

In-Vitro Fertilization Overview Potential risks and What It Actually Entails

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What does IVF cycle entail?

Fertility medicines are administered to the lady in order to stimulate the growth of the follicles on her ovaries. The eggs are contained in the follicles, which will be harvested and transported to the lab when they are mature, where they will be mixed with prepared sperm and ideally embryos will form. When the embryos are at the appropriate stage, one is usually chosen for transfer and the rest are preserved for later use [1].

The preparation

The physicians will need to examine your ovarian reserve before starting an IVF cycle so they can see how well you will respond to the medications. They'll stimulate the ovaries to generate numerous eggs when they're ready. Ultrasound scans and blood tests will be used every few days to assess if the follicles are growing normally. According to current studies, a good number of eggs to gather in a single cycle is around 12. When the eggs are at the proper stage of development, you'll be given a late-night injection to allow the eggs to finish maturing. It will take roughly 36 hours to collect the eggs [2].

The egg collection

The egg collection process is a small surgical day case operation that is normally performed while you are sedated. To penetrate the follicles and harvest the eggs, the doctor uses an ultrasound probe connected to a small needle. The eggs and embryos will be cultured in the laboratory in specific culture conditions, and the embryos will be monitored over the next few days to observe how they develop.

The embryo transfer

Due of the potential of multiple pregnancy, it's typical to just transfer one embryo. The embryo will be picked up by an embryologist in a thin catheter and transferred into the womb, where it will hopefully implant. Whether the initial round was successful or not, frozen embryos can be used for future treatment (Professor Harper has twins from frozen embryo transfer) [3].

Potential risks

Many women will endure mood swings, irritability, and headaches

as a result of the medicines. Ovarian Hyperstimulation Syndrome (OHSS), a rare reaction to fertility medicines that causes overstimulation of the ovaries, is the most significant risk. The symptoms should be known by all patients. Rapid weight gain over a few days, severe abdominal discomfort, nausea, and vomiting, blood clots in the legs, dyspnea, and decreased urination are only a few of the symptoms [4].

There's also the possibility of numerous pregnancies. Transferring more than one embryo was frequent in the early days of IVF, which resulted in a high multiple pregnancy rate. The HFEA, on the other hand, has worked with clinics to guarantee that the rate is lowered because there are hazards to both the mother and the baby, such as anaemia, miscarriage, and premature birth (twins are six times more likely to be born early).

Another possibility is an ectopic pregnancy. This occurs when the embryo implants outside of the womb, most commonly in the fallopian tube [5].

Pregnancy difficulties, such as miscarriage and issues during labour, are more common in older women. The aspirating needle used to harvest the eggs could cause bleeding, infection, or damage to the colon, bladder, or blood vessel during the procedure. No eggs are gathered in certain circumstances, and no embryos are formed in others.

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