

Case study

CASE REPORT ON PRIMARY INFERTILITY

Abstract

Introduction: All women want to become a mother. Infertility is defined as unable to or failure to conceive within one or more year 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 500 IU, Inj. Filgastrium 300IU every third day, Inj. Lomoh 20mg Alternate day, Tab. Esrobot 2mg×TDS, Tab. Ecosprin 150mg×OD.

Outcomes: After IVF treatment patients shows improvement. Patient can be pregnant, with the help of ivf treatment.

Conclusion: My patient was admitted in gynecology ward no. 08, AVBRH with case of primary infertility and complaints of infertility, late menstrual cycle and repeated abortion after IVF treatment patients shows improvement and get pregnant. ET was done on dated 15/11/2021.

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

Introduction

In humans, infertility is defined as 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 incidence of infertility is about 15% globally varies in different populations. Some of the causes of infertility can be treated while others can not be treated. In Vitro fertilization (IVF) with embryo transfer resulted in increase in incidence of multiple pregnancy. (3) Limiting numbers of embryos can be transferred. IVF is a method in which sperm of man and 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)

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 gynecology ward no. 08 with primary infertility for the treatment of IVF. She is 60kg weight with height 156cm.

Present medical history: Female with 41 year old was admitted in Acharya Vinoba Bhave rural hospital Sawangi on dated 15/11/2021 in gynecology ward no.08 with complaint of late menstrual cycle, continues abortion, infertility.

Past medical history: My patient was diagnosed as infertility. As there are four abortions 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.

Family history: Patient belongs to nuclear family with her husband. Her husband is 46 years old, graduated one, having job in government sector, no significant health problem. Patient is 41 years old, she is also graduated, work in library having primary infertility.

Past intervention and outcome: Patient was diagnosed with known case of primary infertility from 13 years back from that time onward four abortions were happened.

Clinical findings: ovarian dysfunction causes decrease number of egg production, pain in men's, irregular menstrual cycle, infertility.

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.

Physical examination: There is not much any abnormalities found in head to foot assessment. Good health with less active.patient is conscious 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- uterosacr modularity, uterine mobility.

Diagnostic assessment:

- CBC investigation on cell counter with PS : Hb- 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 hemoparocyte seen. WBC- Neutrophilic leukocytosis with mild shift to left upto the stage of band form.

Therapeutic intervention: Tab. Esrobot,2mg ×TDS 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,150mg×OD it is an antiplatelets drug use to prevent blood clots in blood vessels, it is also use to relieve pain as well as inflammation.

Inj. Chorion 5000IU ×1/20 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 cancellati

Discussion

A female of 41 year old from chitod, district wardha was admitted in gynecology ward no.08, Acharya Vinoba bhav rural hospital sawangi (meghe) wardha, on dated 15 th of November 2021 with chief complaint of pain in menstrual cycle, late menstrual cycle and for embryo transfer. She is a known case of primary infertility.

Now a day's most of the couples face infertility problems. Now primary as well as secondary infertility is treated with many medical and surgical interventions. Many treatment improve the chance of being parents. Medical procedure such as Artificial insemination, Assisted reproductive technology, Ovulation induction and IVF. Therapies like Counseling 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, increase daily physical activities, regular exercise , avoid 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)

Conclusion: Infertility affects couples all over the world. 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. 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.

Ethical clearance: Taken from institutional ethics committee.

Reference

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