



Gestational Surrogacy Program

Gestational surrogacy has now become an accepted option for couples experiencing fertility problems. Indications for surrogacy would include:

- Women without a uterus due to congenital absence or surgical removal.
- Women who have suffered repeated miscarriages and for whom the prospect of carrying a baby to term is very remote. In this group those, who have repeatedly failed to achieve pregnancy following IVF treatment, may be considered.
- Women with certain medical conditions, which make pregnancy life-threatening but for whom the long term prospects for health are good, can also be considered.

This booklet discusses the types of surrogacy, the preliminary testing required, and the treatment process.

There are two distinct types of surrogates: the **surrogate gestational mother** (host uterus or gestational carrier) provides the gestational but not the genetic component for reproduction and the **surrogate mother** who will provide both the genetic and gestational component for reproduction (true surrogacy). The Fertility & IVF Center of Miami does not offer true surrogacy as a mode of treatment.

The surrogate will undergo an initial screening process, which involves:

- Consult and exam with our physicians
- Consult with a psychologist
- Cervical culture for Gonorrhea, Chlamydia, Ureaplasma/Mycoplasma, and routine.
- HIV I and II antibody screen
- HIV screen by PCR
- Cytomegalovirus antibody
- Complete blood count
- Chemistry panel
- Blood group
- Hepatitis panel
- Rapid plasma reagent (syphilis)
- Hysteroscopy

PREPARATION FOR EMBRYO TRANSFER

The surrogate prepares her uterus for the transfer of the embryos while the commissioning patient undergoes stimulation with fertility drugs. The goal is to re-create the hormonal changes that occur normally during a menstrual cycle by administering appropriate doses of hormones such as estradiol and progesterone. The desired effect on the uterus is the development of an appropriate implantation bed (uterine lining), capable of receiving an embryo. Estrogen is usually administered using patches (Vivelle dot) or in some instances orally. The use of the patch has the advantage of producing more consistent blood levels throughout the cycle and avoids the need for the oral intake of daily medication. Since hormone levels normally vary throughout the cycle, the number of patches will vary in a manner designed to increase the dose of estrogen.

The surrogate also begins subcutaneous daily injection of Lupron to suppress ovarian activities a week before expected menses. Once the surrogate's period begins, a baseline ultrasound and blood work is performed to ensure that Lupron has achieved its goal of suppression. Once suppression is confirmed, the surrogate begins patches on a determined day designated as Cycle Day 1. It is very important not to begin any patch therapy until the commissioning female is ready to start fertility drugs.

After 13 days of patches, the surrogate attends the office for an ultrasound and an estradiol level to ensure the adequate development of a uterine lining and proper levels of estradiol. If these tests are within normal limits, the recipient remains on the same medication regime or "holding pattern" until the commissioning female is ready for retrieval.

Once the eggs are retrieved, the surrogate begins nightly intramuscular injections of Progesterone. Progesterone is a steroid hormone that primes the uterus for embryo implantation.

The fertilized eggs are left in culture to develop for 3 days. On the third day, the embryologist will observe the embryos and note the number, quality, and stage of development. Together with the physician, they will make a recommendation to leave the embryos in culture for an additional 2 days or transfer them that day. If a large number of good quality embryo exists, the embryos can be left in culture for an additional 2 days so that they may reach the stage of blastocyst.

EMBRYO TRANSFER

The number of embryos to be transferred to the uterus is usually discussed and outlined in the contract between the commissioning couple and the surrogate. The doctor and embryologist will inform the commissioning couple of number of embryos available and their quality and give them their recommendation. The actual number of embryos to be transferred will be discussed among all parties at the time of transfer.

Transfer of embryos is performed in our office in specially outfitted rooms. An ultrasound is performed to verify the curvature of the cervix. The doctor places a speculum in the vagina and washes the cervix before introducing an empty catheter. This "practice run" will help the doctor place the catheter loaded with the embryos with ease. Following the transfer, the patient rests for 1 hour and then is discharged home. A pregnancy test is performed in the office 2 weeks after the eggs were retrieved.

The estrogen and progesterone will need to be continued through the 10th-12th week of pregnancy. The details of this hormone replacement schedule and the testing required to monitor appropriate replacement will be provided once a pregnancy is established. The surrogate will have weekly blood testing to monitor the hormone levels. After the first trimester of pregnancy, the growing placenta produces all the necessary hormones required for sustaining fetal development. It is after this period that hormonal support can be discontinued gradually.

SELECTIVE REDUCTION

Selective Reduction is a technique that is used when multiple embryos have implanted as the result of assisted reproductive technologies. It is a procedure where the extra embryos can be selectively aborted. Selective reduction is usually performed between 9 and 12 weeks gestation. It is done on an outpatient basis by inserting a needle guided by ultrasound either through the abdomen or vagina to inject potassium chloride into the fetus. The incidence of miscarriage associated with this procedure is 4 to 5 percent. Premature labor occurs in about 75 percent of multi fetal pregnancy reduction pregnancies. Miscarriage of the remaining fetuses and maternal infection rarely occurs. The decision of whether or not to undergo selective reduction is outlined ahead of time in the surrogate's contract.