

Progressive Reproductive Technique for Alleviating Infertility: An advancement in the Medical Science

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ABSTRACT

Desire to procreate is fundamental in Human beings. But not everyone is fortunate to have their own baby. According to the estimates of the WHO, 13-19 million couples in India are infertile. And the figure is increasing at an alarming rate because of the bad routine of the youngsters. The magnitude of the infertility problem has enormous social implications. Besides the fact that every couple has the right to have a child, in India infertility widely carries with it a social stigma. In the Indian social context specially, children are also a kind of old age insurance. Therefore, every childless couple looks for Assisted Reproductive Technologies (ARTs), a group of technologies that assist in conception or in the carrying of pregnancy to term. Within this, Surrogacy, particularly Commercial Surrogacy, the practice of gestating a child for another couple or for an individual through the use of ARTs and in return for remuneration, has drawn much attention; as it gives the infertile couples hope to have their own biological child. My Paper focuses on the types of Surrogacy and the various procedures used in Surrogacy.

KEYWORDS : *Assisted Reproductive Technologies (ARTs), Surrogacy, infertility, Artificial insemination, In-vitro fertilization*

INTRODUCTION

Advances in Assisted Reproductive Techniques such as donor insemination and, embryo transfer methods, have revolutionized the reproductive environment, resulting in Surrogacy, as the most desirable option. The system of Surrogacy has given hope to many infertile couples, who long to have a child of their own. Taking advantage of the advanced medical facilities, they seek alternative solutions like Artificial Reproductive Technology (ART), In-Vitro Fertilization (IVF) and, Intra-Uterine Injections (IUI), in the hope of having a child of their own. Infertile women, homosexual couples and singles desiring to become parents may seek surrogacy as a simpler route to do so.

SURROGACY

Surrogacy is a reproductive technique that attempts to obtain pregnancy by means other than by intercourse. Surrogacy is a form of assisted reproduction and a “Surrogate Mother” is a woman who bears a child on behalf of other parents. In other words, Surrogacy refers to an arrangement whereby a woman agrees to become pregnant for the purposes of gestating and giving birth to a child for others to raise. She may be the child’s Genetic Mother or not, depending on the type of arrangement agreed to. In my words, when a woman is unable to carry a child, whether due to medical, genetic or social reasons, the couple or single woman or man may choose to find a Surrogate Mother who can carry the baby.

TYPES OF SURROGACY

Infertility due to reproductive tract infections and genital tuberculosis is preventable and amenable to treatment, and an estimated 8 per cent of infertile couples opt for medical intervention involving the use of Advanced Assisted Reproductive Technologies (ART). With the enormous advances in medicine and medical technologies, today 85 percent of the cases of infertility can be taken care of through medicines, surgery and/or the new medical technologies such as In Vitro Fertilization (IVF) or Intracytoplasmic Sperm Injection (ICSI).¹ Most of the new technologies aimed at taking care of infertility, involve handling of the gamete – spermatozoa or the oocyte – outside the body; they also often involve the donation of spermatozoa or oocyte, or the use of a surrogate mother who would be carrying a child with whom she has no biological relationship which is termed as Surrogacy.²

Surrogacy is the reproductive technique that attempts to obtain pregnancy by means other than by intercourse. Surrogacy is a ray of hope to millions of couples who are deprived of the precious gift of the divine in the form of a child. This proves to be a godsend to childless couples. Surrogate Mother is a woman who bears a child on behalf of other parents. Surrogacy is designed to alleviate infertility. Surrogacy is a boon to the infertile couples. It is even used by gay male couples, lesbians etc who cannot have a child of their

While all Surrogacy arrangements involve a woman carrying a baby for another person or couple, **The Black's Law Dictionary** categorizes Surrogacy into two classes:

- **Traditional Surrogacy**
- **Gestational Surrogacy**

TRADITIONAL SURROGACY: A pregnancy in which a woman provides her own egg, which is fertilized by artificial insemination, and carries the fetus and gives birth to a child for another person.³

GESTATIONAL SURROGACY: A pregnancy in which one woman, the Genetic Mother provides the egg, which is fertilized, and another woman, the Surrogate Mother carries the fetus and gives birth to the child.⁴

In general, Traditional and Gestational surrogacy is often termed as Partial and Total Surrogacy respectively.

PARTIAL SURROGACY: This is when the child harvested by the Surrogate, shares the genetic makeup of the Surrogate Mother and that of the Commissioning Father. The Commissioning Mother has no role to play in such arrangement. This is termed as Traditional Surrogacy.

TOTAL SURROGACY: In this case an embryo is created by the IVF Method. It is done by combining the gametes of both the Commissioning Parents. This is then implanted into the uterus of the Surrogate Mother who carries the child to term. Therefore the Child has the genetic combination of the Commissioning Parents. This is termed as Gestational Surrogacy.

'Gestational Surrogacy' is total in the sense that an embryo created by the process of IVF is implanted into the Surrogate Mother and therefore, the Surrogate Mother is not genetically related to the child. Eggs are extracted from the Intended Mother or egg donor and mixed with sperm from the Intended Father or sperm donor in vitro. The embryos are then transferred into the Surrogate's uterus. Embryos which are not transferred may be frozen and used for transfer at a later time if the first transfer does not result in pregnancy.⁵

'Traditional Surrogacy' may be called partial or genetically contracted Motherhood because the Surrogate Mother is impregnated with the sperm of the Intended Father making her both the Genetic and the Gestational Mother; the child shares make-up of the Commissioning Father and the Surrogate Mother.⁶ In Traditional Surrogacy, the Surrogate Mother is artificially inseminated with the sperm of the Intended Father or sperm donor. The Surrogate's own egg will be used, thus she will be the Genetic Mother of the resulting child.⁷

TYPES OF MEDICAL PROCEDURE

The Medical Procedure followed in Surrogacy can broadly be divided into two:

- **Artificial Insemination**
- **In-Vitro Fertilization**

Artificial Insemination offers many advantages to couples who wish to have a Child. It's an infertility treatment that dates back to the 1953.⁸ It's the process of impregnating a woman using donated sperm. It is a fertilization procedure, during which sperm from a woman's partner or sperm from a donor is inserted into a woman's cervix or uterus, and if the procedure is successful, the woman conceives. Artificial Insemination is a simple procedure and is usually the first option infertile couples choose. The success rate depends on many factors, such as the age of the women, her gynecological health, the egg quality and the sperm count. The average cost is \$500, but prices vary widely.

In-Vitro Fertilization is a more complex procedure. In-Vitro is Latin for "**Within the Glass.**" This procedure is usually considered when other Assisted Reproduction Technologies fail. With In-Vitro, egg cells are fertilized with sperm outside of the womb and then the embryo is implanted in the uterus of the woman. Before In-Vitro can take place, the woman's ovulation is hormonally controlled to find the most fertile period and then egg cells are removed from the ovaries. According to WebMD.com, "The eggs and sperm are placed in a glass dish and incubated with careful temperature, atmospheric and infection control for 48 to 120 hours." If fertilization takes place, the embryo is transferred to the womb.⁹ In-Vitro fertilization is far more expensive. For one cycle of In-Vitro Fertilization, the cost ranges from \$10,000 to \$15,000. As for success rates of In-Vitro, a 2006 report of the Centers for Disease Control showed that age plays an important role. The reports states that women 35 years of age and younger have a 30 to 40 percent success rate if they use their own eggs. The success rate declines steadily as a woman grows older.

TRADITIONAL SURROGACY VIA ARTIFICIAL INSEMINATION

What exactly is a Traditional Surrogate Mother? When most people who are not familiar with the process of Surrogate Motherhood are confronted with it, they automatically assume a Surrogate arrangement is a Traditional Surrogacy arrangement, since this is the oldest form of Surrogacy. The first is Traditional Surrogacy. With this type of arrangement, a Woman is artificially inseminated with the sperm of either the intended father or a sperm donor. The child she becomes pregnant with and eventually delivers is genetically her own baby, as her own egg is fertilized as part of the process and this process is known as Artificial Insemination.

Artificial Insemination first began with farm animals. In an article on the University of Florida website states, "In 1899, **Ivanoff** of Russia pioneered AI research in birds, horses, cattle and sheep. He was apparently the first to successfully inseminate cattle

artificially."¹⁰ The first Human experiments with Artificial Insemination occurred during World War II in the Nazi concentration camps. The Soviet War Crimes Report on Auschwitz details such experiments. It is not known if any pregnancies or births resulted from these experiments.

Artificial Insemination is a relatively simple procedure in which sperm, either from the woman's husband or a donor if the husband is unable to produce sperm, is inserted into the woman's uterus directly rather than through sexual intercourse. It is normally the first in fertility treatment a couple will try because it is simple to accomplish, involves no pain for the woman, and is inexpensive compared to other reproductive technologies. It is most often employed when a woman's husband has a low sperm count, or his sperm has difficulty in reaching the woman's egg and the woman is fertile. In case the woman is infertile then a Surrogate is used for having a child and such Surrogacy is termed as "Traditional Surrogacy".



Artificial Insemination is the fertility procedure used in Traditional Surrogacy in which sperm is directed placed in the reproductive tract of the Surrogate. In simple words, *Artificial Insemination* is semen deposition into vagina, cervix or uterus by certain instruments. The semen used in Artificial Insemination is generally of two types. It includes –

(a) **Artificial Insemination Homologus (AIH)** – Semen of husband is normal but he is unable to pour it through intercourse;

(b) **Artificial Insemination Donor (AID)** - Semen of husband is defective and hence it is taken from another healthy, suitable individual.

Broadly speaking AIH raises, least question regarding legal rights, being a product of own parent seeds. In AID fertilization takes place inside women's body for possible variations, thus this child is linked genetically to the male who is outside its own family. **Artificial insemination Homologus Donor (AIHD)** was prevalent earlier in which sperm of husband and a donor was mixed so as to hide the conclusive evidence of father of the child to prevent important issue like adultery, and illegitimacy of the child. But now it is happily accepted in our society, so importance of AIHD has gone down.

TYPES OF ARTIFICIAL INSEMINATION

Although many couples get pregnant the old-fashioned way, others spend months or even years having intercourse without getting pregnant. This can be related to a plethora of medical conditions such as inconsistent ovulation, poor sperm count or other factors. Those who suffer from infertility and has decided to hire a Surrogate or who are

healthy but have not conceived within a reasonable period of time may opt for one of several types of Artificial Insemination. There are four major types of Insemination. They are as following:

INTRAVAGINAL INSEMINATION

Intravaginal Insemination (IVI) is the least common Artificial Insemination form.¹¹ This form involves the placement of sperm directly into the vagina near the cervix. Although this can be done at a fertility clinic, IVI is usually performed by the couple in the comfort of their own home. This type of Insemination is the least invasive of the four types and can be performed by the individual themselves. IVI method is only recommended and is a good option for couples who may have problems with ejaculation during intercourse. IVI is only highly effective if the woman is fertile and ovulating regularly. The procedure is done by the extraction of semen of partner or donor by a fertility doctor and stored in a sterile syringe. The couple then takes the syringe home and inserts it all the way inside the woman's vagina until it is close to the cervix. The semen is then injected by the cervix.

IVI method is least used in Surrogacy. The cost of the IVI procedure can range up to \$500. The success rate of this procedure is 10 to 30 percent.

INTRACERVICAL INSEMINATION

Intracervical Insemination, or ICI, is considered non-invasive and painless.¹² ICI is a form of Artificial Insemination in which sperm is injected into or very near the cervix. ICI is best for those who know that they do not have problems with cervical mucus, inconsistent ovulation or sperm quality, in other words, when everything appears normal physically. Unlike IVI, it is only performed at the fertility clinic. A sperm sample is collected and a doctor places it directly inside the cervix so that it is able to travel through the uterus and up the fallopian tubes. During the procedure, the woman's vagina is held open with a speculum. After the cervix is exposed, a catheter is inserted inside the cervix. Attached to the catheter is the syringe containing the sperm sample; the sperm travels through the catheter and directly into the cervix. The sperm is prevented from leaking out by placing a sponge over the cervix. ICI is the first method that a couple will probably try after unsuccessful attempts to conceive on their own. It is the preferred method because it only takes 10 minutes and costs around \$300. The success rate is 10 percent but can be raised to 30 percent with numerous procedures per cycle.

INTRATUBAL INSEMINATION

Intratubal Insemination (ITI) is less common than ICI but more commonly used than IVI. This is the most expensive and invasive form of artificial insemination.¹³ The couples that choose ITI are having problems conceiving with ICI and want to go to the next level. Women who are having difficulties ovulation are also candidates for ITI. ITI involves placing the sperm directly in the fallopian tubes. It is a good option for those who have problems with cervical mucus or inconsistent ovulation. It is performed one of two ways. One way is to use the same catheter method that is used with the ICI procedure. The other way is through laparoscopic surgery to find the fallopian tubes. If surgery is performed, a camera is inserted into a tiny incision in the abdomen to find the precise location of the fallopian tubes. Once the tubes are located, sperm is inserted inside the tubes. The cost of ITI is upwards of \$1000, depending on the method used. The success rate has been proven to be 5 to 30 percent, but some argue that it is significantly higher.

INTRA UTERINE INSEMINATION

Intrauterine Insemination (IUI) is the most common type of Artificial Insemination. It is the simplest form of assisted reproduction. This procedure includes Artificial Insemination i.e. inserting sperm, using either the semen of the male partner, typically referred to as Artificial Insemination by Husband's Sperm (AIH), or Artificial Insemination by Donor's Sperm (AID), into the uterus with a catheter. During one menstrual cycle women are inseminated 3-4 times. The first step in IUI is hyper stimulating the ovaries through drug treatment to encourage multiple eggs to mature. At the appropriate time when ovulation has been induced, prepared sperms are injected into the uterus twice, at 24 and 48 hours after the injection of HCG. After insemination is done, Hormone (HCG)

injections continue till after 12th week of gestation or till the test for pregnancy comes out to be negative pregnancy test. The procedure is generally painless and takes only a few minutes.

SUCCESS AND COST

The Success Rates of Artificial Insemination vary depending on the type of insemination used, but typically the success rates are between 5 to 30 percent. The Success rate can be affected by factors such as stress and quality of the egg and sperm. On average, ICI is the cheapest, ranging from \$200 to \$350 per cycle. Many people choose ICI for this reason-the cheaper the cost of the cycle, the more cycles can be done and the higher the odds are of conceiving. ITI tends to be the most expensive insemination type, running \$1,000 or more per cycle.¹⁴ The cost of each type of insemination also may vary depending on whether the person undergoing the procedure opts for fertility drugs, donor sperm or a Surrogate.

In Concise, Traditional Surrogacy is achieved through artificially inseminating the Surrogate by any of the above methods. Traditional Surrogacy is typically employed when a single, heterosexual or gay male wishes to have a child and does not have a suitable female partner for carrying the baby. It is also employed when a woman wishes to have a baby and her eggs are unsuitable for some reason. For example, if a woman's eggs are not viable or she has an inheritable genetic condition that could put her biological child at risk, she may choose to contract with a Traditional Surrogate instead.

GESTATIONAL SURROGACY VIA IN -VITRO FERTILIZATION

Gestational Surrogacy is the most common of the two types of Surrogacy. With this type of arrangement, a Surrogate Mother is impregnated with the egg of another woman; the egg is fertilized by the sperm of the Intended Father or a donor prior to implantation, via a process called **In-Vitro Fertilization**.

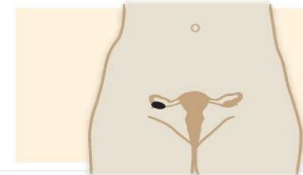
*In medical terminology, In-Vitro Fertilization (Test Tube Baby) is the process where the sperm and ovum are allowed to incubate outside the human body i.e. in laboratory and the resulting embryo is then implanted into the uterus. On July 25, 1978, Louise Brown was born. She was the first child ever born through the use of In-Vitro Fertilization; that is, she was the first "Test Tube" Baby. A British Gynecologist, Dr. Patrick Step toe, & a Physiologist, Dr. Robert Edwards, successfully joined egg and sperm outside the body, and then implanted the embryo in the mother. Nine months later, Louise Brown was born & was heralded as a **MIRACLE BABY** around the world.*

In-Vitro Fertilization simply means fertilization "in glass" as in the glass container of a test tube or Petri dish used in a laboratory. The procedure involves extraction of a number of eggs from the woman. To do this she is usually given a drug that enables her to "super ovulate," or to produce more eggs in one cycle than she normally does. The eggs are then surgically removed and fertilized outside the body in the laboratory, normally using the sperm of the woman's husband. In such a case, the Surrogate Mother is not

Surrogacy using a gestational carrier

During natural reproduction, fertilization takes place in the fallopian tube. Couples who cannot conceive naturally have the option of in vitro fertilization, in which eggs and sperm are joined in a lab. The embryo can then be carried by a surrogate.

- 1 Egg collection**
Hormone shots stimulate a woman's ovaries to produce eggs. The eggs are then collected during a surgical procedure under general anesthesia.



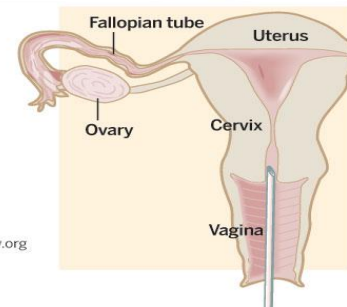
- 2 Fertilization**
A single sperm is introduced into each egg.



- 3 Cell division**
The embryos grow in a petri dish for three to five days.



- 4 Embryo transfer**
One or more healthy embryos are transferred into the surrogate's uterus. If they implant, the surrogate becomes pregnant. The baby will have no genetic connection to the surrogate.



Source: americanpregnancy.org
Journal Sentinel

genetically linked in any way to the unborn child. For this type of Surrogacy, the Surrogate Mother may be required to take fertility drugs to ensure successful impregnation. Prior to the transfer, and for ten or so weeks after the transfer, the Gestational Surrogate carrier will be required to take medications that most likely include daily injections of Progesterone in order to sustain the pregnancy and convince the body that it is pregnant. After the first trimester, she is generally weaned off of these medications. Thus, Gestational Surrogacy is conducted through the process of In vitro Fertilization. And therefore, a Gestational Surrogate Mother is not the Biological Mother of the baby conceived. The Child is either the Biological child of the Intended Mother, or of an egg donor and the Intended Father or one of the Intended Fathers. So for the clear apprehension of the concept of Gestational Surrogacy we need to understand the process of In-Vitro Fertilization.

PHASES OF IN VITRO FERTILIZATION

IVF consists of several laboratory and medical procedures. In-Vitro Fertilization is the process of manually fertilizing an egg with sperm. In-Vitro Fertilization, or IVF, is a process of fertilization of female eggs and male sperm in vitro, or outside of the body. When fertilization is successful, a medical professional physically places the fertilized eggs, or embryos, inside a woman's /surrogates uterus in hopes of implantation and embryo development. Though the finer details might vary from clinic to clinic, women undergoing IVF need to go through the following phases of "Treatment".

PHASE 1: SELECTION OF "PATIENTS"

Most clinics and hospitals have their own criteria with regard to "**Selection of Patients**". The criteria is laid down generally with respect to age and marital status; usually married women under 40 years of age are recommended for "Treatment".

PHASE 2: OVARIAN HYPER STIMULATION (OHS) AND MONITORING

The Second stage of the IVF process is the **Ovarian Stimulation and Monitoring Stage**. During this stage, a doctor will prescribe fertility medications to increase egg production and control the timing of the egg ripening. Typically, a woman's body releases one mature egg monthly, however, during the IVF process, multiple eggs are useful as not all eggs fertilize and develop after retrieval.¹⁵ The ovaries need to be stimulated to generate more number of eggs and to facilitate this, the woman undergoing IVF is required to take hormones like Clomiphene Citrate daily from the second or third day of menstruation. Around the 9th day the woman is given hormone injection of **HMG (Human Menopausal Gonadotrophin)**,¹⁶ usually marketed as Pergonal or Humegon. This hormone helps the follicles to mature.

Regular blood and urine tests are taken to check the hormone levels, and to determine the time of ovulation. A daily vaginal ultrasound scan is performed to measure the size of the follicles. When the largest follicle reaches 18 mm in diameter, **HCG (Human Chorionic Gondatrophin)**,¹⁷ usually marketed as Pregnyl or Profasi is administered. This is a hormone that induces ovulation. The entire hormone treatment lasts for about 17 days. During this stage, a doctor also monitors hormone levels and egg development.

PHASE 3: EGG RETRIEVAL

The Third stage of the IVF process is the **Follicular Aspiration, or Egg Retrieval, Stage**. During this stage, a doctor retrieves the eggs from the pelvic cavity with an ultrasound-guided aspiration or laparoscopy procedure. An ultrasound-guided aspiration uses a hollow needle guided by ultrasound imaging to remove the eggs. Within 24-38 hours the egg cells, which have developed, are sucked out of the follicles. A laparoscopy procedure uses a tube with a tiny camera to find the eggs and remove them with a light suction. This procedure is called egg-cell puncture. One of the techniques through which this is performed is **Trans Vaginal Ultrasound Directed Oocyte Recovery (TUDOR)**. In this, the eggs are harvested through the vagina instead of via laparoscopy, which is a surgical procedure. This procedure is done under local anesthesia and lasts about 40 minutes.¹⁸ The use of local anesthesia

and sedation eliminate any pain or discomfort a woman might feel during this minor surgery. During this phase, sperm from the husband or donor is obtained.

PHASE 4: TREATING THE GAMETES

In this phase the sperm and egg cells are treated. The egg cells are kept for a few hours at 37 degree Celsius to incubate/develop. The semen if provided by the intended father is prepared for fertilization by removing inactive cells and seminal fluid. Or a donor sperm is used. **Sperm Selection and Manipulation take place in this phase.**

PHASE 5: FERTILIZATION

This stage in the IVF process is the **Fertilization Stage**.¹⁹ During this stage, a Doctor collects a sample of sperm from a male approximately 2 hours before the egg retrieval, a process referred to as sperm washing. After the retrieval of the mature eggs, a doctor places the eggs and sperm in a petri dish in a culture medium, in an incubator that simulates the exact temperature of a woman's body. The goal of this stage is fertilization and normal development of the eggs within the first 48 hours.

PHASE 6: EMBRYO TRANSPLANTATION

The Final Stage in the IVF process is the Embryo Transfer Stage.²⁰ During this stage, a Doctor places the fertilized eggs, or embryos, into a catheter and transfers a specified number of embryos into a Woman's/ Surrogates uterus. Once the fertilized egg cell splits from a single cell into a two to four to eight-cell stage, it is ready to be transferred into the Woman'/Surrogates uterus, where normal gestation follows. This replacement/transfer happens about three days after fertilization. There is a very short period when egg cells can be fertilized; therefore to improve the chance of a successful pregnancy, more eggs are retrieved, fertilized and usually multiple embryos are replaced. As more than one embryo is transferred there are chances of multiple pregnancies. In such cases the woman might have to undergo foetal reduction. A doctor will preserve any remaining embryos with cryopreservation, or freezing, for later use. Cryopreservation is useful for storing and preserving most of the embryos for long amounts of time and adding to the success rate of the IVF process.

Hence, In-Vitro Fertilization and Artificial Insemination are available for infertile couples and also for single women and lesbians who don't have a male partner. Artificial Insemination is a simple and inexpensive procedure compared to In-Vitro. But In-Vitro has an added benefit: It is also successful for women in their fifties and sixties who have gone through menopause. After menopause, there are no viable eggs for pregnancy, but the uterus still functions. In these cases, the egg used in the procedure is from an egg donor. Genetically the woman has no connection to the baby, but there is an emotional connection because she has carried the child for 9 months. Apart from the above phases of IVF there is one more IVF procedure available namely ICSI.

INTRA CYTOPLASMIC SPERM INJECTION (ICSI)

Intra Cytoplasmic Sperm Injection (ICSI) is an IVF procedure in which a single sperm is injected directly into the cytoplasm of the egg. This technique is used in cases of severe male infertility, including very low sperm count; immotile sperm; and sperm which cannot penetrate the chemical barrier which protects the egg. It is also used in cases where women are unable to conceive due to closed tubes. Sperm can be extracted directly from testis where ejaculation is not possible.

- ❖ The ovum is acquired as in IVF. For this the woman undergoes OHS and then the eggs are retrieved.²¹
- ❖ Once the eggs are retrieved, the sperm is acquired through:

- **Microscopic Epididymal Sperm Aspiration (MESA)**: procedure in which spermatozoa are obtained from the Epididymis, by either aspiration or surgical excision. ²²
- **Testicular Sperm Aspiration (TESA)**: procedure in which spermatozoa are obtained directly from the testicle, by either aspiration or surgical excision of testicular tissue.
- ❖ The sperm is then selected and manipulated before injecting.
- ❖ The sperm is injected into the oocyte under a microscope using micro manipulation devices.
- ❖ After this procedure, the oocyte is placed into cell culture and checked on in the following days for fertilization.
- ❖ After fertilization the embryo is transferred into the uterus for gestation.

TYPES OF SURROGACY ARRANGEMENTS

Besides the two basic types of Surrogacy, the Surrogacy arrangements are often categorized according to whether payment is exchanged or not. Surrogacy is Commercial or Altruistic depending on whether the Surrogate receives financial reward for her pregnancy or the relinquishment of the child, or not.

Broadly Surrogacy arrangements can be classified into two categories as following:

- ❖ **Commercial Surrogacy**
- ❖ **Altruistic Surrogacy**

For Commercial types of Surrogacy, the Surrogate Mother is typically paid a fee to compensate her for her participation. This fee will cover not only her medical expenses and any other expenses related to the pregnancy, including travel arrangements, but also a sum for her time and effort. In some cases, Surrogacy fees can amount to thousands of dollars or Rupees in compensation which is often termed as the remuneration of the Surrogate or the compensation for their reproductive labor. The other monetary categorization for Surrogacy is the Altruistic arrangement. Altruistic Surrogacy has started to become a buzz word from two groups of people: those on the outside, against Surrogacy, looking at Surrogate Motherhood as a commercial enterprise, and those who are in need of a Surrogate Mother but cannot afford one. Is this type of Surrogate pregnancy possible? Are there women out there willing to become a Surrogate Mother without taking a fee? ²³

Let's get to the bottom of what exactly Altruistic Surrogacy is, as well as where to find such a Surrogate. The word altruistic is an adjective derived from the word altruism. Altruism is defined by the **American Heritage Dictionary**²⁴ as follows:

Altruism: (noun)

1. Unselfish concern for the welfare of others; selflessness.
2. (Zoology) Instinctive behavior that is detrimental to the individual but favors the survival or spread of that individual's genes, as by benefiting its relatives.

Altruistic Surrogacy is where a Surrogate Mother agrees to gestate a Child via a Surrogate Pregnancy for Intended Parents without being compensated monetarily in any way. With this type of arrangement, the Surrogate Mother

agrees to become pregnant with and deliver the baby of another person or couple without any monetary compensation. However, in this case, she may still be reimbursed for medical care and other pregnancy-related expenses. The difference here is that she will receive payment above and beyond the things that are related to the pregnancy.

In other words, this is in effect a free Surrogacy. Now, all the Surrogate Pregnancy related expenses, such as health insurance, maternity clothes and prenatal vitamins are still paid by the Intended Parents, but the Surrogate Mother herself does not take a fee in any way. Either a Traditional Surrogacy or a Gestational Surrogacy may be termed Altruistic. This type of Surrogacy pertains to the fee schedule itself, not the type of Surrogacy.

CONCLUSION

Advancement in Science has resulted into miracles. It has made the impossible, possible. The progress in treatments pertaining to infertility has reached to a zenith. The advancement in Assisted Reproductive Technologies has given hope to millions of childless couples.

Artificial Insemination and In-Vitro Fertilization are the two such Advanced Assisted Reproductive Technologies through which infertile couples can have a child or with the use of this technology and help of a Surrogate they can have their own Biological Child. In Traditional Surrogacy the process used is Artificial Insemination and in Gestational Surrogacy In-Vitro Fertilization process is used; both involve impregnating a woman without using sexual intercourse. While Artificial Insemination is a simple procedure that has been available to couples since 1953, In-Vitro Fertilization is more complex and has been around since 1978.²⁵ These alternative methods of Fertilization are very different in scope and execution, and there is no guarantee that either will work. The Surrogacy arrangement made during both the Surrogacy's could be Commercial or Altruistic depending on the compensation received by the Surrogate Mother.

ENDNOTES

- 1 See Surrogacy Laws India, *Surrogacy Defined*, available at http://www.surrogacylawsindia.com/index_inner.php
- 2 Id.
- 3 BLACK'S LAW DICTIONARY 1485 (8th Ed. 2004).
- 4 Id.
- 5 Jenn Z., *Definition and Types of Surrogacy*, SURROGATE MOTHERS ONLINE, available at <http://www.surromomsonline.com/articles/define.htm>
- 6 S.B.N Prakash, *Surrogacy a problem both socially and legally*, available at <https://www.nls.ac.in/resources/ded/classnotesforyear2010ded/N9PIISurrogacy.pdf>
- 7 Supra note 5
- 8 Blake Ryan, *What Are the Advantages of Artificial Insemination in Humans?* Available at http://www.ehow.com/list_7268353_advantages-artificial-insemination-humans_.html (Last visited on Oct 23, 2014)
- 9 See <http://www.webmd.com/infertility-and-reproduction/guide/in-vitro-fertilization>
- 10 See <https://ufhealth.org/artificial-insemination>
- 11 Whatley Tiesha, *How Is Artificial Insemination Performed?* Available at http://www.ehow.com/how-does_4572461_how-artificial-insemination-performed.html

12 Id.

13 Id.

14 Wanda Thibodeaux , *Types of Artificial Insemination in Humans*, available a http://www.ehow.com/about_5057777_types-artificial-insemination-humans.html

15 Edited and referenced from '*ARTs and Women: Assistance in Reproduction or Subjugation?*' Sama. (2006).pp. 117-119.

16 Gonadotrophin is any of the several hormones synthesized and released in the pituitary gland that acts on testes or ovaries to promote production of sex hormones and sperm or ova (Oxford concise medical dictionary, 1998)

17 HCG is a hormone similar to the pituitary gonadotrophin. It is given by injection to treat delayed puberty, undescended testes, premenstrual tension and sterility due to lack of ovulation. (Oxford concise medical dictionary, 1998)

18 Gupta, J.A., *New Reproductive Technologies, Women's Health and Autonomy, Freedom or Dependency?* Sage Publications. India, 2000

19 Calia Roberts, *Stages of In-Vitro Fertilization*, available at http://www.ehow.com/info_8400179_stages-vitro-fertilization.html

20 Id.

21 Sama, Supra Note 20

22 Id.

23 Perkins Rayven , *Altrusitic Surrogacy*, INFORMATION ON SURROGACY, available at <http://forums.information-on-surrogacy.com/>, last visited on Jan 20, 2012

24 See <https://www.ahdictionary.com/word/search.html?q=Altruism>

25 See http://www.ehow.com/about_5057777_types-artificial-insemination-humans.html