



Case Report

Successful pregnancy in a patient via holistic approach of Uni5 based treatment with recurrent implantation failure: A case report of unexplained infertility

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ABSTRACT

In this study, a case of a 22-year-old married woman with a clinical history of Polycystic Ovary Syndrome (PCOS), recurrent implantation failure was reported and was subsequently diagnosed with adenomyosis. Concurrent symptoms of uterine fibroids or polyps were noted. Meanwhile, the patient had undergone In vitro fertilization (IVF) twice, which was unsuccessful and after that, she neither took any treatment nor was under any medications for almost 3 years. Then the patient and her husband followed the Uni5 treatment regimen for six months and she was medically confirmed as pregnant in August 2017 in the same hospital, where she had previously undergone the IVF procedure. She later gave birth to a healthy baby weighing around two kgs during her 36th week of pregnancy. This case report concludes that the Uni5 treatment regimen can be considered as a holistic, safe, promising, and cost-effective alternative method of treatment for patients who have failed to conceive even after receiving In vitro fertilization (IVF) and Intrauterine Insemination (IUI) treatments and for those who cannot afford such expensive treatment procedures.

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1. Introduction

The most commonly occurring gynecology-related problems for women during their reproductive age are ovulation disorders. One of the most common non-ovulatory-related disorders is PCOS, which can be diagnosed with two basic symptoms, excess secretion of testosterone, and irregular menstrual cycle.¹ PCOS-induced infertility can be generally treated through oral medications, ovulation-inducing drugs, and in some extreme cases through In vitro fertilization (IVF). However, there are still a few complications that can arise due to some injectable fertility medications and IVF treatment.^{2,3} PCOS is often associated with adenomyosis, which is a prevailing gynecological disorder characterized by invading stroma and endometrial glands and into the myometrium. Women having adenomyosis are more probably to experience

plethora of health problems, such as early miscarriages, menorrhagia, subfertility, dysmenorrhea, metrorrhagia, and in some rare cases, it could even interfere in the embryo implantation.⁴ In one-third of the reported cases, women with adenomyosis are asymptomatic. In most cases, adenomyosis is primarily characterized by local hyperestrogenism which leads to the increased uterine peristaltic activity of the sub-endometrial myometrium.⁵ Treatment for adenomyosis has been a major challenge and the only plausible effective treatment for adenomyosis is hysterectomy. However, it is quite traumatic for women who still wish to become pregnant in the future. Clinical therapeutic options such as anti-inflammatory medications, oral medications, uterine artery embolization, and gonadotrophin-releasing hormone agonists (GnRH- α) to reduce the progression of PCOS and adenomyosis are also available. But still, some studies show that these therapies have been proven to show adverse health effects

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when followed in the long term.⁶ Owing to the side effects of conventional medicine, many women wish to seek natural remedies for treating infertility. Moreover, herbal medicines were found to normalize female hormones.⁷

In India, ancient medicinal systems like Siddha and Ayurveda take a holistic approach in maintaining human health based on the five elements involved in the cosmic creation, the Pancha Bhootas.⁸ One such holistic treatment modality in this lineage is the modern Uni5 system, which advocates five therapies for maintaining the balance of one's very existence i.e., Body, Mind, Intelligence, Self-Awareness, and Unity-Consciousness, based on the same five elements that are involved in the cosmic creation, the Pancha Bhootas, including Earth, Water, Fire, Air, and Space. When all these five elements function in harmony, they can promote a healthy body and a positive mind that can further elevate the Self-awareness of an individual.⁹

2. Case Report

2.1. Patient medical history

The case was a 22-year-old married woman from Kerala, who became pregnant in 2008, which resulted in abortion due to fetal heart failure. Then in 2010, the patient took treatment in a fertility hospital located in Kerala, where they have prescribed vitamin pills and folic acid supplements. But there were no improvements and the patient remained unconceived. Then later in 2013, the patient underwent IVF treatment in the same fertility hospital, but still, it ended up in a failure. A Hormone test was done in May 2013 to measure the values of Prolactin, T3, T4, TSH, LH, Testosterone, FSH, and Estradiol (Table 1). In 2014, the patient again tried for IVF and it failed once again, and due to further financial crisis, the patient gave up trying for IVF. Then later in October 2014, TORCH IgG (ELISA), TORCH IgM (ELISA) test (Table 2), and Anti-Mullerian Hormone Testing were done on 16 November 2015, which was found to be at a normal range of 15.7 pmol/L fertility range. The patient's partner took a semen analysis on 14 February 2016, with the results showing a sperm concentration of 64 million/ml. The patient's pelvic scan was taken on 14 February 2016, which revealed a thin Endometrium and signs of Adenomyosis, with irregular follicles found in the left ovary and Multiple residual follicles were present in the right ovary.

2.2. Assessment

Testosterone hormone levels were elevated, while luteinizing hormone LH, estradiol follicle-stimulating hormone FSH levels remained normal (Table 1), suggestive of polycystic ovary syndrome.

The couple came to know about the Uni5 system in February 2017 and they approached for the treatment procedure. The Uni5 based traditional method of treatment

was explained to them before proceeding further. Details such as medical history, diet, lifestyle, family history, and current clinical condition of the patients were also investigated in the process.

3. Uni5 Approach

Uni5 based traditional method of treatment is similar to Siddha and Ayurveda, where all factors that contribute to health are considered while treating a disease. Correspondingly, Uni5 based method of treatment primarily focuses on nourishing our body with a good quality diet, regulation of hormones with the help of natural herbs, cleansing our body by drinking enough water on an empty stomach and certain traditional rituals to reinforce healthy attributes to give birth to a healthy offspring.

The patient was explained about the effects of an unhealthy gut microbiome as reported in many scientific publications and the long-term positive effects of a healthy diet for developing a healthy gut flora.

3.1. Castor oil colon cleansing

The patient took castor oil-based colon cleansing, once a month for around a period of 3 to 6 months which aided in eliminating all the toxins along with the community of harmful microorganisms present in the gut. A probiotic diet such as A2 cow's buttermilk (fat-free fermented milk) and fermented red rice were also suggested on the same day of colon cleansing and recommended to be continued for at least a week to ensure that colonization of beneficial bacteria like Lactobacillus and Bifidobacterium in the intestine.

3.2. Uni5 Water therapy

Drinking around 1.5 liters of warm water daily in the morning, right after wake-up is called water therapy. The patient followed this therapy daily along with some mild spices like ginger and coriander. Practicing water therapy regularly can regulate hormone secretion by helping the liver purify the toxic metabolites. Just merely following a diet without purifying our body won't have any such changes, as purifying our body is the only way to regulate the hormone secretion and also enable our intestines to better absorb the recommended herbal diet.

3.3. Diet and lifestyle

The patient was asked to take one tablespoon of Aloe vera along with honey before breakfast and was also suggested to take seven different herbal liver tonics for seven days in a considerably tiny amount before having lunch. The characteristic properties of these herbs can aid in detoxifying the liver and enhance liver function (Table 3) The patient had Triphala tea before going to bed to strengthen their liver function. A paracetamol-induced

hepatorenal toxicity study conducted in mice showed that Triphala extract has various hepatoprotective properties.

The patient and her husband were instructed to perform breathing exercises, simple yoga asanas, and Uni5 based meditation to relax their minds by reducing their mental and physical stress. Uni5 Meditation can help us overcome all the difficulties faced by us via increasing our self-awareness in every action that we perform in our day-to-day life. Pancha Bhootha walking aids us to create awareness to breathe consciously when we are walking. A traditional Indian practice of vowing charity/donation for social causes with an equivalent amount of money that will be incurred for treatment cost. This traditional practice is considered one of the most significant aspects of the Uni5 treatment procedure.

3.4. Black sesame seeds and jaggery intake

The patient was recommended to take black sesame seeds along with jaggery regularly except during the period of menstruation. Both the black sesame seeds and jaggery are rich in iron while black sesame seeds are rich in vitamin E, which helps in enhancing fertility.

4. Results

The female patient started the Uni5 treatment regimen in February 2017. Then the patient's husband joined the treatment from April 2017 and continued for 3 months. After almost six months of treatment, the patient was medically confirmed as pregnant in August 2017 by the same hospital, where she has previously undergone IVF and IUD treatment. Throughout her pregnancy, she periodically underwent the required medical examinations and every report turned out to be normal. Then in 2018, she naturally gave birth to a healthy boy baby.

5. Discussion

Many factors like tubal, ovulatory, coital, and cervical problems can affect pregnancy, either singly or in amalgamations.⁴ While specific contributors to infertility do not seem to be detected, disturbances in endocrinological balance, reproductive physiology, genetics, and immunology are employed to denote 'unexplained' infertility.^{5,6}

In ancient therapies like Ayurveda, Siddha, or the modern Uni5 system, the patient might not exhibit any clinical symptoms or change in markers that indicates any undesired changes in typical liver functioning.⁹ But research studies show that the state of any disease state is indirectly attributed to the liver and its associated metabolic functions.

Hence toning the liver through diet and exercise and maintaining a decent gut microbiome is one of the prime ways to treat many diseases. This is because the liver is the central organ involved in the regulation of diverse biological pathways mainly in the reproductive system and is also

liable for various metabolic processes.²¹ Therefore, liver health and disease have a profound impact on sex hormone metabolism causing infertility and amenorrhea in women and feminization in men.

Therefore, to manage infertility and hormonal imbalance it is important to treat any underlying reason behind poor liver function in the human body. Notably, the principal function of the liver is to maintain a healthy level of fats in the bloodstream. Healthy fats are liable for a healthy hormone composition and production of semen-rich prostaglandins and anti-inflammatory action. In our approach, to optimize infertility caused due to known or unknown factors, it is essential to modulate the liver function and maintain good liver health.¹⁶

Uni5 recommends seven liver tonic herbs for the support of liver detoxification, regeneration, and health (Table 3). When a standard liver function gets impacted, toxins and excess hormones will not be eliminated properly and also the hormones that aren't eliminated will begin to act as toxins in our body by stimulating our tissues to grow in such a way that will result in several classes of disease conditions.¹⁷

Moreover, women dealing with unexplained infertility are highly likely to possess poor gut health. The human gut accommodates trillions of microorganisms. The live microorganisms that line the alimentary tract, called probiotics, facilitate the absorption of micro and macronutrients from the foods we take and aid in the synthesis and regulation of reproductive hormones in our body. Polyphenols that are consumed through food act as prebiotics that modulate the gut microbiota population which in turn has a strong regulatory impact on various genetic and metabolic functions of the body. Hence intake of polyphenols can decrease the incidence of several metabolic diseases like insulin resistance, hyperglycemia, hyperlipidemia, obesity, infertility, and Type-2 diabetes which are caused by PCOS. Polyphenols are shown to possess anti-androgenic, estrogenic, ovulatory, fertility, and menstrual, hormonal, and menopause-regulating activities.^{22,23}

Dysbiosis is a condition when there is a microbial imbalance of unhealthy over healthy microbiota in the gut. This causes a rise in a chronic inflammatory response which affects healthy egg production by ovaries, impairs embryo development, and causes recurrent implantation failure in women.^{24,25} One of the chief regulators of the circulating estrogen in the body is gut microbiota. Without a healthy microbiome, estrogen metabolism and performance become impaired and might result in several health consequences including adenomyosis, endometriosis, PCOS, and infertility.²⁶ The gut microbiome plays a significant role in immune function. An imbalance in the ecosystem of the gut microbiome can influence the immune system and may cause several chronic health conditions,

Table 1: Hormone test

Hormone	Value Observed	Reference Range
PROLACTIN	15.26 ng/mL	1.20 - 29.93 ng/mL
T3	124.13 ng/mL	60 - 181 ng/dL
T4	9.2 µg/dL	4.5 - 12.5 µg/dL
TSH	2.31 mIU/L	0.35 - 5 mIU/L
LH	4.70 mIU/mL	1.4 - 13 follicular
TESTOSTERONE	39.56 ng/dL	14.76 ng/dL
FSH	6.51 MIU/mL	2.5 - 13 follicular phase
ESTRADIOL	17.50 pg/mL	Follicular phase (-12) - 10 – 50

Table 2: TORCH IgG and IgM

Test	Observed Value	Reference Range
	TORCH IgG (ELISA)	
TOXOPLASMA IgG	< 5.0 IU/mL	< 6.5 IU/mL Nonreactive
RUBELLA IgG	38.5 IU/mL	< 5 IU/mL Nonreactive
CMV IgG	Ratio 4.5	<0.9 Nonreactive
HSV1 IgG	< 2.0 RU/mL	< 16 RU/mL Negative
HSV2 IgG	14.2 RU/mL	< 16 RU/mL Negative
	TORCH IgM (ELISA)	
TOXOPLASMA IgM	Ratio 0.06	<0.9
RUBELLA IgM	Ratio 0.3	<0.9
CMV IgM	Ratio 0.3	<0.9
HSV1 IgM	Ratio 0.1	<0.5
HSV2 IgM	Ratio 1.1	<0.2

Table 3: Herbal recommendation for treatment

S.No.	Scientific name	Common name	Properties	
1	Eclipta alba	False daisy	Increase hepatoprotective and has anticancer potential. Reduces bowel inflammation and respiratory tract disorders.	10,11
2	Phyllanthus niruri	Gale of wind	Improves hepatoprotective, analgesic, and anti-inflammatory activity. Reduces hypolipidemia, hypoglycemia, urolithiasis, and hyperuricemia.	12
3	Murraya koenigii	Curry tree	Increase liver health Stimulates digestive enzymes Reduces diabetes	13,14
4	Coriandrum sativum	Coriander	Mitigates gastrointestinal disorder Anti-inflammatory Controls hypoglycemia, and hypocholesterolemia activity.	15,16
5	Mentha	Mint	Induces menstruation and regulates menstrual cycles Control liver fibrosis	17,18
6	Citrus X Sinensis/ Citrus X lemon	Orange/Lemon	Induce anti-oxidative, anti-inflammatory, and anti-cancer characteristics, Improves cardiovascular and neuroprotective effects.	19
7	Moringa oleifera	Moringa	Controls non-alcoholic liver diseases, diabetes, hypercholesterolemia, high blood pressure, and overall inflammation.	20,21

which can impact fertility.²⁷

In an in-vitro study, fecal samples collected from women diagnosed with PCOS were given to mice as oral lavage. The mice group that received the fecal samples reproduced fewer offspring compared to the control mice. This study gives further insights into the effect of the harmful gut microbiome on causing PCOS-induced infertility.²⁸

Considering the role of Polyphenols in Gut, Liver, and Reproductive health, we suggest Castor Oil Cleansing and Water Therapy as a significant treatment regimen in the Uni5 method of treating infertility. This practice ensures the recolonization of healthy bacteria in the intestines and balances the gut microbiome, which can successively help reduce inflammation and support fertility.

In this case report, the couple underwent the Uni5 treatment regimen and was able to attain a successful pregnancy within six months of treatment. She was able to give birth to a healthy baby boy successfully via normal delivery in the same hospital where she had experienced a failure earlier in IVF treatment.

6. Conclusion

Thus, on the basis of our new findings we will conclude that the Uni5 treatment regimen is a promising safe, and holistic alternative method of fertility treatment which can be considered by couples who did not conceive, even after taking up the IVF and IUI or any other expensive treatment procedure.

7. Consent for Publication

Written and informed consent was acquired from the patient for publication of this case report and any accompanying images.

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10. Conflict of interest

The authors declare that there are no potential conflicts of interest for the authorship and publication of the article.

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