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EFFECT OF *SHIROPICHU* AND *NASYA* IN MANAGEMENT OF INFERTILITY DUE TO POOR OVARIAN RESERVE- A CASE STUDY

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ABSTRACT

Infertility is defined as a Failure to conceive within one or more years of regular intercourse without any contraceptive measures. (Sixty) 60 to 80 (eighty) millions of couples suffering from infertility in worldwide, approx. 15 to 20 million (25 %) cases reported in India every year . As per world health organization's report, one in every four couples developing countries had infertility problems. Poor ovarian reserve is one of the important cause of infertility in reproductive age groups. This case study was planned, to find an effective, non-invasive *Ayurveda* treatment for infertility due to poor ovarian reserve. A 35-year-old female, unable to conceive since 2 years, visited institutional OPD of *Prasuti Tantra evum Stri Roga* department, in January 2023. She was diagnosed with secondary infertility due to a low Anti Mullerian Hormone(AMH) and raised Prolactin levels. Provisional diagnose was made as *Garbha Sravi* or *Balakashaya Janya Vandhya.* She was Planned for *Shiropichu* (application of cotton pad soaked in medicated oil or *ghrita* on head) and *Nasya* (administration of medicated oil or *ghrita* through nostrils) with *Phala Ghrita* for 07 days, during follicular phase for 03 consecutive cycles. After treatment the patient conceived naturally. Significant increase in the levels of AMH was seen and Prolactin level comes within normal limits. *Shiropichu* and *Nasya* was found to be effective in poor ovarian reserve in reproductive-aged women.

Keywords- *Infertility, Anti Mullerian Hormone, AMH, Prolactin, Phala Ghrita, Shiropichu, Nasya*

INTRODUCTION:

Infertility is defined as a Failure to conceive within one or more years of regular intercourse without any contraceptive measures. Out of 60 to 80 million couples suffering from infertility worldwide, approx. 15 to 20 million cases are reported in India every year. As per world health organization's report, one in every four couples had infertility issues[1].

Total number of primary oocytes at birth is estimated about 2 million. At puberty some 4 lacs primary oocytes are left behind. Out of these some 400 are likely to ovulate during the entire reproductive life.[2]

Anti-Mullerian hormone (AMH) is released by granulosa cells in developing follicles and is an Important biomarker for ovarian reserve. Poor ovarian reserve indicates reduction in the quantity of ovarian follicles.[3]

Folliculogenisis depends on normal functioning of Hypothalamic pituitary ovarian axis . Pulsatile secretion of

Gonadotropin releasing hormone (GnRH) from hypothalamus triggers proper secretion of Gonadotrophins (FSH and LH) from anterior pituitary. Which in turn leads to stimulate formation of antral follicles, proliferation of granulosa cells and maturation of dominant follicle.[4]

According to classical *Ayurvedic* texts like *Charaka Samhita, Sushruta Samhita*, and *Ashtanga Hridaya*, successful conception depends on four essential factors known as *Garbha Sambhava Samagri*.[5] As favorable season, fertile land, proper watering, and good seeds result in a good crop, similarly, favorable essential four factors described by *Acharya Sushruta* results in healthy progeny. These factors are:

1. *Ritu* (Fertile period)
2. *Kshetra* (Healthy body and Reproductive organs)
3. *Ambu* (Nourishing factor)
4. *Beej* (ovum & sperm)

Abnormality in any of the above said factors causes infertility, Poor ovarian reserve are increasing day by day. The general line of management in conventional medicine system is through DHEA supplements which help in improving the quality and quantity of eggs.[6]

Objective: To find an effective *Ayurveda* procedure to manage infertility due to poor ovarian reserve and to assess effect of *Siropichu* and *Nasya* on AMH level.

CASE REPORT-

A 35 years old female came to OPD of *Prasuti Tantra* and *Stri Roga* Department at Pt. Khushilal sharma govt. Ayu. hospital on 23/02/23 OPD no. 20230011631). She complained of difficulty in conceiving after first issue. Husband's Semen analysis report was found to be within the normal values. Female routine hematological history was found to be within the normal limits. The serological report found, low AMH value of 0.38 ng/mL dated 04/06/22 The patient was advised for ovulation induction under conventional medical system with assisted methods of reproduction. Hysterosalpingography (HSG) was performed on 08/06/2022, found to be normal with bilateral peritoneal spillage. Follicular study done on 30/06.2022 showed only 1-2 antral follicles. After ovulation induction, no dominant follicles were seen in Follicular study. Hence, they consulted for *Ayurvedic* treatment and visited PTSR OPD of Pt. Khushilal sharma Govt. Ayurvedic college and hospital..

Marital history: (Married in the year 2018)

Married and Active married life- 6 years

Menstrual history:

Duration- 2 days
Cycle- 28 days
Flow- 2days
Pad- 1/ day
Clots- absent
Pain- mild

Obstetric history: $G_2 P_1 L_1 A_1$

G_1-Fch- 5 years (full tern normal delivery)
G_2- Spontaneous abortion at 6 weeks of gestation, 3 years before.

Occupational history:

1. Occupation (wife)– House maker.
2. Occupation (Husband)– Photographer, running photo studio.

Clinical findings:

Darshan Sparshan Pariksha-

The patient had a normal build with a body weight of 57 kg and height of 152 cm. with body mass index of 24.7 kg/m^2. There was no evidence of pallor, lymphadenopathy, clubbing of fingers, or edema noticed on physical examination.

The findings obtained on per vaginal and per speculum examination were normal.

- Uterus: Anteverted - Anteflexed, Normal in size and shape
- Cervix: Downward, Firm
- Cervical motion tenderness: Absent
- All fornices: Non -tender

On per speculum examination -

1. No abnormal discharge seen
2. Cervix-Normal size, few nabothian cyst present, No erosion,
3. Vaginal walls: Healthy, Pinkish

DASHVIDHA PARIKSHA:

Prakrirti*: Vatapittaj*
Vikriti*: Vishmasamveta*
Sanhana*: Madhyama*
Pramana*: Madhyama*
Satmaya*: Sarvarasa satmaya*
Satva*: Madhyama*
Ahara shakti*: Madhyama*
Vyayama shakti*: Madhyama*

ASHTAVIDHA PARIKSHA:

Nadi: *Vatapittaj*
Mala: *Sama*
Mutra: *Samanya*
Jivha: *Malavrat*
Shabda *: Madhyama*
Sparsha: *Ruksha*
Drika: *Samanya*
Akriti: *Madhyama*

Declaration of patient consent:

The author certifies that; appropriate consent has been obtained from patient. Before treatment.

Diagnostic assessment:

Provisional diagnosis : *Garbha Sravi Vandhya, Balakashaya Janya Vandhya*

Final diagnosis: Secondary infertility associated with low ovarian reserve.

This condition could be considered as *Kaka Vandhya. Sapraja Vandhya* or *Dhatukshayajanya Vandyatva* from an *Ayurvedic* perspective.

SAMPRAPTI:

According to Ayurveda vitiation of *Vata dosha*, leads to *Jatharagni Vaishamya* (Digestive fire ibalance) which hampers the formation of proper *Rasa Dhatu*. This results in formation of *Äma*. This *Sāma Rasa* is *Sarvdosha Prakopaka* and ultimately results in *Strotorodha* (depletion of nourishment in microchannels) afflicting *Garbhashaya*, leading to *Dhatukshayajanya Vandyatva*.[7] *Acharya Caraka* has mentioned *Kleevata* (infertility) as *Rasa Pradoshaja* disease.

TREATMENT PLAN:

On the basis of diagnosis patient was planned for ***Shiropichu*** and *Nasya* with *Phala Ghrita* for 7 days, during follicular phase for 3 consecutive cycles, to stimulate Hypothalamic Pitutary Ovarian axis and thus folliculogenesis. *Shiropichu* with *Phala Ghrita* acts by cellular absorption through trans-dermal route. It corrects the brain circulation, normalizes *vata* functioning and stimulates peripheral nerves.[8]

Nasya Karma application of medicated substances via the nasal passages. It is stated in *Ayurvedic* texts, that the nose serves as a vital portal to the head,medicine administered through Nose stimulates olfactory nerves and limbic system, which in turn stimulates hypothalamus leading to pulsatile secretion of GnRH, resulting in proper secretion of FSH and LH hormones. leading to folliculogenesis, dominant follicle development and ovulation.[9]

Probable Mode of action of *Phala ghrita*:

Folliculogenesis is a crucial process in a woman's reproductive cycle, and its disruption can have significant implications for fertility. *Phala ghrita* contains *Shatavari, Ashwagandha,*

Pippali, Trifala and drugs of *Jeevaniya gana*.and has *Tikta, Madhura* and *Katu rasa, Laghu, Snigdha Guna,* both *Katu* and *Madhura Vipaka* and also *Ushna and Sheeta Veerya*.

According to *Bhaisajya Kalpana* it has *Tridosha Shamaka, Shothahara, Krimighna, Balya Garbhasthapak, Rasayana* etc. properties which helps in development of antral follicle and nourishing the developing follicle to grow as a dominant follicle and also helps in proper development of the endometrium which is required for the implantation and nourishment of the zygote. Application of *Shiropichu* and *Nasya* with *Phala Ghrita* can promote ovulation induction.

Image 1. Investigation reports

Table no. 1- AMH and Pralactin before and after treatment report

Investigations	Before treatment (04/06/2022)	After treatment (01/05/23)
AMH	0.38 ng/ml	0.98 ng/ml
Prolactin	354.1 uiu/ml	18,9 uiu/ml

Table no. 2- Serum FSH and Serum LH before and after treatment report

Investigations	Before treatment (24/01/2023)	After treatment (17/05/23)
Serum FSH	52.8 miu/ml	35.2 miu/ml
Serum LH	10.9 miu/ml	10.7 miu/ml
Estradiol	518.14 pg/ml	187 pg/ml

OBSERVATION AND RESULT:

After completion of the treatment, the patient conceived naturally. Significant increase in the levels of AMH was seen and Prolactin level comes within normal limits. *Shiropichu* and *Nasya* found to be effective in infertility in poor ovarian reserve in reproductive-aged women.

DISCUSSION:

Anti-mullerian hormone (AMH), known as mullerian -inhibiting substance, is a dimeric glycoprotein hormone belonging

to the transforming growth factor-beta family. It is produced by ovarian granulosa cells in females. AMH level reflects the ovarian reserve. With increasing age of females, pool of follicles I.e. number of follicles decreases gradually. Likewise, their blood AMH levels and the number of ovarian antral follicles visible on ultrasound also decreases. AMH is sensitive marker of ovarian reserve than FSH, estradiol, and antral follicle count (AFC)[10].

Table no 3- AMH levels in different reproductive age group females:[11]

S.no.	Age Range	Good AMH Level (ng/mL)	Normal Range (ng/mL)
1.	Under 25	4.1	2.5 – 6.0
2.	25-29	3.5	2.0 – 5.5
3.	30-34	2.8	1.5 – 4.5
4.	35-39	1.5	1.0 – 3.0
5.	40-44	0.9	0.5 – 2.0
6.	45+	0.4	0.1 – 0.9

CONCLUSION: Cases of infertility are increasing day by day due to various factors including Poor ovarian reserve, where AMH is a useful marker that helps in detecting and planning for infertility management. Infertility has been a great challenge even after the advancement treatment. *Ayurveda* offers a potential remedy for infertility due to poor ovarian reserve, that has not responded to conventional treatments like ovulation induction. *Shiropichu and Nasya found* to be overcoming the barriers of low quantity and quality of eggs in women with poor ovarian reserve in the present case where the patient conceived naturally after a course of treatment. Hence, a large sample study should be conducted to validate the current treatment modality.

REFERENCES:

1. Dr. Sujit kumar singh, Determination of risk factors of infetility in village women: An Epidemiological survey: Journal of advanced medical in dental sciences research, ISSN online:2321-9599

2. Dutta DC. Textbook of Obstetrics.7th edition edited by Hiralal Konar, Page no. 17 New central book agency (P) Ltd.; 2013.

3. *Indian Journal of Ayurveda and Integrative Medicine KLEU* 4 (2): p 75-78, Jul–Dec 2023. | *DOI:* 10.4103/ ijaim.ijaim_27_23 Infertility Due to Low Ovarian Reserve – Treated by *Matra basti*- A Case Report Arpitha, M. U.; Bhavya, B. M.; Athira, A. G.

4. Dutta DC. Textbook of Gynaecology.6th edition edited by Hiralal Konar, Page no. 68 New central book agency (P) Ltd.; 2013.

5. Kaviraj Ambikadutta shashtri, A.M.S. Susruta samhita.ISBN 978-81-89798, Vol 1 Chaukhambha sanskrit sansthan, Varanasi Sha.sthana 2/3, page no.19

6. Oh SR, Choe SY, Cho YJ. Clinical application of serum anti-Müllerian hormone in women. Clin Exp Reprod Med 2019;46:50–9.

7. Acharya JT. Sushruta Samhita of Sushruta:Nibandhasangraha Commentary of Dalhana, Sutra Sthana. 6th ed., Ch. 24, Ver. 10. Varanasi: Chaukambha Orientalia; 1997. 116.

8. . Gupta et al. 2019 Greentree Group Publishers © IJAPC Int J Ayu Pharm Chem 2019 Vol. 11 Issue- Concept of Murdha Taila and Its Role in Psychological Disorder: A Review page no.139
9. Deepika et al. Journal of Ayurveda and Integrated Medical Sciences |
August 2023| Vol. 8| Issue 8238- Nasya for Ovulation Induction: Unveiling A Case Study
10.William D. Winkelman, et al. The Sexual Impact of Infertility Among Women Seeking Fertility Care.
11. What role do AMH levels by age play in infertility and IVF >https://ankuranclinic.com/what-role-do-amh-levels-by-age-play-in-fertility-and-ivf/#

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