

## 세포교정영양요법(OCNT)을 이용한 난임 환자 개선 사례 연구

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## A Case study on the improvement of infertile patient using Ortho Cellular Nutrition Therapy (OCNT)

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## ABSTRACT

**Objective:** A Case report on the improvement of infertility through implementation of OCNT.

**Methods:** Korea woman in her 40's failed in all of her attempts to have a second child.

**Results:** Pregnancy of the second child was confirmed following the implementation of nutrition therapy.

**Conclusion:** Application of nutrition therapy to infertile patient can be helpful for pregnancy.

**Keywords** Ortho-Cellular Nutrition Therapy (OCNT), infertility, pregnancy

## Introduction

Infertility refers to the condition of not being able to get pregnant for more than 1 year in spite of normal sex life without exercising birth control by a couple.<sup>1</sup> However, nowadays, it is

defined as 'infertility' with 6 months as the reference and begins treatment as well if the age of the woman is more than 35 years.

The cause of female infertility is mostly the problems in ovary, uterus, fallopian tube and peritoneum. When testing to find the exact cause, generally confirm whether the hormone levels including FSH, LH and estrogen are normal and check the thyroid stimulating hormone (TSH) and lactogenic hormone (prolactin) that affects menstrual irregularity.

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Moreover, check the ovarian function through ovarian reserve test (anti mullerian hormone - AMH).

The sizes of your ovaries and No. of antral follicles are observed, and the growth of the follicles, condition of the uterine lining and the time of ovulation are checked through ultrasonography by visiting hospital on the 2<sup>nd</sup> ~ 3<sup>rd</sup> day of menstruation.

Uterine hysteron-salpingography is performed to check for abnormalities in the uterus by checking whether the fallopian tubes are blocked or deformed, and to identify any synechia or deformities in the uterus by injecting contrast medium and performing radiographic examination.

In addition, other tests including ovulation test, postcoital examination, endometrial examination, diagnostic laparoscopy and hysteroscopy, etc. are implemented.

In the case of men, semen test, hormone test and chromosome test are performed, and, in cases of azoospermia, a testicular biopsy is performed to check for the presence of sperm in the testicular tissue.

As the method of treating infertility, artificial insemination of inserting semen in the uterus can be performed and, in cases of infertility with unknown cause, artificial insemination is performed if the sperm count and motility are below normal standards, and if there is mild endometriosis.

When performing artificial insemination, inject ovulation inducers 3 days prior to the start of menstruation and administer over-ovulation injections after menstruation and ovarian follicle injection prior to ovulation.

If it is not possible to get pregnant even with artificial insemination, IVF for test tube baby is performed. IVF is a procedure for in vitro fertilization of sperm and eggs, which is then implanted in the uterus. Estradiol (Proginova) and ovulation induction injections are administered to induce ovulation, and progesterone injection/vaginal injection is then administered to promote implantation after the aforementioned procedure.

The patient in this case underwent nutrition therapy after having suffered infertility. She successfully became pregnant and gave birth thereafter. I am reporting the case after having acquired the consent of the patient.

### **Case**

#### **1. Subject**

1 case of patient with infertility was selected for the study.

1) Name: Kim O O (F/40 years old)

2) Name of diagnosis: infertility

3) Date of manifestation: After the first childbirth

4) Treatment period: July 2, 2022 ~ October 20, 2022

5) Main symptoms: Infertility with unknown cause

- 6) Past medical history: Frequent heartburn and intestinal metaplasia 1 year ago
- 7) Past social history: None
- 8) Past family history: None
- 9) Medicine being administered: None

## **2. Method**

### **Nutrition therapy**

Cyaplex X (101, 1 sachet at a time, 2 times a day)

Eufaplex (101, 1 sachet at a time, 2 times a day)

Gastron (101, 1 sachet at a time, 2 times a day)

Aqua Sac Pure (101, 1 sachet at a time, 2 times a day)

Hemoplex (101, 1 sachet at a time, 2 times a day)

### **Diet therapy**

1) Avoid alcohol, food made of flour (especially instant noodle and bread), deep-fried foods, coffee and excessively spicy foods. Consume kimchi without red pepper powder, water-based radish kimchi and seaweed soup frequently.

2) Consume fruits in moderation since excessive fruit consumption increases advanced glycoxidation end-products, which can induce inflammation.<sup>2</sup>

3) Avoid cold water, coke, sprite, processed juices and yogurt containing sugar.

4) Avoid foods cooked in cooking oil.

5) Since the stomach is at its healthiest state at 38°C, always eat warm food.

6) Parboiled cruciferous vegetables such as cabbage and broccoli are good for the gastrointestinal system.

7) Avoid stir-fried, deep-fried and grilled food. Instead, consume food in parboiled, boiled or shabu-shabu formats.

Example: Steamed or boiled eggs rather than fried eggs, boiled chicken rather than deep-fried chicken, boiled pork served with vegetable, boiled pig feet, short rib soup and ox bone soup rather than grilled pork belly.

8) Avoid cow's milk since it is produced by injecting antibiotics and growth hormone (IGF-1), etc. into the dairy cattle, which will induce hormonal imbalance and, in the case of children, sexual precocity.<sup>3</sup>

### **Result**

The patient gave birth to a baby girl with the body weight of 2.4 kg through Cesarean section on July 6, 2023, which is slightly underweight because the mother could not eat properly due to poor condition of her stomach.

### **Considerations**

The patient in this case is a 40-year-old woman who works at an oriental medical clinic and gave birth to her first child through Cesarean section after a period of normal pregnancy. Although she put all her efforts to have a second child for the next 8 years, she failed to get pregnant every time.

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In order to get pregnant, she spent a lot of money at the oriental medical clinic where she worked, taking herbal medicines extensively and attempting numerous artificial inseminations. However, they all failed to produce the desired result and, as such, she decided to try nutrition therapy before she got too old to have another child.

She was reluctant to consume many types of products due to financial issues and her weak stomach. As she also disclosed that she had uncomfortable experience with mineral products, nutritional therapy conducted by minimizing the nutritional products.

Gastron was given since she frequently experienced heartburn due to her weak stomach. There is high probability that infertility with unknown cause is due to oxidative stress<sup>4,5</sup> and reactive oxygen species can induce infertility by chemically altering the DNA and proteins of oocytes, thereby inducing oocyte atresia.<sup>6</sup>

Anthocyanin, etc. contained in Cyaplex X act as an antioxidant<sup>7</sup> to eliminate oxidative stress, thereby providing assistance with pregnancy.

Reduced intake of omega-3s can become a cause of infertility due to occurrence of eicosanoid imbalances and high carbohydrate intake can increase blood insulin levels, which can reduce fertility. On the other hand, sufficient omega-3 intake could increase fertility by increasing the prostacyclin/thromboxane ratio.<sup>8</sup>

In addition, decreased plasma eicosapentaenoic acid (EPA) and erythrocyte DHA (docosa

hexaenoic acid) levels and increased erythrocyte saturated fatty acids are observed in infertile women in comparison to those of fertile women.<sup>5</sup>

Eufaplex was added to prevent this. The omega-3 contained in Eufaplex increases the prostacyclin/ thromboxane ratio and DHA level to improve the probability of pregnancy in fertile women.

The minerals included in Aqua Sac Pure, and vitamins B, vitamin B12, vitamin C and substances with antioxidation capabilities contained in Hemoplex assist pregnancy by increasing follicular fluid and serum antioxidant capacity, which are often deficient in infertile women.<sup>9</sup>

Lastly, intake of heme iron contained in Hemoplex can reduce the risk of ovulatory infertility.<sup>10</sup>

Since this is a single case study, the aforementioned findings cannot be universally applied to all infertile patients. Nonetheless, it is reported with the consent of the patient because I believe it is a case in which nutrition therapy provided assistance in the improvement of the patient's symptoms.

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