



ADVANCED TREATMENT PROTOCOL TO OVERCOME FAILED IVF

Parenthood is considered the dream of married couples. Present day lifestyles and the environment greatly impact various organs in the body, including the reproductive system. Sedentary lifestyle, unhealthy eating habits, lack of sleep and stress can all contribute towards infertility. Infertility can have severe impact on self-esteem, cause social stigma, marital discord and even lead to depression.

Numerous couples opt for In-vitro fertilization (IVF) as a last resort after attempting all possible tried and tested methods like ovulation induction/ Intra uterine insemination, laparoscopy etc. to get pregnant. However, success and failures are a part of life and the same happens in the case of the IVF process. While some couples are lucky enough to conceive in the first cycle, others fail leading to anger, frustration, hopelessness and despair.

A failed IVF cycle is devastating for the couple emotionally, physically and financially. Unfortunately, this is witnessed in 40-50% of patients, who are unable to conceive for various reasons. As many couples assume, a failed IVF is not the end of fertility treatment. There are several options to get pregnant with the right guidance and treatment.

REASONS FOR IVF FAILURE

Human reproduction by itself is a gamble. Consider a fertile couple who is trying to have a baby, do their attempts result in a pregnancy every month? Of course not! A young, fertile couple may take up to one year to achieve a pregnancy – and they have just 10-15% chance of conceiving in one menstrual cycle. It is very difficult to pinpoint a single cause for failure. However, some possible explanations include,

1) ADVANCED AGE/POOR QUALITY EGG

Women are born with a set number of eggs. As age advances, the number of eggs declines, and the rate of decline is different for all women. Along with the number, there is also a decline in the quality of egg, and increased risk of genetic anomalies, which manifests as increased risk of abortion after the age of 35. This can also cause a decline in fertility and the probability of pregnancy.

2) POOR SPERM QUALITY/ SPERM DNA FRAGMENTATION

Abnormal sperm parameters like poor count, motility and morphological defects can cause poor embryo quality, which leads to decline in IVF success. High sperm DNA fragmentation (DFI) can yield poor embryos and lead to failure. High DFI is also associated with higher aneuploidies and higher miscarriage rates.

3) POOR QUALITY OF THE EMBRYOS

The quality of the embryo is assessed using morphological parameters such as rate of cell division, cell stage, granularity. Grade 1 and 2



Dr Vandana Hegde,
Clinical Director and Chief IVF consultant

embryos give higher success.

4) GENETIC DEFECTS IN THE EMBRYOS

If the embryo is genetically abnormal, despite having good morphology, the treatment will fail. The genetic component of the embryo cannot be checked by morphological grading and would require a specialized test called Pre-implantation Genetic Testing (PGT)

5) NON-RECEPTIVE ENDOMETRIUM

Endometrial receptivity is the ability of the endometrium to successfully attach the embryo, nourish it and keep it alive.

This can only be achieved after the endometrium undergoes several histological changes while also increasing in thickness. Fibroids/ endometrial polyps/ adenomyosis will also have a negative effect on implantation.

6) IVF SET-UP

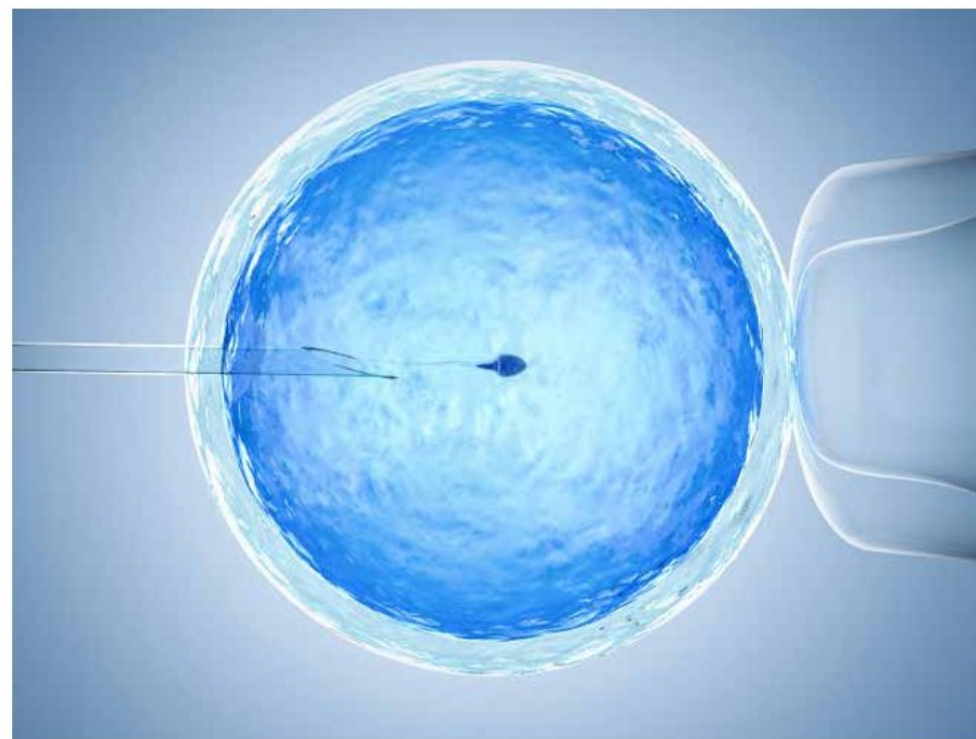
Apart from the above mentioned reasons, various other factors also affect success like infrastructure, IVF Lab quality, culture conditions, equipment and techniques used in the lab, expertise of clinicians and embryologists. It takes the whole team to work in a seamless manner, individualising protocols to each couple and in a case-by-case manner to deliver results in previously failed cases.

While it is important to know the reasons for failure, it equally important to know what doesn't cause IVF failure.

THINGS TO DISCUSS AFTER A FAILED CYCLE

WHAT WENT WRONG

Sometimes it's just a matter of trying again.



But in cases of more complex treatments like IVF, identifying where things fell through may help boost your odds of success next time.

WHAT ARE YOUR ODDS OF SUCCESS IF YOU TRY AGAIN?

Sometimes, they are just as good as the first time. Sometimes, previous cycle may predict poor future response. And sometimes previous cycle details may help make certain changes to improve success in subsequent cycles.

WHAT ADDITIONAL TESTING MAY BE RECOMMENDED, IF ANY

Sometimes it's testing you've had before; sometimes it's something new, such as genetic screening, karyotyping, testing for reproductive immunology issues, or a more advanced uterine evaluation like hysteroscopy/ endometrial receptivity array.

SUBSEQUENT MANAGEMENT

1. Another attempt at IVF: In IVF treatment, a person may require more than one attempt to get pregnant. Only a few lucky ones conceive at the first attempt. Before going for the second IVF treatment, the couple may be prescribed some tests to look for any condition that may hinder the fertility treatment. The specialists may also suggest lifestyle changes that can increase the chances of getting pregnant. If everything goes fine, they may advise the couple to go for another IVF.

2. Pre-IVF medications: They can be given for both partners 30-60 days prior to starting IVF. During this time, lifestyle modifications with diet, exercise, weight loss and acupuncture may also help. Overall, these efforts help in improving egg/sperm quality for the next cycle.

3. Advanced stimulation protocols: Ovarian stimulation strategies have evolved since the last decade. By using advanced personalized stimulation regimens for each patient, the oocyte retrieval numbers can be improved thereby improving IVF outcome.

4. Pre-implantation Genetic Testing (PGT):

MYTHS REGARDING MISCARRIAGE

- 1) Not taking bed rest
- 2) Cough
- 3) Stress
- 4) Foods generating excessive heat
- 5) Treatment in summer season
- 6) Long journeys etc.

In patients who fail repeatedly, despite transferring good quality embryos, PGT is advised. Here, embryos after culturing to day 5 (Blastocyst) are biopsied and sent for genetic testing. Embryos with normal chromosomes are only used for transfer and abnormal ones are discarded.

5. Endometrial Receptivity Array (ERA): Endometrial Receptivity Array is a genetic test performed prior to frozen embryo transfer in highly-selected patients. This test aims to identify the best time for embryo transfer; based on genetic testing to identify the window of implantation. ERA may be advised if the person has had repeated implantation failure.

6. Hysteroscopy: Most of the uterine abnormalities like fibroids, endometrial polyps, uterine adhesions are usually diagnosed on routine fertility scans. But in 10-15% patients, mild abnormalities may be missed in routine evaluation. Hysteroscopy will help to detect and treat the condition in the same sitting.

7. Blastocyst culture: Embryos cultured up to day 5 are known to increase success in IVF.

8. Testicular Sperm aspiration (TESA): It is advised in patients with severe sperm abnormalities. Testicular sperms can be obtained from a biopsy and used for ICSI in severe low counts/ very high DFI/ previous failed IVE.

9. Anti-coagulant therapy: It is given in therapeutic doses after embryo transfer in certain patients, to help improve implantation. Heparin, a blood thinner prevents the formation of blood clots and may improve attachment of the embryo to the endometrium.

10. Use of Steroids, IVIG or Intralipids: These therapies are used to reduce the level of specific immune cells called NK cells in the uterus. This immune alteration is favourable to support a pregnancy.

11. Use of G-CSF (Granulocyte-Colony Stimulating Factor): A cytokine which stimulates the proliferation of specific immune cells which can help improve outcomes in patients with recurrent miscarriages.

12. Oocyte donation: If there is any problem with the eggs, then the couple may be advised to go for a third-party egg donor. It is mostly recommended to women with inadequate, or non-viable, eggs. In this, eggs are procured from donors after the screening. Third-party donors are generally under 30 and have healthy eggs.

13. Sperm donation: If there is severe sperm abnormality like cryptospermia with ICSI

INFERTILITY DEPARTMENT

DR. DURGA VYTILA
Clinical Head - Miyapur

DR. JASMINE SALKAR
Consultant Reproductive Medicine

DR. SHALINI SINGH
Consultant Reproductive Medicine

DR. LAVANYA BOMMAKANTI
Consultant Reproductive Medicine

DR. INDRANI MOGLI
Consultant Reproductive Medicine

DR. ARCHANA A NAGAONKAR
Consultant Reproductive Medicine

GENETICS DEPARTMENT

DR. SURBHI KAPOOR
PhD - Human Genetics

DEPARTMENT OF LAPAROSCOPY

DR. PRASHANT HEGDE
Medical Director



Dr Akash Agarwal
Scientific Director & Chief Embryologist

failure or very high DFI >80, or genetic abnormality in male partner, donor sperm may be advised. Semen is procured from registered sperm banks.

14. Surrogacy: Some women including patients with severe adenomyosis, multiple fibroids with distorted uterine cavity, very thin endometrium, severe uterine adhesions etc. cannot implant embryos. That's when surrogacy is the last option. A surrogate is not directly linked with the embryo. They are just gestational carriers, who carry the embryo for the couple for nine months.

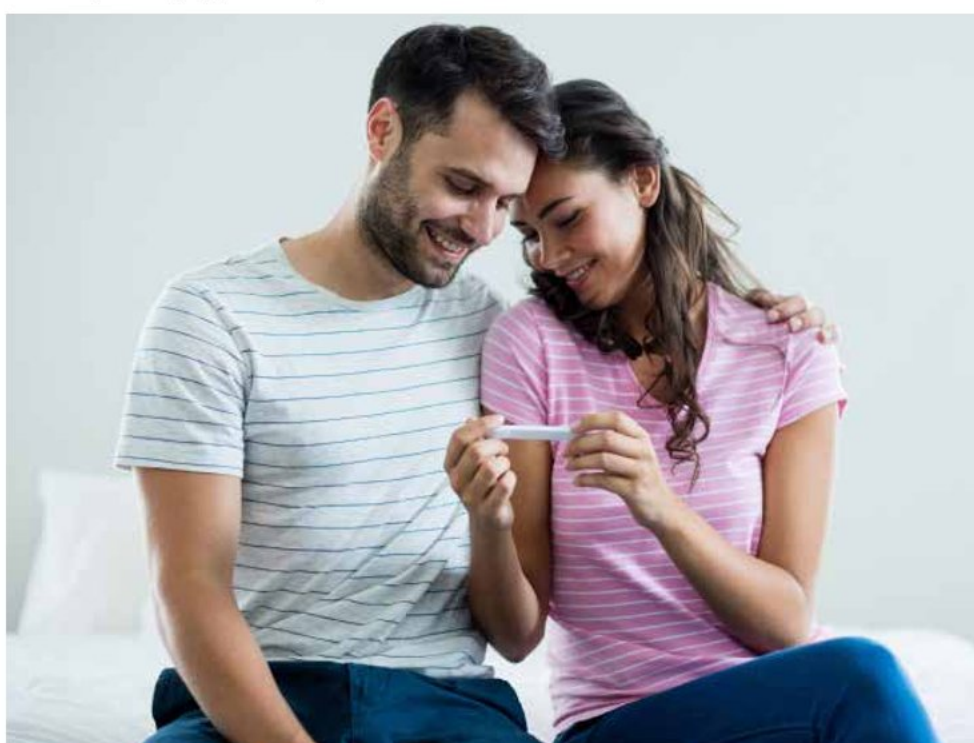
With today's technological advances in IVF and all available options mentioned above, majority of patients will be able to complete their family in due time. The team at Hegde Fertility strives hard to ensure this happens sooner. They incorporate all the latest advances happening world over into their protocols, to deliver success rates on par with international standards.

For further details contact:

HEGDE FERTILITY
Conception. A Miracle. A Science
Touching Hearts of Millions Since 1977

● Hitec City ● Malkpet
● Miyapur ● Suchitra
Call: 8880 747474

To know more: www.hegdefertility.com



For any further details about Times Health, contact kiran.tsm@timesgroup.com

DISCLAIMER: THE VIEWS/CONTENTS EXPRESSED/PRESENTED HEREIN, WITHIN THIS ADVERTORIAL, HEALTH PROMOTIONAL FEATURE, ARE THE SOLE AND EXCLUSIVE RESPONSIBILITY OF INDIVIDUAL CLIENTS/ THEIR AUTHORIZED REPRESENTATIVES, TO WHICH EFFECT, PUBLICATION HOUSE/ ITS REPRESENTATIVES/AFFILIATES ARE NOT RESPONSIBLE/LIABLE WHATSOEVER.