In Vitro Fertilization

In Vitro Fertilization Pre-Embryo Transfer is a fertility procedure that has come a long way. The procedure first succeeded as early as 1978 and since then, with 20,000 babies born worldwide, the technology has been further refined and developed by physicians. Today, the chances of a successful IVF pregnancy have grown from nil to one chance in 4 to 6. Here are some interesting facts about the IVF procedure:

- Surgery used to be required for egg recovery in IVF procedures. Today, because of technical advances, physicians can retrieve eggs using a sonographically guided needle. This procedure is called Transvaginal Oocyte Retrieval. It does not require hospitalization or general anesthesia.

- In order to create an environment within the woman that will allow retrieval of several healthy and mature eggs, two weeks of intensive preparation are required. This includes hormonal therapy with fertility drugs, blood tests, and ultrasound scans of the ovary to determine the optimal time (usually just before ovulation) to retrieve the eggs.

- At the proper time, under local anesthesia, the woman’s eggs can be visualized by ultrasound and retrieved from the ovary by placing a needle through the vaginal wall. Patients have described the mild discomfort they feel during this procedure as similar to a Pap smear.

- The eggs are kept in a lab under physiological conditions similar to those within a woman’s body, where an embryologist places sperm with the eggs when they are ready for fertilization. They are maintained in laboratory dishes and kept in a nutrient mixture that imitates the environment of the fallopian tubes.

- Using a special catheter, the couple's pre-embryos will be passed through the vagina and into the uterus at the time the pre-embryos would normally have reached the uterus (2 or more days after retrieval). Hopefully the pre-embryo will then attach to the uterus and mature normally.