Reproductive Facts

Patient fact sheet developed by the American Society for Reproductive Medicine



Egg Donation

What is egg donation?

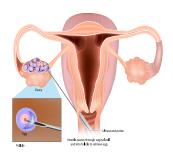
Egg donation is a process whereby a female patient (egg donor) gives eggs to another female (recipient) to allow the recipient to have a baby. To donate eggs, the donor must be given medications to develop multiple eggs over a single cycle. The eggs are then removed from the donor by ultrasound guidance during a minor surgical procedure. This is done by placing a needle, attached to an ultrasound probe, through the vaginal tissues and into the ovary. The eggs are then gently taken out of the ovaries. Once the eggs are removed, they are evaluated in the laboratory. Eggs can then be frozen for later use or fertilized. For fertilization, sperm from the male partner or a sperm bank is placed around or injected into each egg to allow for fertilization (one sperm entering one egg) to occur. This process is called in vitro fertilization (IVF). Once fertilized, the egg becomes an embryo, which can be transferred back to the uterus or frozen for future use.

How is the recipient prepared for the embryo transfer?

If the transfer is going to be done with fresh (not frozen) embryos, the recipient's uterus (womb) must be synchronized with the donor's stimulation of egg production. There are several ways to achieve this. If the recipient still has regular menstrual cycles, a medication is often used to suppress the ovaries. Once the donor starts the medication to stimulate the ovaries, the recipient takes estrogen to develop the uterine lining.

Around the time of egg retrieval, the recipient will begin taking progesterone to prepare the uterus for the implantation of the embryo. For frozen embryo transfer, the process is the same but coordinating the timing between the donor and recipient is unnecessary since the embryos are ready to use anytime.

The embryo(s) will be transferred to the recipient's uterus three to five days after fertilization (either frozen or fresh). Hormonal medicines continue to be given until the pregnancy test. If the test is positive, the medicine is continued during the early part of the first trimester of the pregnancy.



Who should consider using an egg donor?

Egg donation is used for patients who wish to have children but cannot get pregnant with their own eggs. This may be because they were born without ovaries, are in menopause, did not respond adequately to hormonal stimulation of their ovaries with past fertility treatments, or have had poor egg or embryo quality with previous IVF attempts. Patients may also choose to use a donor if they have a genetic disease that they do not want to pass on to their children.

Who can become an egg donor?

Egg donors are females, usually between the ages of 21 and 34, who are willing to provide their eggs to a recipient. They may be unknown (anonymous) or known (directed) to the intended parents. Anonymous donors are recruited through egg donation programs or agencies and are unknown to the recipient. It's important to note that while some couples find donors through advertisements, caution is advised. Directed donors, often close friends or relatives, should be thoroughly screened through a third party. Recipients are strongly encouraged to consult with a lawyer before initiating the process, especially when

considering donors without anonymity safeguards.

What tests are performed on the donor?

The donor undergoes comprehensive testing for infections, including HIV, Hepatitis B and C, gonorrhea, chlamydia, and syphilis. Additionally, ethnic background is considered in screening, focusing on genetic testing aligned with the donor's specific heritage. While screening for the cystic fibrosis gene is essential, broader genetic testing is recommended based on personal and family history. Some programs may include chromosome analysis and testing for Fragile X syndrome, although these are not universally required.

Psychological assessments are commonly included in mental health screenings. Donors must disclose all personal and family medical issues, emphasizing the need for thorough evaluation before egg donation.

related diseases. They may also be advised to see a doctor specializing in high-risk pregnancy. The male partner's sperm should be analyzed, and appropriate genetic screening should be obtained based on personal and family medical history. Ethnic background is also considered in tailoring genetic testing to align with the specific heritage of the male partner.

What is the chance that a donor egg cycle will result in pregnancy?

The success of egg donation depends on many factors but is not considered to be related to the recipient's age. Success rates compiled by the Society for Assisted Reproductive Technology (SART) and by the Centers for Disease Control (CDC) for the year 2020 show an average birth rate per embryo transfer of 53.5% for all egg donor programs using fresh eggs.

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How should the recipient be evaluated?

Evaluation should include a comprehensive medical history from the recipient and their potential partner, including blood type and Rh factor, and testing for sexually transmitted diseases, including HIV, hepatitis, gonorrhea, chlamydia, and syphilis. A mental health professional should counsel them about the complexity of the decision to use donor eggs.

The recipient should have a pelvic exam and an assessment of the uterus (womb). If the recipient is over 45 years old, a more thorough evaluation should be done, including an assessment of heart function and risk of pregnancy-