Louis Weckstein, MD Susan Willman, MD Mary Hinckley, MD Deborah Wachs, MD Carmelo Sgarlata, MD Evan Rosenbluth, MD Kristen Ivani, PhD



# **EGG DONATION**

# **Background:**

The first successful pregnancy using donated eggs was reported in Australia in 1984. Eggs were taken from a fertile donor, and replaced into the uterus of another woman with after being fertilized with her husband's sperm. Since then egg donation has proven to be a successful treatment for any woman who either has undergone a menopause in their late 30's or 40's, or who is still menstruating but whose ovaries are poorly responsive to fertility medications.

#### Who are appropriate candidates?

Women who have never had a spontaneous menstrual period and women with premature ovarian failure who have stopped menstruating at an early age can consider the option of conceiving through egg donation. One exception is women who have Turner's Syndrome. In these patients, a thorough cardiac evaluation is important pre-existing abnormalities in the heart can put them a grave risk during pregnancy. Other candidates for IVF with oocyte donation are women who have undergone previous treatments with fertility medications with production of very few eggs, women in their 40's who have stopped menstruating, and women with an elevated FSH level or a very low AMH test. In addition, women who have had multiple IVF cycles and failed to achieve a pregnancy may be candidates for egg donation. One possible reason for not achieving a pregnancy in these women is the quality of the eggs is suboptimal.

#### **Getting Started:**

If you feel you may be a candidate for egg donation, the first step is setting up a consultation with a physician with experience in coordinating egg donation cycles. They can best advise you whether this would be a good option for you. The discussion should then include what is involved including: selecting an egg donor, an evaluation cycle, the real cycle, success rates and costs.

## Selecting an Oocyte Donor:

How do you find an egg donor? RSC has a pool of eligible egg donors; the RSC egg donor profiles can be viewed on line with a user id and password from RSC. If you have a sister or friend willing to be a donor, this may be an option. There are also donor agencies and RSC can help you with referrals to reputable institutions.

It is desirable that the donor should match as many of your desired characteristics as possible. Generally a donor should between the ages of 20 and 33 years with no prior history of major medical problems or gynecologic problems. There should not be any family history of birth defects or childhood hereditary diseases. There should be no history of cigarette smoking and she should be a normal weight.

A history of a previous pregnancy is not a predictor of a successful cycle. Rather, the age of the egg donor and her FSH level are more important predictors.. They should undergo a medical and social history, physical examination, psychological screening, and laboratory screening for sexually transmitted diseases.



All egg donors treated through RSC have screening that includes:

- FSH and estradiol level
- Ultrasound assessment of the number of follicles in the ovaries
- Drug screer
- Infectious disease screen for HIV, Hepatitis B & C, Syphilis, Chlamydia, gonorrhea, and a virus known as HTLV
- A complete physical exam to rule out any evidence of infection, disease, or high risk behavior
- A psychological evaluation that include a multiple choice test screening for psychiatric disorders and an interview with a psychologist
- Genetic testing for Cystic fibrosis, hereditary types of anemia and Fragile X
- An interview with a genetic counselor who reviews the family history in greater depth
- The recipients are offered a meeting with a genetic counselor to review the donor's genetic history and the male partner's history in more detail

The expenses involved vary. The American Society of Reproductive Medicine suggests that donors be given a monetary gift to compensate them for risk and time involved. The amount of compensation in the Bay Area generally varies from \$5,000 to \$7,000. This is in addition to the fee charged by the institution or agency for administrative fees related to donor recruitment and screening. This may vary from \$3,000 - \$7,000. There are also additional cost of medical evaluation and testing of the donor and then the cost of the IVF cycle and medications. The entire costs of an egg donor cycle may add up to \$25,000 to \$30,000; RSC has a Shared Ovum Donor Program in which one donor is shared between two recipients and this brings the cost down to the range of \$17,000 with identical success rates.

## **Psychological Aspects of Egg Donation:**

If you decide to pursue egg donation, it is important to consider the long term consequences of either disclosing or with-holding the information regarding the use of an egg donor to your child, your family and your friends. Although there is no absolute consensus regarding this issue, many parents and professionals in the field believe that a child has a right to know their genetic origins, and that attempting to keep this information from them could do more harm than good if and when the truth came out.

RSC strongly recommends that you have a session with a psychotherapists or counselor who specializes in third party reproduction regarding your decision to proceed with egg donation. During your consultation, you will have an opportunity to discuss this and other issues related to the psychological aspects of using egg donation to build your family.

# **Legal Aspects of Egg Donation:**

There are no specific state laws addressing many aspects of egg donation. The oocyte donors sign a medical consent relinquishing their rights to the oocytes. They can declare whether or not they give permission for the eggs to be donated to more than one recipient or for the embryos to be donated to another couple. Donors are given the option to have the consent reviewed by an attorney. Recipients should consider this option as well. To date, there has not been a case in which an oocyte donor has requested years later to have parental rights to the offspring of her donation. However, your offspring, once of legal age, may request the courts to open the medical records in order to locate the identity of their donor.

Using case law on adoption and sperm donation, a judge could choose to honor the offspring's request to subpoena the records, but not at the donor's request.

## **Evaluation Cycle:**

Once you have selected an egg donor, your physician may recommend that you have a test cycle. This is done to find the proper medication protocol in preparation for the actual egg donation cycle, to best prepare your uterus to receive the embryos. You may be prescribed an oral, natural estrogen pill, an estrogen skin patch, estrogen as a vaginal suppository or estrogen injection in gradually increasing dosages over a period of 10 days – 2 weeks. Your blood estrogen level will be evaluated and ultrasound will be done to look at the thickness of your uterine lining. Once an optimal uterine lining has developed, the test cycle is concluded and your physician will know how best to prepare the lining of your uterus for the real cycle.

# The Oocyte Donation Cycle:

Your physician and Case Manager will plan your cycle with your donor's cycle. You may be prescribed birth control pills and a medication called Lupron, to help coordinate the timing of your cycle with that of the donor's menstrual cycle. You will start your estrogen as your donor is starting her medication for ovarian stimulation. You will need to have periodic blood testing and an ultrasound to measure your uterine lining. On the day your donor's eggs are retrieved, a sperm specimen will be needed from your husband to fertilize the eggs. Generally you will begin Progesterone injections the day before the donor's egg retrieval and vaginal Progesterone on the day of the retrieval. Three to five days later, the embryos are transferred to your uterus (IVF). Following the transfer of embryos you will be maintained on Estrogen and Progesterone daily. Nine to eleven days later a pregnancy test is done. If it is positive, you will need to continue the Estrogen and Progesterone for approximately two months. At that time, the baby's placenta will take over and no more medication is necessary.

#### Success Rates:

In 2009, RSC reported a 70% pregnancy rate per egg donation cycle in which the donor was under the age of 34 years. In 2009, in IVF-oocyte donation cycles in which two embryos were transferred at the blastocyst stage, 40% of the pregnancies were twins. Since a pregnancy with twins carries a higher risk of preterm delivery and maternal complications such as hypertension, a single embryo transfer is recommended when embryo quality is considered excellent. In the RSC program in 2009, in select cases such as egg donation, where the embryo quality was very good, pregnancy rates were 60% with a single embryo transfer. Women over the age of 44 years and women whom have never had a full term pregnancy before are at higher risk of hypertensive disorders in pregnancy and should strongly consider a single embryo transfer.

Approximately 10 -15% of IVF pregnancies from egg donation will miscarry. About 10 % of egg donation cycles are canceled due to either too high or too low of a response on the donor's part to the fertility medications.

### Other Benefits:

There are some advantages of egg donation over adoption. Though the donor provides half of the genetic make-up of the embryo, the recipient controls the prenatal environment. Your nutrition, psychological input, and what you do or don't do during the pregnancy are significant; areas you may not be able to control with adoption. You can experience the pregnancy from early on through childbirth and breast-feeding. Adoption has become more expensive and more difficult to find a healthy baby over the years. These are reasons couple often give as their reason to choose egg donation. Egg Donation is an emotional and time intensive experience. Our experience is that recipient couples are satisfied with their choice. Thoughtful consideration is important to make sure it is the right decision for you. Egg donation does offer a realistic, successful option for many couples who would have no other way to have a child.

