Delayed cycle, B/L PCOS AMH (Anti Mullerian Hormone) 9.89 ng/ml | Treatment initiated as per Modern medicinal protocol |
| 20/2/2016     | Induced folliculogenesis | IUI failed. Ceased treatment for 2½ years Ayurveda treatment initiated |
| 11/10/2018    | Irregular cycle, 1MP:10/6/2018, body weight:95 kg, on USG both ovaries appeared polycystic, Endometrial thickness:7.5 mm | |
| 7/01/2019     | Menstruation on 30/12/2018 | Punchakarma started Basti (enema), Uttara basti |
| 22/06/2019    | Weight reduced:85 kg | Internal medicine given Advised |
| 8/07/2019     | Dominant follicle Right ovary:18*16 mm Endometrial thickness:11 mm | Phlasarpi, Keheerabala |
| 27/07/2019    | UPT: Positive | Patient conceived. |
| 8/03/2020     | Female baby: 3.26 kg | Patient delivered on LSCS |

Srotorodha. Here the movement of Vata especially Apana vata got obstructed by the increased Kapha which in turn obstructed the natural functioning of Ardha also. According to Ayurveda disintegration of Samprapti (pathogenesis) is the way to treat any disease. In this case we can consider Kapha and Vata as Doshas, Rasa, Rakta, Mamsa, Medas as Dooshyas. Rasavaha, Rakthavaha, Mamsavaha, Medovaha and Arthava vaha are involved in the etiopathogenesis of the disease. Sanga (blockage) and Granthi (cyst) can be considered as their Dushti carana (vitiating factor). Site of origin of the disease is Kshota and the specific site of manifestation is Garbhshayya (uterus).

The ultimate aim of the treatment was to release the obstructed Vata and to enable its normal functioning in the Kshota especially in Garbhasaya. The obstruction was because of the accumulated Kapha in the channels of Vata especially in Artavavavaha Srotas. The combination of Chiruviviladi kwahta and Vaisvanara Churna is VatakaphaShamana in its action along with added benefits including kindling the Agni and alleviating the Avarana. The other set of medicine, Nirgundyadi kashaya and Triphala gugulu is also Kaptha Shamana with an added property of Kriminashana. As a result, Kapha might have been pacified and thus the pruritus and abnormal vaginal discharge diminished. Annabhedisindoora as Chedana, Lekhana, Vatakapha Shamana with a specific action Rajapravarthaka when given with Jambira Svarasa as Sahapana it becomes Deepana, Anulomana and also induces the bleeding.

Once the expected outcome from Purva karma is obtained, it was decided to move to the next phase- Shodhana therapies. As Kaptha and Meda became the key factors for the development of the disease, it was decided to opt Rukṣana procedure as a preliminary step. Udvarthanana along with Takrapana was Kaphamedonasana by default [[11], Sutrasthana 2/15], [[11], Sutrasthana 5/33]. It took 9 days to obtain Rukṣana [[11], Sutrasthana 16/35]. The next step was Snehapana with plain Sarṣhpa taila which became the ideal medicine for Snehana in the conditions where predominance of Kapha and Vata. It was decided to go for Accha Snehapana and the initial dose given was 25 ml. It took total 6 days to observe the ideal signs and symptoms which were expected to occur after Accha Snehapana. After Abhyanga Swedana and Utklesana, Vamana was the selected Shodhana therapy because of the involvement of Kapha dosa [[11], Sutrasthana 1/25]. The standard operative procedure of Vamana was carried out and the symptoms of Samyuk yoga including Pitadasana were obtained. Then Virechana was administered using Gandharvahastadi eradana taila.

It was decided to administer Basti as a next step because of the involvement of Vatadosha. Specific indications including Rajonas also pointed to the necessity of Basti Anuvanasana basti was given with Pipalyadi Anuvasana taila which is Vata Anulomana and

6. Follow-up and outcomes

After the treatment body weight of the patient reduced to 75 kg and BMI was found to be 27.43. Her menstrual cycle became frequency improved substantially. On per speculum examination it was observed that abnormal vaginal discharge and other visible changes due to cervicitis reduced considerably.

7. Discussion

The diagnosis was confirmed as primary infertility associated with PCOS. According to Ayurveda this disease is Vandretyava due to Nashtartava where Avarana of Artavavahva srotas becomes the chief causative factor [13, Sharira sthana 2/21]. The Nidana (causative factors) attributed could be Ayayamaya (sedentary) and intake of excess Abhishyandi Ahara leading to Kaptha Medo Dushti and

Table 1: Timeline.

| Date          | Observation/remarks | Treatment                                      |
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Kapha Shamana in nature [[11], Sutrasthana 19/2–3]. For achieving the complete relief from Kaphamedovruddhi, Lekhana Basti which is a modified form of Eranda moola kwatha basti was selected [[11], Kalpasthana 4/7–10]. Uttarabasti which forms the prime treatment in Garbhasya roga was also administered during the course [[11], Sutrasthana 19/70]. Mahanarayana taila which is Brimhna, Vata- Shamana with an added indication in Vandhyatva was selected as Uttar Basti medicine. Uttar Basti was repeated on 12th, 13th and 14th days of her next menstrual cycle. Shodhana treatment may have contributed in reduction of fat deposits and acceleration of the maturation of graffian follicles. Thus, the follicles ruptured and ovulation occurred detected in USS on 8/07/2019. She was given Phalasarps to improve quality of endometrium and achieving Garbhashtapan. Urine pregnancy test was suggested after a week of absence of menses and the result found to be positive [[11], Utaratantra 34/63–67].

She delivered a female baby on 8/3/2020 through LSCS. Each and every phase of the management were monitored and recorded carefully. Through the Ayurvedic interventions it took a total of 8 months to get the positive result (as the initial visit of the patient in OP was on 11/10/2018). While she conceived, her date of LMP was 22/06/2019. The successful outcome in the present case signifies the relevance of logical selection of medicines according to the stage, judicious combination of internal medicines, procedures, diet and regimen for the complete cure of the disease.

### 8. Conclusion

This case report shows an insight into systematic learning how to manage primary infertility associated with PCOS effectively through Ayurvedic treatment modalities. The result obtained in this single case study is encouraging and the protocol followed here may be subjected for trial in larger samples.

### Informed consent

Written consent was obtained from the couple for the purpose of publication of their clinical details.

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### Conflict of Interest

None declared.

### Author contributions

M.A. Asmabi was the physician responsible for the assessment, treatment plan and interaction with the patient.  
M.K. Jithesh contributed in data analysis, interpretation, discussion and drafting of the case report.

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