



ORIGINAL RESEARCH PAPER

Ayurveda

MANAGEMENT OF INFERTILITY ASSOCIATED WITH POLYCYSTIC OVARIAN SYNDROME: A CASE REPORT

KEY WORDS: PCOS; Infertility; Vandhya; Yoniroga; Pumsavana

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ABSTRACT

Polycystic ovarian syndrome (PCOS) forms a major cause of infertility associated with ovulatory dysfunction. Ayurveda considers excellence of four factors, Rtu, Kshetra, Ambu and beeja for formation of a healthy progeny and PCOS invariably affects the quality of all the four factors leading to either infertility or an unhealthy conception. While modern medicine aims at hormonal management to improve conception rates ayurveda gives a holistic approach to improve the general health and conception with the excellence of all the four factors. This case report represents ayurvedic management of infertility due to PCOS after the patient failed to conceive with the conventional modern therapy. Patient started getting regular cycles with 3 months of treatment and conceived normally thereafter. Main aim of the treatment was to ensure proper dhatu parinama and to reduce the existing kapha and medo vridhi thereby bringing the doshas to prakritha avastha and to try for conception thereafter.

INTRODUCTION:

Infertility is defined as the inability to conceive after 1 year of unprotected intercourse of reasonable frequency¹. It's a common condition seen among 10 -15% of couples in the reproductive age group. As per the current statistics male is directly responsible in about 30-40 percent, the female in about 40-55 percent and both are responsible in about 10 percent cases. The remaining 10 percent, is unexplained, in spite of thorough investigations with modern technical knowhow². A critical evaluation of causes of female infertility shows that ovulatory factors - which includes anovulation or oligo ovulation, decreased ovarian reserve, luteal phase defect and luteinized unruptured follicle - contributes almost 30 -40 % of the cases. Among the anovulatory/oligo ovulatory causes of infertility Polycystic Ovarian Syndrome (PCOS) plays a major role. Polycystic ovarian syndrome (PCOS) is a common endocrinopathy typified by oligo-ovulation or anovulation, signs of androgen excess, and multiple small ovarian cysts. The etiology of the disease still remain unclear though some have suggested an autosomal dominant inheritance pattern. In women with PCOS, symptoms may include menstrual irregularities, infertility, manifestations of androgen excess, or other endocrine dysfunction.

A direct description of the Polycystic Ovarian Syndrome in classical textbooks remains elusive. For the same reason, the diagnosis and management of the condition should be based on the principles of *Roga - Rogi pareeksha* explained in classics. After considering the clinical features management principles of *Yonirogas* like *Vandhya* and *Artava Vyapads* (*Arthavakshaya, Nashtartava, Asrugdhara*) can be considered for menstrual irregularities such as oligo menorrhoea, amenorrhoea etc. Treatment of Obesity and other clinical features like acne, hirsutism, acanthosis nigricans, baldness etc can be done by adopting the management principles of *sthoulya* and other *santharpanajanya rogas* like *prameha, kusta* etc along with the management principles of *ksudra rogas* like *Mukhadoshika, Khalathi* etc.

CASE REPORT:

A non- consanguineous married couple presented with complaint of inability to conceive even after 2 years of regular unprotected sexual life. Male partner was apparently normal then and the female partner was having menstrual irregularities which started a year before marriage. They had consulted a gynaecologist for infertility management after one year of marriage during which a detailed evaluation of the case was done and the female partner was diagnosed with PCOS. Seminal parameters of the male were normal and the lady was advised with tablets Siphene, Gynovit and folic acid supplement for 3 months. On failure to conceive after three months of medication the couple decided to go for ayurvedic management.

Personal History Of Female Partner:

- a)Age : 25 years
- b)Occupation : House wife.
- c)Diet : Non veg
- d)Sleep : Disturbed (habit of day sleeping).
- e)Bowel : Irregular.
- f)Micturition : Normal.
- g)Psychological status : Normal
- h)Appetite : Normal
- i)Body built : Moderate
- j)Weight : 63 kg
- k)Height : 155cm

Menstrual History

- a)Age of menarche : 12 years
- b)Characteristics of menstrual bleeding:
 - Duration - < 3 days
 - Interval: 2 - 3 months
 - Amount - moderate. (No. Of pads changed/ day - 2)
 - Colour - blackish red
 - Odour - non specific
 - Clots - absent
 - Pain - absent

Physical Examination:

Face : Prominent facial hairs (esp. upper lip)
 Neck : Acanthosis Nigricans (Grade 1)

On detailed evaluation of all the signs and symptoms of the patient, it was considered as a *vata kapha* predominant condition with involvement of *rasa, rakta, mamsa, medas, and sukla dhatus* and their respective *srotas*. The treatment was decided as follows:

Treatment Phase 1: Advised To Follow For Three Cycles Starting From Last Menstrual Period (28/03/2017)

Medicines:-	
Sapthasaram Kashayam	: 15ml with 45ml Luke warm water twice before food
Kanchanara guggulu	: 2 tabs twice daily after food
Kumaryasavam	: 30 ml twice daily after food
Diet:-	
Advised minimal use of sweet, spicy, oily and non-vegetarian diet.	
Advised inclusion of <i>tila taila</i> in daily cooking	
<i>Sunti and dhanyaka</i> water for drinking.	
Activities:	
Advised walking for atleast half an hour a day	

A follow up scan around her next expected cycle revealed (20/04/2017) no follicular growth and she got her next cycle at the end of May 2017, two months after taking medicines. The

further two cycles appeared at normal intervals and the patient was reviewed after 3 months of treatment. There was reduction in her body weight from 63kgs to 58 kg and her cycle interval was around 28 – 32 days. Patient was advised to stop the present medications and was advised with new medicines.

Treatment Phase 2: Advised To Follow Till Conception (from July 2017 Till Conception)

Medicines:-
Sukumara Ghrutha : 15g daily before breakfast (from 5 th to 20 th day of cycle)
Phalasarpi : 15g at bed time (from 21 st day till periods)
Leaf bud of F.bengalensis : 8 nos daily with milk (early morning)
Diet:-
Advised minimal use of sweet, spicy, oily and non-vegetarian diet.
Advised inclusion of <i>tila taila</i> in daily cooking
<i>Sunti</i> and <i>dhanyaka</i> water for drinking.
Activities:-
Advised walking for atleast half an hour a day
Advised regular intercourse between 10 th and 20 th day of cycle

As the lady failed to conceive after 2 normal cycles the she was advised to perform an Ultra sonography to assess follicular growth, after her cycles in August 2017, which revealed a normal study with proper follicular growth and rupture. She was advised to continue the same treatment again and was advised for UPT test on missing her periods in October 2017 which turned out to be positive. Intra-uterine pregnancy was confirmed by the doubling of two beta- HCG values taken 48 hours apart. Early obstetrical scan in November 2017 confirmed pregnancy and fetal cardiac activity was noted. The pregnancy period was uneventful and the couple was blessed with a baby boy of birth weight 3.2kgs through normal labour in June 2018.

Clinical Reports:

USG PELVIS

Name: [Redacted] Age: 25 Years Parity: [Redacted]

Complain: P5G 12th day (TAS and TVS done) L.M.P. 28.01.17

Uterus: 5.5x3.8x4.4 cm, no focal myometrial lesions

Endometrium: Triple line 6.8 mm

Cervix: Normal

Right Ovary: NS, multiple peripherally arranged small follicles, no DF

Left Ovary: NS, multiple peripherally arranged small follicles, no DF

Param: No adnexal lesions

P.O.D: No free fluid

Liver: [Redacted]

Right Kidney: [Redacted]

Left Kidney: [Redacted]

UB: Dilated, with normal, clear contents

Remarks: Suggest review on Wednesday to assess follicle growth

Approach: [Redacted]

US SCAN FOLLICULAR STUDY

Thicker in full regular in middle brown zone

Uterus measures: 7.8x5.2x4.8 cm shows normal myometrial stratification

Right ovary measures: 4x2.3cm

Left ovary measures: 3.8x2.2cm

No adnexal masses seen. No fluid in pouch of Douglas.

L.M.P: 28.8.2017 Periods: Regular

DATE	DAY	Dominant Follicle	Endometrium	PGO	
		Right Ovary	Left Ovary	Fluid	
7.8.2017	11th	11x5mm	11x10mm	2.8mm	Nil
8.8.2017	12th	11x5mm	10x8mm	4.8mm	Nil
11.8.2017	15th	20x17mm	10x8mm	9.2mm	Nil
13.8.2017	17th	16x15mm (ruptured)	10x8mm	3.2mm	Nil

CONCLUSION: Normal Study

DISCUSSION:

Phase 1 of the treatment was aimed at reducing the *vata kapha medo* dominance of the patient and to promote *Agni deepana* to ensure proper *dhatu parinama* and to bring *anuloma gati* of *vata*. *Saptasaram Kashayam* mentioned in *Sahasrayogam* is an ideal preparation that cause *vata kapha shamana* along with *Apana anulomana* which is very much essential for proper artava formation and expulsion. The combination with its

deepana property also ensures proper *dhatu parinama* which again leads to proper *artava* formation. Considering the cystic appearance of ovaries as *Granthi*, a *granthihara* medicine like *Kanchanara guggulu* (KG) was selected. *Kapha – medohara* property of KG along with proper diet and exercise also helped in reducing the weight. *Kumaryasava* which is considered to be *bala Varna Agni deepana*, *vrshya*, *prameha nashana* etc, as per the reference, was advised to ensure proper metabolism at the level of *dhatu*s. She was advised to drink *shunti* and *dhanyaka* water to prevent development of *agnimandhya*.

Phase 2 of the treatment was aimed at bringing about a viable conception. *Sukumara ghrutha* was chosen in the follicular phase of the cycle to ensure proper follicle development and endometrial formation. The preparation is *balya*, *Rasayana*, *deepana* and *vata anulomana*, so considering the *kaphaja* nature of the follicular phase it was presumed to support the function of the body in formation of follicle and endometrium and was advised to the patient. *Phala sarpi* which is traditionally used for infertility treatment, as per the reference '*mriyamanam cha prajanam*' was selected in the luteal phase to ensure proper conception and development if fertilization occurred. *Palasarpi*, with mostly *usna swabhava* ingredients, ensures proper formation of secretory endometrium and helps in implantation if conception occurred. Leaf buds of *Ficus benagalensis* with milk is one among the *Pumsavana* drugs mentioned invariably by all the acharyas either as *nasya* or oral medication. Dalhana, commentator of *Sushruta Samhita*, has explained that *pumsavana* is done with three objectives, Pre-conceptionally for achievement of conception, immediately after conception for its proper implantation and post conception, within 3 months, for having male progeny. The concept of using *pumsavan* drugs prior to conception was leveraged in this case to aid conception. As the patient had easy availability of leaf buds she was advised to have it regularly with milk.

CONCLUSION:

Though PCOS, as a single entity is unexplained in ayurveda, it can be considered as a condition with impairment of *dosha*, *dhatu* and *Agni* at various levels leading to various clinical presentations leading to infertility. So aim of ayurvedic management should be to correct *Agni* at *dhatu* level and to ensure proper *vata anuloma* for the proper formation of *artava*. Most of the clinical cases presenting with oligo/amenorrhoea is usually associated with *agnimandhya* at *dhatu level* with *kapha medo vridhi* and associated *vata vaigunya* as discussed in the case above. Hence it can be considered that combination of medicines given initially helped in the proper formation of *artava* and the second phase of treatment helped in the achieving conception.

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