

Infertility treatments that could help women get pregnant despite the odds

Here are few options to treat infertility in women.

[Debjani Arora](#) | Updated: March 7, 2018 8:42 am



The last two decades have been revolutionary in terms of fertility management and triumphing challenges posed by infertility. To the couple experiencing difficulty in getting pregnant, there is plenty of hope today. It is not a lost battle like it was in the past. Besides, almost every hurdle can be overcome with the help of scientific and technologically advanced options. For example, a woman without a uterus can still have her own child by borrowing another's womb! This makes experts believe that every woman who chooses to become pregnant can be blessed.

Here **Dr Duru Shah Director, Gynaecworld Center for Assisted Reproduction & Women's health**, discusses the issues of infertility and options that can help a woman conceive despite all odds.

What happens during conception?

During the normal sexual activity, semen which consists of millions of sperms is deposited in the vagina. From there the active and motile sperms travel into the fallopian tube to meet the egg which is released from the ovary once a month. This is where fertilization of the egg occurs. The fertilized egg multiplies further, becomes an embryo and travels into the uterus where it finally implants and forms a fetus and then into a beautiful baby. So to produce a baby it is absolutely necessary that there should be an efficient egg, a motile sperm and a functional uterus. However, for some this natural cycle is hampered due to certain physiological problems –like the absence of a womb or functional ovaries. These women then have to take the route of fertility treatments to get pregnant.

Here are few of the problems that can affect conception in women:

1. **Dysfunctional ovaries or damaged eggs**

Women are born with limited eggs in their ovaries, and when the eggs are exhausted, women reach menopause. Fertility is low almost nil in the last 10 years before menopause. Indian women reach menopause at an average of 48 years which is about five years earlier than their western counterparts. Hence women of Indian ethnicity are recommended to complete their reproductive function before the age of 35 years, to avoid having to access assisted reproduction.

Sometimes, radiation therapy or chemotherapy used to treat certain cancers in young women may temporarily or permanently damage the eggs in the ovaries. The other risk factors for eggs to be harmed are active smoking and sometimes even passive smoking through excessive smoking by her partner. Previous ovarian surgery for various reasons where some part of the ovary may be removed can also make conception difficult.

What can be done:

Freezing or Vitrification of eggs: It is a procedure where eggs are frozen if any of the above is anticipated so that she can keep her eggs young and in good quality and use them when she would need. But if she has not frozen her eggs and she plans a pregnancy when her eggs have all been exhausted, then she needs an egg donor to give her the eggs she needs.

Egg donation: This procedure involves finding an appropriate donor (anonymous), screening her for infections and other diseases such as diabetes, thyroid, etc, matching her physically with the patient concerned, retrieving eggs from the donor, fertilising the eggs with the patients husband's sperm and placing the embryos (babies) in the womb of the patient. This is a variation of IVF (In vitro fertilisation or

test tube baby). Egg donation gives excellent results in women who have poor quality eggs.

2. **The absence of a womb**

Unfortunately, there are certain conditions in which a woman is born without a uterus or has to have it removed due to medical reasons. With the help of IVF, embryos are prepared with her eggs and her husbands' sperms and then transferred to another woman's womb. This procedure is termed surrogacy.

Surrogacy: Surrogates (who carry the baby) also require thorough screening, to ensure that no infectious disease is transmitted to the baby. To confirm that the baby belongs to the biological parents, DNA fingerprinting is done and care is also taken to match the DNA of the baby with that of the parents so it is not similar to the DNA of the surrogate who carries the baby till delivering. Recently uterine transplantation has been successfully tried abroad and about ten children have already been born. However, doctors are of the opinion that it will take another five years before it becomes a common clinical service in India.

Fertility options for men who have low sperm count or dysfunctional sperm

An expert suggests fertility options for men suffering from low sperm count.

[Debjani Arora](#) | Published: March 7, 2018 5:11 pm



When it comes to pregnancy and conception, even with all the awareness and knowledge around, people think that the onus always lies on the woman to birth a baby. But in reality, both the man and woman's health – physical and psychological should be in sync to make conception happen. Some people conceive as soon as they plan to have a baby and for some, it might take a while. Conception depends on a lot of things – sperm and ovum quality, ovulation, right time for intercourse, the overall health of the parents and more. So, when a couple is not able to conceive despite repeated attempts it is necessary to get a detailed medical check-up done for both to get to the root of the problem. Here [are some common reasons for infertility in men](#).

The problem could be in either of the partners and if the problem lies with the man, the most common one is that of low sperm count or dysfunctional sperms. 'For a pregnancy to occur, the egg is penetrated by the sperm and the two merge together to form an embryo. However, if the man has low sperm count or is suffering from azoospermia is a condition in which the male does not have any measurable level of sperm in his semen, this could pose a problem in conception,' she **Dr Duru Shah Director, Gynaecworld, Center for Assisted Reproduction and Women's health, Mumbai**. Here are [few reasons of secondary infertility in men](#).

Here she explains how men can overcome this problem. There are two ways to treat the problem

1. **TESA (Testicular Sperm Aspiration):** This involves directly obtaining sperm from the testes where they are produced. These sperms do not usually possess the ability to penetrate the egg. Hence by a process called ICSI (Intra Cytoplasmic Sperm Injection), each sperm is literally injected into a single egg using 400 times magnification with the assistance of a very special microscope called Micromanipulator. ICSI is also used for men with a low sperm count or reduced ability of the sperm to move (motility).
2. **Sperm donation:** The other option available for men with azoospermia is the use of donor sperm. This involves a screening process, for ruling out medical conditions in the donor at ovulation, determined by ultrasonography, the sperms are injected into the uterus via a procedure called Intra Uterine Insemination (IUI) which involves placing sperm inside a woman's uterus to facilitate fertilization.