

FAQ

1. What is infertility?

World Health Organization (WHO) definition of infertility is failure to conceive following twelve months of unprotected intercourse in absence of any known pathology.

2. How common is infertility across the world?

Global estimates of infertility range between 8-12% of couples with women of child bearing age, affecting between 50 - 80 million people.

3. What are the conditions leading to infertility?

Infertility is due to female problem in 30% of the cases and male problem in 30% of the cases. Problems common to both partners are diagnosed in 15-30% of infertile couples. Unexplained infertility is when cause of infertility is not found and is seen in 10-15 % of couples. Female factors are: ovulatory disorders, damaged fallopian tubes, endometriosis, tuberculosis, uterine abnormality, endocrine abnormality like hyperprolactinemia etc.

4. Is it always that the female who is responsible for the infertility?

No. The incidence of infertility in men and women is almost equal. Infertility is due to problem in female in approximately 30% of the cases and problem in male in approximately 30% of the cases. Problems common to both partners are diagnosed in 15-30% of infertile couples. In spite of thorough medical investigations, the causes of the fertility problem remain unexplained in upto 5-10% of infertile couples.

5. Do painful periods or longer interval (5-6 week) between periods cause infertility?

Painful periods do not affect fertility. In fact, for most patients, regular painful periods usually signal ovulatory cycles. However, progressively worsening pain during periods (especially when this is accompanied by pain during intercourse) may mean you have endometriosis which in turn may affect your fertility. As long as the periods are regular, this means ovulation is occurring. Some normal women have menstrual cycle lengths of as long as 40 days. Of course, since they have fewer cycles every year, the number of times they are "fertile" in a year is decreased. Also, they need to monitor their fertile period more closely, since this is delayed (as compared to women with a 30 day cycle).

6. How do the fallopian tubes get damaged?

This is mostly due to sexually transmitted diseases (for example chlamydia or gonorrhoea), complicated appendicitis, tuberculosis or pelvic inflammatory disease (PID) can also cause damaged tubes. Other causes are multiple miscarriage, abdominal operations (gynaecological operations, caesarean section, sterilization etc.) and diseases like Crohn's disease etc. Affected patients can have fertility problems and are at risk for having a pregnancy located in the tubes (ectopic or tubal pregnancy).

7. What is endometriosis? How does endometriosis affect fertility?

Endometriosis is an often painful disorder in which tissue that normally lines the inside of your uterus — the endometrium — grows outside your uterus (endometrial implant). Endometriosis most commonly involves your ovaries, bowel or the tissue lining your pelvis. Rarely, endometrial tissue may spread beyond your pelvic region. In endometriosis, displaced endometrial tissue continues to act as it normally would — it thickens, breaks down and bleeds with each menstrual cycle. Because this displaced tissue has no way to exit your body, it becomes trapped. When endometriosis involves the ovaries, cysts called endometriomas may form. Surrounding tissue can become irritated, eventually developing scar tissue and adhesions — abnormal tissue that binds organs together. This can give rise to infertility or subfertility.

8. What is polycystic ovary syndrome or PCOS?

Polycystic ovary syndrome (PCOS) is a common hormonal disorder among women of reproductive age. The name of the condition comes from the appearance of the ovaries in majority — containing numerous small cysts located along the outer edge of each ovary (polycystic appearance). Infrequent or prolonged menstrual periods, excess hair growth, acne and obesity can all occur in women with polycystic ovary syndrome. In adolescents, infrequent or absent menstruation may signal the condition. In women past adolescence, difficulty becoming pregnant or unexplained weight gain may be the first sign. The exact cause of polycystic ovary syndrome is unknown. Early diagnosis and treatment may reduce the risk of long-term complications, such as type 2 diabetes and heart disease.

9. Can the uterine or tubal defects be corrected?

Anatomical abnormalities of uterus and damaged fallopian tubes can be corrected by advanced reproductive surgeries. Advanced reproductive surgery involves meticulous surgical technique for optimal results. Reproductive surgeons treat tubal obstruction, endometriosis, uterine fibroids, scarring of the ovaries or other pelvic structures. Abnormalities that lead to infertility can be treated surgically by removing scar tissue, laser coagulation or excising endometriosis, and repairing tubes blocked at the fimbrial end. Many types of minor female reproductive surgery can be performed laparoscopically through a very tiny incision.

10. My husband and I do not have any health problems, my periods are fairly regular and we have a good sex life. But I haven't been able to conceive, what could possibly be wrong?

It is recommended that you consult your gynecologist at the earliest, who will try to find out the cause of infertility by advising some investigations to you and your husband. These tests will tell if your husband's sperm count is normal, if your fallopian tubes and uterus are normal, and if you are producing good sufficient eggs. It is only after undergoing these tests will your doctor be able to diagnose the cause of infertility. Based on the diagnosis, doctor will recommend the best possible solution.

11. How frequently do we need to have intercourse in order to conceive?

Around the middle of the cycle is the time of ovulation which is release of a mature egg from the ovary. Usually the fertile period is one week before and after the probable date of ovulation. Unprotected intercourse on alternate days during this period gives better a chance of pregnancy.

12. Which is the best possible treatment for me to conceive?

A correct diagnosis accomplished by investigations and consultation with a fertility specialist can help you determine the correct treatment options. At Morpheus, the team of doctors and counselors to the couple about all the treatment options available to help them make an informed decision.

13. What are the treatment options for couple where husband's semen analysis shows very low counts or no sperms?

IUI is offered to couple having low sperm count between 10-15 million/ml. Surgical Sperm Retrieval is offered to couple with azoospermia (no sperm in the semen).

PESA (Percutaneous Epididymal Sperm Aspiration) is done in case of blocked ducts leading to azoospermia. Here, under local anesthesia, a needle is inserted in the duct and the sperms aspirated.

TESE (Testicular Sperm Extraction) is done in case of non-obstructive azoospermia. Under local/short general anesthesia, sperms are obtained by biopsy from testes directly.

TESA (Testicular Sperm Aspiration) is done in case of non-obstructive azoospermia. Under local/short general anesthesia, sperms are obtained from the testes by relatively less invasive procedure.

MESA (Microsurgical Epididymal Sperm Aspiration) refers to the process of microscopic surgery used to retrieve the sperms from the ducts that convey them from the testicles. This is attempted in case there's an obstruction to the duct (obstructive azoospermia).

TESE or MESA is a technique developed for patients with no sperm cells in their sperm due to an undeveloped or obstructed spermatic cord. The cause of obstruction can be a former sterilisation or an infection of the epididymis.

The sperms thus retrieved are used for ICSI.

IMSI is useful in couples where the morphology of sperms is poor to select the best sperm.

When the testicles make no sperm cells at all, of course these are not possible. Sperm donor program is advised to a couple where husband's semen has no sperm.

For the couples opting for donor sperms, we procure semen sample from certified sperm banks. Donor IUI or IVF/ICSI is offered as per indication. The confidentiality and anonymity of the sperm donor as well as recipient couple are strictly maintained.

14. Is it possible to predict the success of the fertility treatment?

The success rate of IVF depends on many factors like age of the female partner, hormonal profile, clinical diagnosis etc. In case of an IVF treatment we need to evaluate both the husband and the wife as regards their own fertility potential. Based on these tests and clinical history we can estimate the prognosis of that particular case. Success rates in IVF/ICSI self cycle pregnancies all

over the world are in the range of 30-40% in the age group of 25-35 yrs (women). Usually ART using donor eggs/ embryos/ sperms yield better results.

15. I want to come to India for IVF treatment. How long would the treatment take?

We start with preparing the couple for IVF. This can be advised by email depending on your history and facilities available in your country. Investigation of the couple which includes blood tests (infectious screening, hormones), sonography and general tests to rule out any health problems. Some patients may require diagnostic or operative laparoscopy/ hysteroscopy, lifestyle modification (weight reduction, stop smoking, and stop alcohol/drug usage). Post this stage we recommend you visit our center for a detailed consultation where the treatment options will be discussed.

Steps involved in actual treatment:

- Down Regulation (suppression of natural hormones)
- Stimulation using hormonal injections to grow eggs.
- Monitoring of the growth eggs (scans & blood tests).
- Oocyte retrieval (egg collection)
- Embryo formation & transfer.

Time frame:

- The preparatory steps and down regulation are variable and take from 1 month to 3 months. Some of these can be done in your country, if feasible.
- From stimulation to embryo transfer will be approximately 3 weeks for which you will have to visit the center.
- The blood test for pregnancy will be done after 2 weeks from embryo transfer, which is preferably done at our center.
- So there will be an initial visit and then a stay of minimum 3 weeks during the cycle.

16. Some fertility clinics give guaranteed success for the infertility treatment. So what kind of an assurance do I have of the outcome if I enroll for the treatment with Morpheus?

The expected success rate from IVF cycle is in the range of 30 to 35 %. Though every clinic aims to succeed in helping every couple that hopes to conceive, in reality, this cannot be guaranteed. In our practice, we work with the couple to explore the causes of infertility and to outline all possible treatment options. The success rate may vary from centre to centre, since they are influenced not only by the level of expertise of the medical and embryology team but also by the characteristics of the patients treated. Patients' medical history, cause of infertility, uterine factor, systemic factor and many other conditions affect the outcome of IVF cycle. When you enroll for treatment Morpheus IVF provides the expertise, experience, latest techniques and trained staff to ensure the best possible treatment outcomes for all patient groups.

17. Is IVF treatment expensive?

The cost of IVF treatment in India is less than a fifth of that in the U.S. At Morpheus, we have a unique "Double Your Chances" offer, a clinically result oriented and cost effective treatment plan. Double Your Chances treatment plan improves the chances of pregnancy. This is a clinically result oriented plan wherein the couple gets the second cycle free of procedural cost if the first cycle does not lead to clinical pregnancy

18. What are the latest IVF technologies available at Morpheus?

State-of-the-art equipments and latest techniques like IMSI, Zona Birefringence and Laser hatching which have proved to be a boon to couples in difficult cases.

Intracytoplasmic Morphologically Selected Sperm Injection (IMSI):

IMSI is a highly advanced technique where sperms are magnified to approximately 7200 times to allow selection of better quality sperms for ICSI. This technique offered by Morpheus is a major advantage for the couple with bad morphology (abnormal structure) of sperms. It helps to select the sperms with best shape and size for injecting into the egg.

Laser Assisted Hatching (LAH):

LAH is an advanced technique used when the zona pellucida or the covering of the eggs are thicker than usual. The excessive thickening is believed by many scientists to result in lower chances of implantation which lowers the chances of pregnancy. With the help of a laser, the zona is thinned out at one place, to ease hatching of the embryo, hence improving implantation and pregnancy rates.

Zona Birefringence:

This advanced optical system assists in assessing the quality of the oocyte in a dimension that is not possible with conventional microscopy. Using this technology selection of better oocytes for fertilization is possible, resulting in good quality embryos.

19. I have undergone a previous IVF cycle, but the embryos did not grow. Is there any treatment that can help me?

In a normal IVF cycle since fertilization of eggs and sperms are allowed to happen naturally so sometimes the embryos are not formed. In such cases we should opt for an advanced procedure called ICSI where the sperm is injected into the egg to form embryos

20. I have undergone a previous ICSI cycle, but I did not conceive. Is there any treatment that can help me?

In couples who have undergone repeated failures of implantation, an alternative technique would be to culture the embryos up to the 5th day if possible, when they become blastocysts. In a natural cycle, this is the stage when the embryo actually implants in the uterus. Blastocyst culture mimics the natural cycle, thereby increasing the chances of pregnancy.

21. What are the treatment options for a woman who cannot produce any eggs?

Egg donor program is offered to women with premature ovarian failure or those with poor quality eggs. In such a case, an egg donor is chosen who donates her eggs which are fertilized with the

sperm of the husband. The selection of a donor is done by the centre and anonymity of the donor as well as the patient is strictly maintained.

This program is advised to a couple where:

Wife's ovaries are unable to produce sufficient eggs (Poor Ovarian Reserve)

Premature Menopause (Premature Ovarian Failure)

Wife's eggs are of poor quality

Ovaries have been removed or destroyed as a result of previous disease or surgery.

22. Is cryopreservation a part of the IVF procedure?

Cryopreservation means preserving in a frozen condition. It can be used for freezing gametes (egg and sperm) or embryos. Embryo Cryopreservation is freezing of embryos in liquid nitrogen at temperature of -196°C. It is used for preservation of surplus good quality embryos which can be used for subsequent cycles. The process is carried out by highly skilled and trained embryologists, following protocols to ensure minimal damage to embryos. This is offered only in select centers

23. Would the infertility treatment have any adverse effects on my health?

Along with their intended benefits, drugs used to treat infertility may on occasion cause side effects. In ovulation induction, close monitoring of follicular growth is crucial to ensure successful treatment. Monitoring techniques (such as ultrasound scan and blood tests) and adequate use of treatment protocols help the physician to avoid Ovarian Hyperstimulation Syndrome (OHSS) and minimize the risk of multiple pregnancies. Current treatment protocols have been designed in a way to reduce the risk of multiple births and OHSS though they are not completely avoidable.

24. Does IVF treatment increase the incidence of multiple births?

Multiple births occur more frequently after infertility treatment than in the normal population. About 80% of pregnancies achieved following simple ovulation induction with gonadotrophins result in single births, the remaining 20% being multiple pregnancies, mostly twin pregnancies. New treatment regimens carefully adapted to the patient's response help to decrease the risk of a multiple pregnancy. After IVF, one pregnancy out of four is multiple (20% twin pregnancies and 3-4% triplets). In many IVF centres, physicians now frequently choose to place a maximum of three embryos inside the uterus, to further reduce the chance of multiple births