

Case Study: Role of Panchkarma in Anovulatory Infertility

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Date Of Submission: 15-05-2021

Date Of Acceptance: 26-05-2021

ABSTRACT-Secondary Infertility is defined as the inability of a couple to conceive who had at least one prior conception. Ovarian factor is the most frequent cause of secondary infertility in women. Polycystic Ovarian Syndrome is one of the main leading cause of Secondary infertility. Polycystic Ovarian Syndrome is a common endocrinological disorder characterized by menstrual irregularities and anovulation. A 32 year old female came to us with the complaint of failure to conceive since 4 years, irregular cycle, weight gain and disturbed sleep since 1 year. Sonography reveals multiple small follicles in bilateral ovaries. Based on clinical findings along with sonological evidences PCOS was diagnosed and a treatment protocol was selected for managing PCOS and finally to achieve conception. **Treatment protocol**-Virechana karma and Lekhana Basti followed by Uttarbasti was selected as treatment. After treatment patient conceived. **Discussion:** Main factor for infertility is Beejadushti and vitiation of vata dosha. In this case treatment was concerned towards pacifying the vitiated vata dosha and making ovulation fruitful by curing Beejadushti with Virechana karma.

As normalization of Vata dosha helps the yoni to retain Garbha quickly, or helps the women to conceive immediately so after Virechana karma, Uttarbasti with Phalalaghrita was planned.

KEYWORDS- Vandhyatva, Virechana, Basti, Anovulation, Infertility, PCOS

I. INTRODUCTION

Infertility is defined as the failure of a couple to conceive after one year of regular unprotected coitus. Infertility is of two types – Primary Infertility and Secondary Infertility. Primary Infertility means where someone who has never conceived. Secondary infertility means the inability to conceive a couple who had at least one prior conception. 30-40% of women with infertility are due to ovarian factor.

PCOS is one of the main leading cause of Secondary infertility. PCOS is observed in women

seeking medical advice for infertility as well as irregular menstrual bleeding.

Polycystic Ovarian Syndrome is a common endocrinopathy in a women of reproductive age group. The prevalence of PCOS is 6-10% globally and accounts 50% of oligo anovulation, menstrual irregularities and hyperandrogenism.^{1,2}

Infertility can be correlated with Vandhyatva or Vandhya yonivyapada in Ayurveda. According to kashyapa, Vandhya can be termed as Pushpghani jataharani i.e. having useless pushpa or menstruation (Unovulation i.e. no conception).³ Menstrual irregularities can be mentioned in context of Anartava, Artavkshaya and Arajaska. In all these conditions menses is delayed or Artava is produced in less quantity. Anovulation can be compared to Vandhya yonivyapada.

And Vandhya can be defined as Nashtartavam.⁴

We all know that Yonidoshas occur due to aggravation of all the three doshas but mainly due to vitiation of Vata doshas.⁵

For proper fertilization, implantation and development of healthy progeny the four factors- Ritu (fertile period), Kshetra (female reproductive tract), Ambu (nutritional factors) and Beeja (Sperm and ovum) are essential. Any defect in these four leads to infertility.⁶

So Virechana and Basti Karma was selected in this particular study. As Virechana Karma is mainly responsible for Anulomana of Vata and it also increases the efficacy of Beeja.⁷

Basti is the main line of treatment for Vata pradhan Vyadhis.⁸ So Shodhana Basti was done followed by Uttarbasti for three consecutive cycles.

II. CASE REPORT

A 32 year old female, visited the Rajiv Gandhi Post Graduate Ayurvedic College and Hospital (H.P.) with the complaint of inability to conceive a second child inspite of not using any contraceptives since 4 years. Patient also had

complaint of irregular menses with cycle length of 60-70 days , gradual weight gain ,disturbed sleep, indigestion, acidity and flatulence since one year. Patient already had female child delivered by LSCS due to non progression of labor 6 years back . On

sonography she was diagnosed with bilateral PCOS.

PAST HISTORY-No H/O Hypertension, Diabetes Mellitus, Thyroid disorders

MENSTRUAL HISTORY-

Menarche at 13 years of age

	PAST HISTORY	PRESENT HISTORY
INTERVAL	32-34 days	60-70 days
DURATION	5-6 days	3-4 days
AMOUNT	3-4 pads /day	2-3 pads/ day

OBSTETRIC HISTORY- G2 P1 A0 L1

Year and date	Pregnancy events	Labor events	Methods of delivery	Puerperium	Baby
July 2014	Well covered antenatally, uneventful	Induction failure	LSCS due to CPD 6 yrs back	Uneventful	Baby girl weight- 3.5 kg Cried at birth Breast fed (1year) alive and well

GENERAL PHYSICAL EXAMINATION-

Built – Obese
 Nourishment-Good
 Tongue –Moist ,non coated
 Pallor/cyanosis / lymphadenopathy- Not present
 Height-5ft 4inch
 Weight-85 kg
 B.P. -118/78mm of Hg
 PR- 78/min

SYSTEMIC EXAMINATION-

Cardiovascular system- NAD
 Respiratory system- NAD
 CNS - Fully conscious, well oriented to time , place and person
 Per abdomen - Soft and no organomegaly present

INVESTIGATIONS-

	BT	AT
Hb	11gm %	12.5 gm%
ESR	18mm fall after 1 hr	8 mm fall after 1 hr
FBS	90 mg /dl	85 mg /dl
LFT	WNL	WNL
RFT	WNL	WNL
LIPID PROFILE-		
Cholesterol	177mg/dl	148 mg/dl
LDL	113mg/dl	82mg/dl
HDL	39mg/dl	44mg/dl
TG	100mg/dl	102mg/dl
VLDL	20mg/dl	22mg/dl

LH	18.95MIU/L	8.95MIU/L
FSH	9.79MIU/L	9.79MIU/L
FOLLICULAR STUDY	Showed Anovulatory cycle	Showed Ovulatory cycle

THYROID PROFILE-

T3- 1.15 ng/ml
 T4-8.30 ug/dl
 TSH- 3.976 uIU/ml

SERUM INSULIN- 15.93mIU/ml
 TESTOSTERONE,TOTAL -28.50 ng/dl

URINE ROUTINE- Color –pale yellow
 Volume-20ml
 Appearance-clear

URINE MICROSCOPY-pus cells -2-3/hpf
 Epithelial cells-5-8/hpf

HUSBAND SEMEN ANALYSIS - SHOWED NORMAL PICTURE

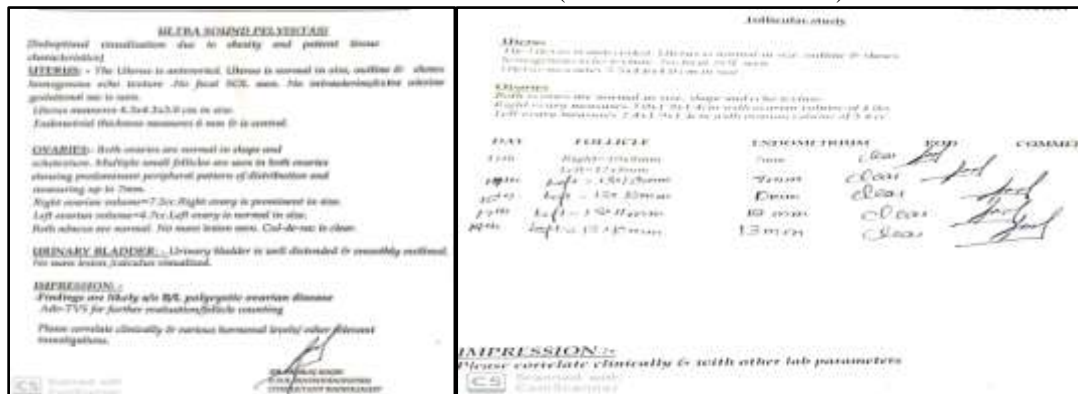
Physical examination

volume	5 ml
Color	whitish
Ph	alkaline
Liquefaction time	10 min

Microscopy examination

Total count	80 million/cc
Rapid progressive	80%
Sluggish progressive	10%
Non progressive	5%
Immotile	5%
Pus cells	0-1/hpf

USG REPORT AND FOLLICULAR STUDY REPORT-(BEFORE TREATMENT)



ULTRASONOGRAPHY
 Suboptimal visualization due to obesity and patient tissue characteristics.
UTERUS - The uterus is anteverted. Uterus is normal in size, outline & shows homogeneous echo texture. No focal SOL seen. No retrocervical/ligamentous nodules. Endometrial thickness measures 0.8 cm. It is normal.
OVARIES - Both ovaries are normal in shape and echotexture. Multiple small follicles are seen in both ovaries showing predominant peripheral pattern of distribution and measuring up to 7mm.
 Right ovarian volume=7.2cc. Right ovary is positioned in situ.
 Left ovarian volume=4.7cc. Left ovary is normal in size.
 Both adnexa are normal. No mass lesions seen. Col-de-sac is clean.
URINARY BLADDER - Urinary bladder is well distended & normally outlined. No mass lesions/obstruction visualized.
IMPRESSION - Findings are likely due to polycystic ovarian disease. Adv-TUS for further evaluation,if clinically warranted.
 Please correlate clinically & various hormonal levels/other relevant investigations.

FOLLICULAR STUDY
 Microscopic examination of the follicular study was performed. The follicles were observed in the ovary. The follicular study was performed on the 10th day of the cycle. The follicular study was performed on the 10th day of the cycle. The follicular study was performed on the 10th day of the cycle.
IMPRESSION - Please correlate clinically & with other lab parameters.

TREATMENT PLANNED FOR THE PATIENT-

Virechana karma and Basti karma

VIRECHANA KARMA-

Procedure and drugs used	Days	Dosage
Pachana with chitrakadi vati	For 3 days	2 BD with luke warm water
Snehpana with Panchatikta ghrita	For 4 days	Starting with 50 ml and gradually increasing upto 200 ml till appearance of samyak snigdha lakshana
Sarvanga Abhyanga with ksheerbala taila followed by Sarvanga Swedana	For 3 days	
Virechana karma with triphala kwath 150 ml and 15 gm trivrita +5 gm sanaya patra+15gm haritaki +5gm saindhava lavna	For 1 day	As per kostha of patient

- 15 Vegas were observed with this Virechana yoga. Samsarjanakarma was advised for 7 days.

After Virechana karma ,

Lekhana Basti and Uttar Basti with Phalaghrita was done for 3 consecutive cycles

PROCEDURE	MEDICINE DRUG	DOSE	DURATION
LEKHANA BASTI	Madhu-100gm Saindhav lavana -5gm Sneha (saindhavadi tail)- 60 ml Kwath- Triphala-300ml Prakshepa- Gomutra-150ml Hinga-250mg Shilajeet-125mg Yavakshar -2gm Kasisa -125 mg Tutha -125 mg	500ml	3 days for 3 consecutive cycles
UTTARBASTI	Phalghrita(first cycle)	4ml	For 1 day
	Second cycle	4ml	For 2 days
	Third cycle	4 ml	For 3 days

III. RESULT

- After Virechana and Basti karma, follicular study was done which showed normal study and patient conceived successfully.

FOLLICULAR STUDY AND USG AFTER TREATMENT-



IV. DISCUSSION

According to Ayurveda Shodhana Chikitsa (Purification procedure) remove the toxic elements developed in body system and improve the health by maintaining the equilibrium of Tridosha and proper nourishment of Uttarottara dhatu (succeeding tissues). It also corrects any dearrangement in hormonal system. Uttarabasti helps in expelling vitiated Dosha from female reproductive tract and highly beneficial in nourishing uterus.

SHODHAN CHIKITSA (Virechana Karma)- Virechana karma was chosen for Anuloman of Vata and Beejakarmukta. Acharya Kashyap told that by the use of purgation, the Indriyas get clarified, Dhatus get cleansed and the Beeja (sperm, ovum) become efficacious.³

DeepanPachan

It is mandatory to give Deepana–Pachana drug before administration of Aabhyantarasnehpana because of their inherent properties of Amapachana and increasing the quantum of Agni. Amapachana helps to reduce the Pichilita of morbid matter so that they can be easily dislodged so Chitrakaadivati were used for 3 days for Deepan Pachana of the patient. It normalizes the Jatharagni and Dhataavagni thereby helping in proper production of Rasa and ArtavaDhatu.

SNEHPANA- Panchtikta Ghrita was used for Snehpana and samyak snigdha lakshana was observed on 4 th day. It has Tiktarasatmak drugs which cause Amapacahana, increases the Jatharagni. Ghrita is Vatapitta Shamaka and it is beneficial for Rasa , Shukra , oja.⁹

Virechana

Virechana karma was chosen for Shodhana .
 Drugs used for virechana-

Snayapatrachurna is laxatives, promotes digestive fire and purifies the body.

Trivrut used in Virechana balances Pitta and Kapha and useful for inflammation. SaindhavLavana boosts cellular absorption of minerals, it helps in getting rid of toxic minerals. Triphala executes Rechana Karma due to its Sara guna.

As said earlier that for proper fertilization, implantation and development for healthy progeny the four factors – Ritu (fertile period), kshetra (female reproductive tract), Ambu (nutritional factors) and Beeja (Sperm and ovum) are essential.

As far as Virechana is concerned, Acharya Charaka has explained that Virechana does clarity of strotas, normalcy of agni.¹⁰ i.e. improving the metabolism. which leads to proper Rasadi dhatu formation. Acharya Sushruta also explained that Virechana brings back vitiated Rasaadi Dhatus to its normal state and we all know that Rasa dhatu is responsible for Garbha poshan.(i.e. ambu factor).¹¹ Also the patient was advised to do intercourse in fertile period (ritu factor) causes . Acharya Kashyap told that by the use of purgation, the Indriyas get clarified, Dhatus get cleansed and the Beeja (sperm, ovum) become efficacious i.e.(Beeja factor).¹²

Uttarbasti-According to Acharyas, Uttarbasti should be given after cleansing her body by use of two or three Shodhana Basti .So in three consecutive cycles after three Lekhana basti, Uttarbasti were given.¹³

Due to normalization of Vata by the use of Uttarbasti , the yoni retains the Garbha quickly or the woman conceive immediately , so it means Uttarbasti prepare the kshetra for Garbha dharana i.e. (kshetra factor) .¹⁴

Drugs used in lekha Basti –

Madhu, saindhav, sneha, prakshepa dravya (ushakadi gana), gomutra, triphala kwath.¹⁵ Thus by correcting

Karma of each drug-¹⁶

Amlaki	Tridoshara, Vrishya and prajasthapana
Haritaki	Vatashamaka, vrishya and garbhashaya shotha hara
Vibhitaka	Kaphavatashamka and artavajanana
Ushakadi	Kaphavatashamak and Artavajanana
Hingu	Kaphavatashamaka and Artavajanana
Tutha	Kaphahara and Lekhana Bhedana property
Kasisa	Vatakapha hara and Raja pravartaka
Shilajita	Yogvahi
Gomutra	Vatapittahara

Basti normalize the function of Apana vayu leading to normal raja pravritti and normal beeja nirmana. Triphala had the property of Balya , deepana pachana, Yonivishodhana, Artavajanana, and Beejotsarga.

UTTARBASTI BY PHALAGHRITA-

Uttarbasti acting directly on the sthana of the pathogenesis of this disease i.e. yoni. Uttarbasti is indicated in Yonivyapad, pushpanasha, garbhashaya vikara.

Patient were given three courses of Phalaghrita Uttarbasti administered for three days starting from just next day of cessation of menses for three consecutive cycles.

PROPERTIES OF PHALAGHRITA-

Phalaghrita described in Sharangdhar, Yogratanakar, Vagabhata and Bhavaprakash. Vandhyatva is Vata dominated Sannipataja Vyadhi. Phalaghrita has properties like Tikta, Madhura Vipaka and also Ushna and Sheetavirya. It has also Deepana, Pachana, Lekhana, Anulomana, Shothahara, Krimighna, Balya, Prajasthapana and Yoni Pradoshanashaka properties which works mainly on female reproductive system. This Phalaghrita increases the thickness of endometrium and nourishes the endometrium for conception and decreases the chances of Miscarriage, Still birth, and Preterm baby. Hence Phalaghrita was used for Uttarbasti.

Uttarbasti given in intrauterine route activates the normal function of vata and stimulates the ovarian hormones, ultimately achieving ovulation. Ovaries contain receptors which receive hormones secreted by hypothalamus and pituitary gland. Uttarbasti stimulates these receptors , so that proper maturation of follicle and ovulation occur in each cycle.

V. CONCLUSION:

Holistic Ayurvedic approach can be very beneficial in Infertility. According to Ayurveda each individual has a unique body constituent and treatment should be directed according to individual body type. Panchkarma procedures (Cleansing methods) balances the doshas, leads to formation of Shudha Artava dhatu which are essential for successful conception. These approaches improve the health of patient which leads to increase likelihood of conception. In this case the line of management caused Vata Shamana (main factor for Vandhyatava), Shudha Artava updhatu Nirmana ,Beejakarmukta and strotoshudhi. All the four factors (Ritu, Kshetra, Ambu, Beeja) were considered and made effective for healthy progeny by Virechana Karma and Uttarbasti .It also provided strength to the reproductive tissues. All these lead to successful conception.

ACKNOWLEDGMENT- I would like to express my extreme gratitude towards Faculty and PG Scholars of Panchkarma Dept, Prasuti Tantra and Stree Roga Dept. of Rajiv Gandhi Post Graduate Ayurvedic College And Hospital Paprola Distt Kangra (H.P.), Also Patient and her Attendant for their valuable support.

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