

Infertility treatment-IVF

OVO G-U-I-D-E

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IVF WITH ICSI



Intracytoplasmic sperm injection (ICSI) is an in vitro fertilization procedure in which a single sperm is injected directly into an egg.

This is used when sperm has difficulty penetrating the egg, and in these cases the partner's or a donor's sperm may be used. ICSI is also used when sperm numbers are very low.



IVF WITH IMSI



Intracytoplasmic Morphological Sperm Injection is a modification of the ICSI technique where sperm samples are examined under a microscope that is almost 6000 times more powerful to assess their morphology. It assesses structure of the sperm and excludes the sperm with suspected abnormalities from being injected into the eggs. IMSI can be used for men with high number of abnormal sperms & poor outcomes in IVF with ICSI earlier.

WHAT IS IVF?

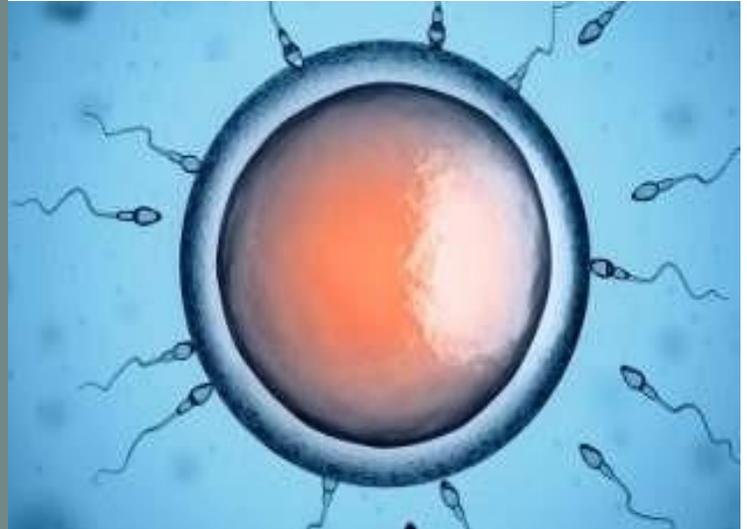
IVF (In Vitro Fertilization) is a procedure in which egg is taken out of woman's ovaries and joined with the sperm together outside the body, in a specialized laboratory, in a Petri-dish. The fertilized egg(s) are allowed to grow in a protected environment for some days before transferring into the woman's uterus, thereby increasing the chances of pregnancy. The resulting embryos are assessed for quality, and one or more embryos are placed in woman's uterus through the cervix.

IVF can be used to overcome a range of fertility issues with couples, thus offering them the best chance of having a baby.

Why is IVF done?

In vitro fertilization (IVF) is done for the treatment of infertility or genetic problems.

Sometimes, IVF is offered as a primary treatment for infertility in women over age 40. IVF can also be done if you have certain health conditions. For example, IVF may be an option if you or your partner has:



- **Fallopian tube damage or blockage**
Fallopian tube damage or blockage makes it difficult for an egg to be fertilized.
- **Ovulation disorders**
If ovulation is infrequent or absent, fewer eggs are available for fertilization.
- **Premature ovarian failure**
Premature ovarian failure is the loss of normal ovarian function before age 40. If your ovaries fail, they don't produce normal amounts of the hormone estrogen or have eggs to release regularly.
- **Endometriosis**
Endometriosis occurs when the uterine tissue implants and grows outside of the uterus — often affecting the function of the ovaries, uterus and fallopian tubes.
- **Uterine fibroids**
Fibroids are benign tumors in the wall of the uterus and are common in women in their 30s and 40s. Fibroids can interfere with implantation of the fertilized egg.

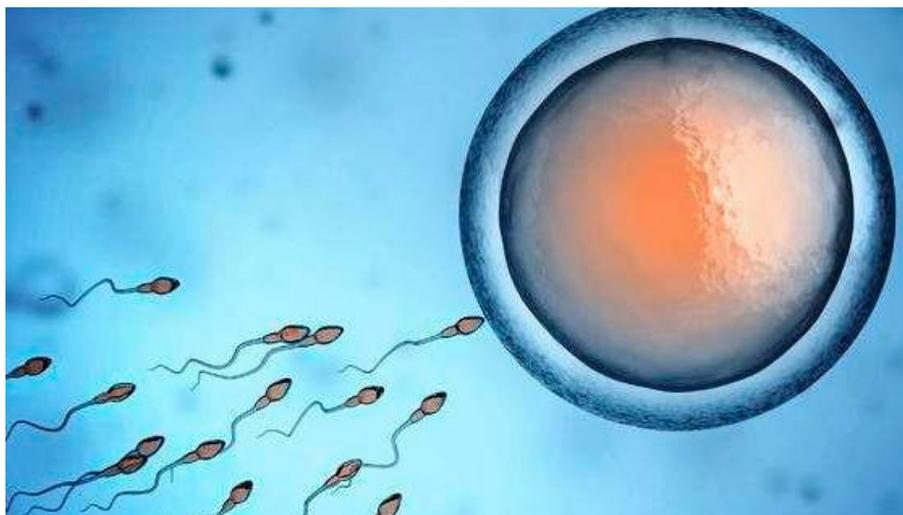
 - **Previous tubal sterilization or removal**
If you've had tubal ligation — a type of sterilization in which your fallopian tubes are cut or blocked to permanently prevent pregnancy — and want to conceive, IVF may be an alternative to tubal ligation reversal.
- **Impaired sperm production or function**
Below-average sperm concentration, weak movement of sperm (poor mobility), or abnormalities in sperm size and shape can make it difficult for sperm to fertilize an egg.
- **Unexplained infertility**
Unexplained infertility means no cause of infertility has been found despite evaluation for common causes.
- **A genetic disorder**
If you or your partner is at risk of passing on a genetic disorder to your child, you may be candidates for pre-implantation genetic diagnosis — a procedure that involves IVF. After the eggs are harvested and fertilized, they're screened for certain genetic problems, although not all genetic problems can be found. Embryos that don't contain identified problems can be transferred to the uterus.

- **Fertility preservation for cancer or other health conditions**

If you're about to start cancer treatment — such as radiation or chemotherapy — that could harm your fertility, IVF for fertility preservation may be an option. Women can have eggs harvested from their ovaries and frozen in an unfertilized state for later use. Or the eggs can be fertilized and frozen as embryos for future use.

- **Surrogacy**

Women who don't have a functional uterus or for whom pregnancy poses a serious health risk might choose IVF using another person to carry the pregnancy (gestational carrier). In this case, the woman's eggs are fertilized with sperm, but the resulting embryos are placed in the gestational carrier's uterus



HOW DOES IVF WORK?

IVF techniques vary according to an individual's circumstances and the approach of your doctor/clinic. Largely it depends on the fertility problem of the couple along with other factors like age and past IVF history. All IVF treatments start with a medication course of hormone therapy to stimulate the development of several follicles in the ovaries. During a normal menstrual cycle, woman releases one egg per month. The odds of getting pregnant are better with more eggs. By using fertility drugs the number of mature eggs is increased which are subsequently released with the help of ovary stimulation. These eggs are then fertilized in a test-tube ('in vitro') to create several embryos. After two to five days in an incubator, one or more of these embryos are transferred through the vagina into the uterus, where implantation occurs and pregnancy begins.

Is IVF for me?

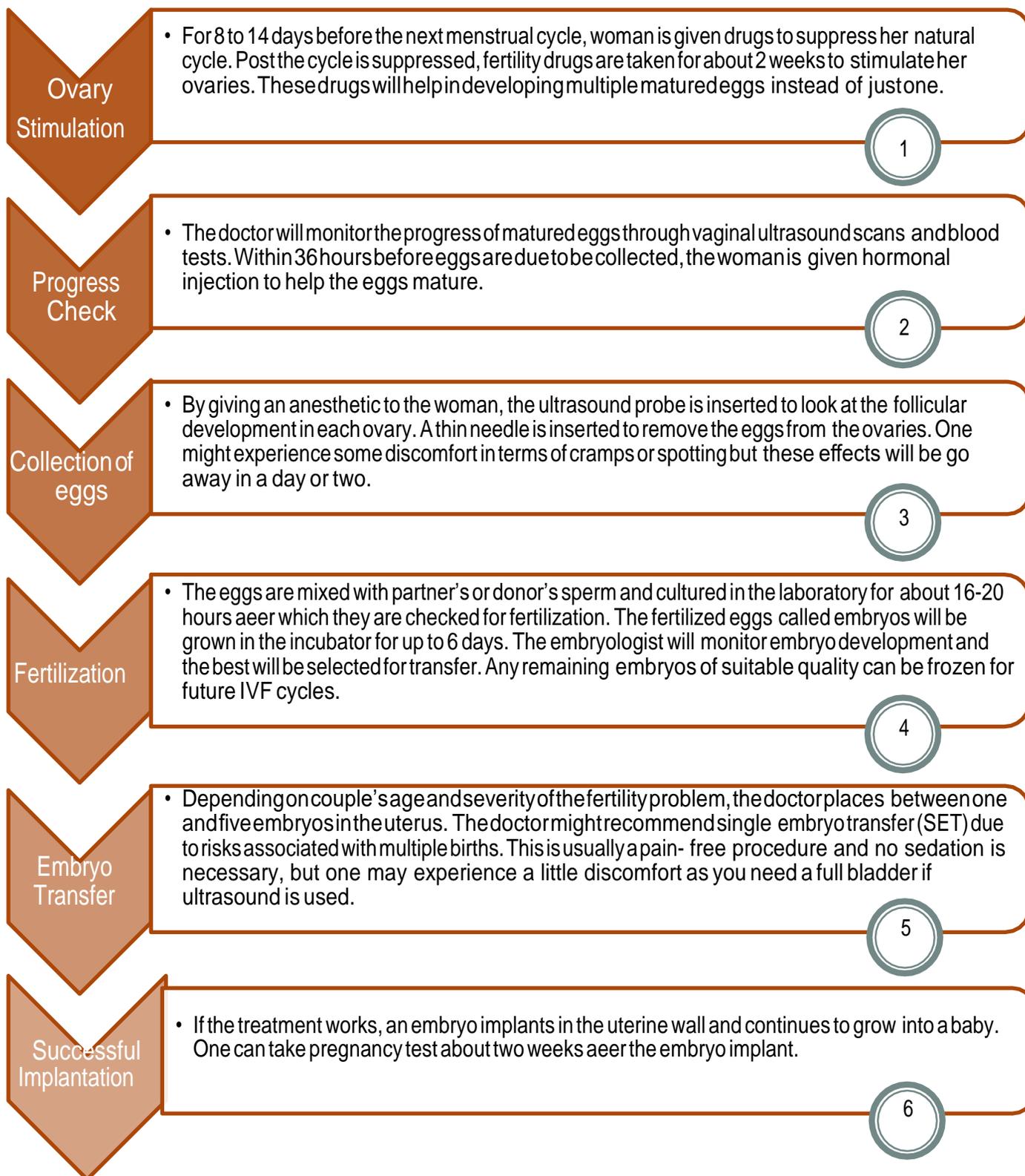
Following points are given below that may indicate whether IVF is right for you

- Other Infertility treatments have failed
- Underlying Fertility problems have been addressed
- You are financially prepared

How long IVF takes?

It takes about four to six weeks to complete one cycle of IVF. In case the first cycle is not successful, the doctor might use the frozen embryos for future cycles.

Stages of IVF



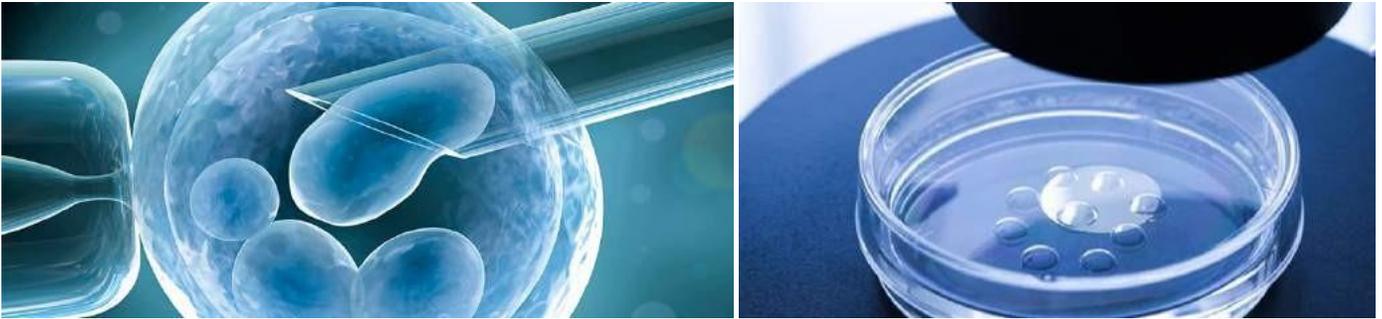
Cost of IVF treatment

IVF treatment costs are calculated according to per cycle. The estimate of the total basic IVF cost to get pregnant varies according to age, duration of infertility, and country of an individual. Post-treatment medicine also adds up significant cost to overall treatment. Below table shows tentative current IVF treatment cost for different countries:*

Country	Cost per cycle in USD	Country	Cost per cycle in USD
Argentina	5100	Latvia	3100
Australia	6400	Lebanon	8000
Austria	4400	Lithuania	4300
Canada	5200	Malaysia	5700
China	3000	Netherlands	3200
Czech Republic	3000	Norway	3900
Denmark	4900	Pakistan	2000
Dominican Republic	10200	Portugal	5000
Finland	4000	Qatar	3500
Greece	5300	Russia	4200
Hong Kong	12200	Saudi Arabia	8000
Hungary	2700	Singapore	7800
Iceland	6200	South Africa	3700
India	3800	Spain	6900
Indonesia	6000	Sweden	9800
Iran	6400	Switzerland	4500
Israel	6000	Taiwan	6000
Italy	3900	Thailand	3700
Japan	5000	Turkey	3700
Jordan	3000	UK	9200
Kenya	6200	Ukraine	7900
Korea	2000	USA	12200

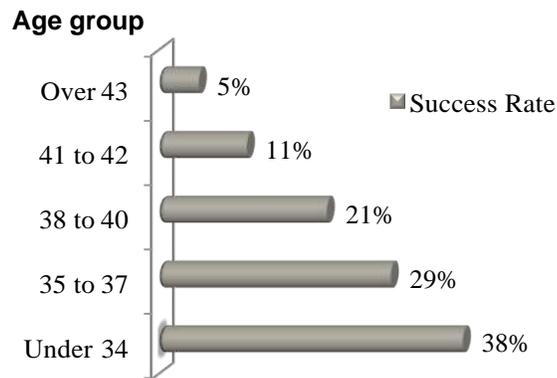
**Internal data sources. Please note - These are tentative average costs to give you a comparison of costs in various countries. Actual cost might be different for different clinics.*

The financial burden for IVF treatment can be overwhelming and stressful. It can also be an emotional roller coaster. OVO supports hassle free finance for treatment in the form of short term (up to one year) to medium term loans (between one and three years). Through guided step-by- step process, you can instantly avail loans.



The success rates of IVF vary dramatically, depending on each couple's fertility problems and their ages. Younger women usually have healthier eggs and higher success rates. Based on recent data, the percentage of cycles for women using their fresh eggs resulting in live birth is shown in graph.

IVF Success Rate at different ages



How to find the right IVF Clinic/Doctor?

One of the major factors for selecting the right fertility clinic is to know its success rate. Apart from that before getting down on the final clinic or doctor, you should also enquire the following questions:

- How old is the clinic and how long have the doctors and specialists been there?
- Where did the doctor receive his/her medical training and how long is he/she been practicing infertility treatment?
- Does the clinic offer IVF as the only treatment option?
- Know if your health insurance covers fertility procedures provided by clinic. It may cover diagnostic procedures or medicines.
- Understand the breakup of complete treatment procedure and know the cost of each component
- How accessible the clinic after-hours? Does it work 7-days week? Does clinic answers queries remotely over phone or emails?

You can search experienced and verified doctors and clinics at www.ovohealth.com where you can look for ratings and reviews of other users before getting down to final choice of clinic.

TO-DO list for IVF treatment

Prepare yourself for IVF

- Note the date when your period starts, the number of days it lasts, and anything else regarding your menstrual cycle (at least for three months before starting the treatment). This can help your doctor chart your treatment. It could prove to be helpful if you experience any problems in conceiving.

Avoid stress

- Don't try to make any major changes to your life during the treatment, like moving to a new house, starting a new job or switching careers, etc. You don't need added stress at this moment. High stress is known to affect fertility in both men and women and compromise the outcome of IVF.

Eat right always

- Nutritious foods are vital for producing healthy eggs and promoting implantation of the embryo. Your diet should consist of four to six small meals each day, and each should consist of some complex carbohydrate with fresh fruits and vegetables.

Drink lots of fluids

- This is not just to flush out the toxins from your body but to help deal with some side-effects of IVF treatment. Some women suffer from OHSS (Ovarian hyperstimulation syndrome) due to the medications injected during IVF. This leads to painful, swollen ovaries. Drinking three to five litres of water can prevent OHSS.

Avoid consuming alcohol

- Regular consumption of alcohol, even in small amounts, can reduce a woman's chance of conceiving by more than 50 percent. Why take a chance!

Avoid caffeine in any form

- Having five cups or more coffee per day doubles your chances of a miscarriage. The same happens if you take caffeine from other sources like colas, aerated fruit juices and sports drinks.

Pamper yourself

- Balance the stressful experience of IVF with pleasurable activities that promote relaxation and wellness. Read a book, talk to your partner, indulge in a hobby or just take a stroll in a garden. Anything that helps you to take your mind off the emotional rollercoaster ride

Communicate with your doctor

- At any given time don't hesitate to call your doctor if you feel any problems or discomforts bothering you. Also, address your fears and concerns with the doctor.

Keep plan B ready

- Last but not the least always have a plan B ready, in case your IVF doesn't succeed, you should not lose hope and can go for an egg donor or another IVF cycle. Always consult your IVF specialist.

OVO Fertility

OVO Fertility through its patented technology helps women learn about their fertility and understand their period cycles improves their reproductive health while trying to conceive or avoiding pregnancy smartly. OVO has been ranked as the best Women Health Portal since its launch while driving thousands of Research & Clinical Studies, Communications and White Papers in the field of Ovulation and Fertility.



Thank you!