

## **Donor Egg Recipient (DER) Overview**

Some women may not be able to conceive a child using their own oocytes (eggs). The reasons vary, but may include: premature menopause (premature ovarian failure), poor egg quality, absence of the ovaries from birth, previous chemotherapy, previous ovarian surgery, or genetic issues.

Women who are unable to produce eggs of their own, carry a genetic disorder or have poor egg quality are encouraged to explore the option of the egg (oocyte) donation program at Piedmont Reproductive Endocrinology Group (PREG). To be considered as a recipient for donor eggs, you must have a normal uterus and be 50 years of age or younger.

Patients of advanced reproductive age (40 years or older) are the most common recipients of donor eggs and are able to overcome the age barrier with the use of a donated egg. Patients undergoing in vitro fertilization with a donated egg often have high success rates because the egg being used is from a young, healthy donor. Egg donation in recent years has become a very successful option for couples that would otherwise be unable to have children. Dr. Nichols/Payne and the staff of PREG want to guide you through a very fulfilling experience of helping someone's dreams of having a family become a reality.

### **Choosing a donor (matching)**

There are two categories of egg donors - anonymous and known. Anonymous donors are not permitted to meet you, the recipient, and cannot know whether or not a pregnancy occurred from your cycle. Egg donors are usually anonymous unless the recipient has a family member or friend that chooses to be a donor. Potential donors can come forward on a voluntary basis for many different reasons. All anonymous donors must undergo extensive screening to assure they are suitable candidates. Donors must be healthy women between the ages of 21 and 32. They are asked to complete a thorough questionnaire that is reviewed by our staff. If they are potentially good candidates then a very detailed personal medical history as well as past and present family medical history is reviewed. An interview with a Licensed Clinical Psychologist as well as an API (a personality profile) is administered to ensure there are no underlying psychological issues present. They are also counseled on the psychological and physical effects of donating eggs to make sure they are able to adjust well. In addition, all donors are screened for sexually transmitted diseases as required by the FDA, urine drug screen, Cystic Fibrosis, and other heritable genetic conditions based on race or ethnicity such as Tay-Sachs, Sickle cell, or Thalassemia. The recipients, at their expense, may request additional genetic screening, such as a karyotype (chromosome analysis) and/or fragile X (FMR1 gene), etc., once a donor has been selected.

The egg donors are anonymous and the potential recipient's information is not given to the donor or the outcome of the donor egg cycle itself. The recipient does have available to them parts of the donor's profile and psychological evaluation but no specific identifying information. This allows the recipient to make the best decision regarding potential donors.

Known donors are often related to the recipient, most often a sister, or are a compassionate friend of the couple. Known donors must go through the same FDA screening as required for anonymous donors and should have a psychological evaluation as well, but it is not required. In known donor situations, it is

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suggested that all parties involved sign a legal contract outlining details of the egg donation. PREG can refer you to legal counsel with experience in assisted reproductive techniques pregnancies involving known donors.

Recipients and donors are matched using a list of specific requirements they want from their donor such as physical attributes, education, or ethnicity. Dr. Nichols/Payne and the PREG staff work very closely with donors and recipients in helping make appropriate matches.

### **Screening for Recipients**

During your initial consultation at PREG, all aspects of the egg donation program will be discussed with you and your husband. If you are not a current patient at PREG, your medical records will need to be sent to the office for a complete review to determine whether or not you are a candidate for donor eggs.

The decision to conceive a child through the use of a donated egg can be very difficult for a couple. Therefore, if you desire, a PREG physician can refer you and your husband to a psychologist for counseling and emotional support. It is important to discuss issues related to non-biologic parenting, past fertility problems, parenting at an older age and positive and negative aspects of disclosure to potential offspring.

If you are 43 years of age or older, a physical exam, with an ECG (electrocardiogram- heart electrical rhythm strip), must be performed by an internist or family physician to rule out any potential risks to pregnancy, including diabetes and heart disease. If you do not currently have an internist or family physician, your PREG physician will refer you to one. We will need a letter of medical clearance for pregnancy documenting the exam and ECG by your internist or family physician in order to begin your donor egg recipient (DER) cycle.

The donor egg recipient must have an evaluation of their uterus and uterine cavity to ensure that the uterus is in optimal condition to allow the highest possibility of successful implantation of an embryo and progression of the pregnancy. The evaluation is usually performed with a saline infusion Sonohysterogram (SIS) performed early in your menstrual cycle with a transvaginal pelvic ultrasound after passing a small catheter thru the cervix into the uterine cavity and then instilling a small amount of warm normal saline through the catheter. This exam allows us to perform a “mock” or practice transfer and to ensure no endometrial polyps or fibroids are present within or next to the endometrial cavity prior to the DER cycle. Some women with a history of fallopian tube disease or blockage may need to have a Hysterosalpingogram (HSG) to ensure hydrosalpinges (dilated water tubes) are present. A hydrosalpinx, endometrial polyp or fibroid within the endometrial cavity or large fibroids near the cavity should ideally be surgically removed prior to DER IVF to improve the chance for successful pregnancy.

Both you and your husband must have blood work done to screen for diseases and conditions that can affect your pregnancy including Human Immunodeficiency Virus, hepatitis C, hepatitis B surface antigen, RPR (sexually transmitted disease), blood type with RH, and antibody screen, and rubella immunity. Your husband must also provide a semen sample approximately 4-12 weeks prior to the transfer cycle for semen analysis, strict morphology and sperm survival testing to help us determine the best method (standard insemination or ICSI) to achieve the highest chance for normal fertilization of the donor eggs.

### **The Donor Egg Recipient (DER) IVF cycle**

While going through an egg donor cycle, the donor and the recipient's menstrual cycle will be synchronized together usually with medications. When both the donor and recipient are regulated, the donor starts fertility medications (daily injections) to stimulate her ovaries to produce multiple eggs. The recipient will be given estrogen during this time and will be monitored by using vaginal ultrasound and blood tests to make sure the lining (endometrium) of her uterus is optimal for receiving embryos. The recipient will begin taking progesterone as well starting the day of the donor's egg retrieval.

When the eggs are matured, they are harvested by way of an ultrasound guided retrieval in which the donor is sedated and will feel no discomfort. After the eggs are retrieved, the egg donor participation is over. The retrieved eggs will then be fertilized in the IVF lab with the recipient's partner's sperm by the procedure that offers the best chance for good fertilization results. On the day of the donor's egg retrieval, your husband will provide a semen sample that will be prepared in the PREG laboratory. The sperm will then be placed in a dish with the donated egg(s) and incubated overnight or Intracytoplasmic sperm injection (ICSI) will be performed. The following day, you will receive information regarding the success of the procedure.

Three to five days after retrieval of the eggs, an embryo transfer (placement of embryos into the recipient's uterus using a small catheter through the cervix while using abdominal ultrasound for guidance) will be performed, with usually two and occasionally three of the resultant embryo(s) being transferred into the recipient's uterus. After the embryo transfer the recipient will continue taking the estrogen and progesterone and being monitored with blood work and a pregnancy test will be done in about two weeks. Upon a positive pregnancy test result, we may adjust medications (estrogen and progesterone) for the best chance of sustaining the early pregnancy. The recipient will have three pregnancy hormone ( $\beta$ hCG) levels measured from blood test and an early obstetric vaginal pelvic ultrasound will be performed about 4-5 weeks after the embryo transfer occurred to determine how many pregnancies (usually a singleton or twins) are present and if the pregnancy is viable (fetal heart beat(s) visualized). If there is an excess of embryos that have grown to the blastocyst stage after the fresh transfer, the recipient will be given the choice of blastocyst freezing (cryopreservation). This will give the recipient additional attempts to conceive in the future using frozen blastocyst transfer cycles should the recipient not conceive in the fresh cycle or want to have another child in the future.

For more information about the Egg Donor Program at PREG, please email us at [contact@piedmontreg.com](mailto:contact@piedmontreg.com) , visit our website at [http://www.pregonline.com/egg\\_donor.php](http://www.pregonline.com/egg_donor.php) , or call 864-232-7734.