



A Case Report on Primary Infertility

**Aishwaraya Vaidya^{a#*}, Pooja Kasturkar^{a≡}, Trupti Uke^a, Kavita Gomase^a,
Jaya Gawai^a, Seema Singh^a and Savita Pohekar^a**

^a Department of Mental Health Nursing, Smt. Radhikabai Meghe Memorial College of Nursing,
Datta Meghe Institute of Medical Science (Deemed to be University), Sawangi (Meghe), Wardha,
Maharashtra, India.

Authors' contribution

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i62A35196

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here:
<https://www.sdiarticle5.com/review-history/78951>

Case Study

Received 02 November 2021
Accepted 26 December 2021
Published 28 December 2021

ABSTRACT

Introduction: All women want to become mothers. Infertility is defined as unable to or failure to conceive within one or more years of regular unprotected coitus. Primary infertility denotes patients who have never conceived.

Clinical Findings: The main symptom of primary infertility is the inability to get pregnant. A menstrual cycle is not continued. That's too long (35 days or more), too short (less than 21 days), irregular or absent results of patients not ovulating. Late menstrual cycle, pain in menstrual cycle, infertility, there might be no other signs or symptoms.

Diagnostic Evaluation: serological test, semen test in her husband, sonography, hysteroscopy, laparoscopy.

Investigation of BHCG value: BHCG value greater than 25 indicates positive results.

Therapeutic Intervention: Inj. Chorion(Human chorionic gonadotropin) 500 IU, Inj. Filgastrium(Neupogen) 300IU every third day, Inj. Lomoh 20mg Alternate day, Tab. Esrobot 2mg×TDS, Tab. Ecosprin 150mg×OD.

Outcomes: After In-vitro fertilization treatment patients show improvement. Patients can be pregnant,with the help of In-vitro fertilization treatment.

Conclusion: My patient was admitted in gynaecology ward no. 08, AVBRH (Acharya Vinoba Bhave Rural Hospital) with case of primary infertility and complaints of infertility, late menstrual

[#]B.sc Nursing;

[≡]Assistant Professor;

^{*}Corresponding author: E-mail: aishwaryav657@gmail.com;

cycle and repeated abortion after IVF (In-vitro fertilization) treatment patient condition improved and got pregnant. ET(Embryo transfer) was done on 15/11/2021.

Keywords: Infertility; late menstrual cycle; hysteroscopy; laparoscopy.

1. INTRODUCTION

In humans, infertility is defined as an inability to become pregnant after one year of intercourse without using contraception involving a male and female partner. Primary infertility refers to couple who has never had a child while secondary infertility means that at least one conception has been occurred, but currently couple cannot achieve a pregnancy [1]. It is complex physical problem, and causes of infertility are usually related to azoospermia(complete absence of sperm in semen), anovulation(absence of ovulation),or tubal obstruction [2].

Average annual incidence of infertility is about 15% globally in different populations. Some of the causes of infertility can be treated while others cannot be treated. In Vitro fertilization (IVF) with embryo transfer resulted in an increase in incidence of multiple pregnancy [3] Limiting numbers of embryos can be transferred. IVF is a method in which sperm of man and the eggs of women are combined outside of the body in a laboratory dish. One or more fertilized eggs (embryos) may be transferred into the woman's uterus, where they may implant in the uterine lining and develop. High serial plasma human chorionic gonadotropin (HCG) concentration from day 13 after the process of embryo transfer suggested multiple pregnancy. Ultrasound sonography was done on 33 days after embryo transfer [4].

1.1 Patient Identification

Patient with age of 41 years old female was admitted in Acharya Vinoba Bhave Rural Hospital Sawangi (meghe)Wardha on dated 15/11/2021 in gynaecology ward no. 08 with primary infertility for the treatment of IVF. She is 60kg weight with height 156cm.

1.2 Present Medical History

Female with 41 year old was admitted in Acharya Vinoba Bhave Rural Hospital on dated 15/11/2021 in gynaecology ward no.08 with complaint of late menstrual cycle, continues abortion, infertility.

1.3 Past Medical History

My patient was diagnosed as infertility. As there are four abortion have been done in past . First Abortion is done 13 year back, second is done 9 year back, third is done 7 year back and fourth Abortion is done 5 year back. There is no history of hypertension, diabetes mellitus, epilepsy, thyroid ,no history of blood transfusion.

1.4 Family History

Patient belongs to a nuclear family with her husband. Her husband is 46 years old, graduated one, has a job in the government sector, no significant health problems. Patient is 41 years old, she is also graduated, and works in a library having primary infertility.

1.5 Past Intervention and Outcome

Patient was diagnosed with known case of primary infertility from 13 years back from that time onward four abortion was happen.

2. CLINICAL FINDINGS

Decrease number of ova, pain in menses, infertility.

2.1 Etiology

Etiology of primary infertility is Anovulation or oligo- ovulation , oligomenorrhea or even amenorrhea. Other causes of anovulation are- women with premature ovarian failure, elderly women, polycystic ovarian syndrome ,PCOS causes a hormone imbalance, which affects ovulation, tubal blockage, drinking too much alcohol, older age, medication such as chemotherapy drugs, birth defect that affect the reproductive tract.

2.2 Physical Examination

There are not many abnormalities found in head to foot assessment. Good health with less active. Patient is conscious and well oriented with time, place and person. BHCG examination was done and it's value is greater than 25. Reproductive

history, age of menarche- 22year, last date of menstrual period - 26/10/2021, menstrual period-duration and interval, my patient previously use of contraceptive pill, previous testing and she is not continue taking treatment of infertility, thyroid examination, abdominal examination, vaginal examination- uterosacral modularity, uterine mobility.

2.3 Diagnostic Assessment

CBC investigation on cell counter with PS : Haemoglobin - 11.5gm%, Total RBC count - 4.5million/cumm, Total WBC count -29100/cumm, Total platelet count- 2.41, Granulocytes-80%, Lymphocytes-15%.

Peripheral smear: RBC- Normocytic normochromic platelets- Adequate on smear. No hemoparasite seen. WBC- Neutrophilic leukocytosis with mild shift to left up to the stage of band form.

2.4 Therapeutic Intervention

Tab. Esrobet,2mg xTDS it is given for the hormone replacement therapy for hormone estrogen, also used to reduce symptoms of menopause, mood swings, reduce sex drive, etc.

Tab. Ecosprin,150mgxOD it is an antiplatelets drug used to prevent blood clots in blood vessels, it is also used to relieve pain as well as inflammation.

Inj. Chorion 5000IU x1/20 daily it is used to treat infertility in men as well as women, it also used to treat delayed puberty issue in children.

Inj. Filgastrim 300IU it is a granulocyte colony-stimulating factor (G-CSF) analogue and is used in IVF , it is used to increase the platelet count and WBC count .

Inj. GH 2unit Growth hormone has been used in female infertility treatment of IVF for more than 25 years. It lowered the cycle cancellation.

3. DISCUSSION

On the 15th of November 2021, a 41-year-old woman from Chitod, district wardha, was admitted to gynaecology ward no.08, Acharya Vinoba Bhave Rural Hospital Sawangi (meghe) Wardha, with the major complaint of menstrual cycle pain, late menstrual cycle, and embryo transfer. She has been diagnosed with primary infertility.

Nowadays most of the couples face infertility problems. Now primary as well as secondary infertility is treated with many medical and surgical interventions. Many treatments improve the chance of being parents. Medical procedure such as

Artificial insemination, Assisted reproductive technology, Ovulation induction and IVF. Therapies like Counselling psychology this centres are available [5].

Healthy couples under age of 30 will have a 20% chance per month of getting pregnant each month. Infertility and miscarriage rate is increasing corresponding to age it increases rate after age 35 year [6]. The Patient's condition is improving. As she is coming for the treatment of embryo transfer it is done on dated 15 th of November 2021. She had four abortion in past . Now it is difficult because of her age [7] Their is 13 year history of abortions caused by chromosomal abnormalities , abdominal trauma, etc. She is taking first time of infertility treatment, which is in-vitro fertilization. Before that she is not taking any other treatments or any other procedures. It is the first cycle of embryo transfer. Unhealthy weight gain, alcohol consumption, can negatively impact the reproductive system leading to difficulty in conceiving. Hence, lifestyle modification such as healthy eating habits, increased daily physical activities, regular exercise, and avoiding alcohol consumption are helpful in improving healthy weight . Other factors that increase the risk of infertility can be controlled [8].

Higher level of education, providing counselling to patients. Counselling is concerned with helping couples to explore problem, make critical choices [9]. Role of nurse in infertility counselling- receiving patients and family and making comfort for counselling , nurses provide care before, during and after fertility treatment, help couples to recognize feelings, IVF group discussion, therapeutic counselling, etc. Counselling helps to deal with emotional stress. It provides extra support to patient, helps couples to choose the right treatment [10].

4. CONCLUSION

Infertility affects couples all over the world [11]. It is responsible for both male as well as female. Both the parents play a vital role in infertility. Many treatments and interventions are available

for infertility [12]. Artificial insemination, Assisted reproductive technology, Ovulation induction and in-vitro fertilization (IVF). My patient is coming for the treatment of IVF and treatment is continuously going on and the patient shows improvement [13].

CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline Patient's consent and ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Chowdhury S et al. Infertility. Essentials for the Canadian Medical Licensing Exam: 2nd edition. Wolters Kluwer. Hong Kong; 2017
2. Makar R et al. The evaluation of infertility. 2002;117 (Suppl):S95-103.
3. Himmel W et al. Voluntary Childlessness and being Childfree. 1997;47(415):111-8. PMC 1312893.
4. Cooper T et al. World Health Organization reference values for human semen characteristics. 2010;16(3):231-45.
5. Wischusen J et al. Reversible male infertility due to congenital adrenal hyperplasia. Clin Endocrinol (Oxf). 1981;14:571-577.
6. Bonaccorsi A et al. Male infertility due to congenital adrenal hyperplasia: testicular biopsy findings, hormonal evaluation and therapeutic results in three patients. Fertil Steril. 1987; 47:664-670
7. Winters S et al. Evidence for a role of endogenous estrogen in the hypothalamic control of gonadotropin secretion in men. J Clin Endocrinol Metab. 1985;61:842-845.
8. Hayes F et al. Differential regulation of gonadotropin secretion by testosterone in the human male: absence of a negative feedback effect of testosterone on follicle-stimulating hormone secretion. J Clin Endocrinol Metab. 2001;86:53-58.
9. Weinstein LS, Shenker A, Gejman PV, Merino MJ, Friedman E, Spiegel AM. Activating mutations of the stimulatory G protein in the McCune-Albright syndrome. N Engl J Med. 1991;325:1688-1695.
10. Shenker A, Weinstein LS, Moran A, Pescovitz OH, Charest NJ, Boney CM. Severe endocrine and nonendocrine manifestations of the McCune-Albright syndrome associated with activating mutations of stimulatory G protein GS. J Pediatr. 1993;123:509-518. -
11. Lumbroso S, Paris F, Sultan C. McCune-Albright syndrome: molecular genetics. J Pediatr Endocrinol Metab. 2002;15:875-882. -
12. Happle R. The McCune-Albright syndrome: a lethal gene surviving by mosaicism. Clin Genet. 1986;29:321-324.
13. Boyce AM, Casey RK, Ovejero Crespo D, Murdock CM, Estrada A, Guthrie LC. Gynecologic and reproductive outcomes in fibrous dysplasia/McCune-Albright syndrome. Orphanet J Rare Dis. 2019;14:90.

© 2021 Vaidya et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/78951>