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INFORMATION GUIDE FOR DONOR EGG RECIPIENTS

YOUR QUESTIONS ANSWERED

This booklet has been written to answer your questions about egg donation and help you decide about proceeding with egg donation. If after reading the information, you would like to proceed with egg donation, or if you would like to learn more, please call:

Nursing InfoLine
514 843-1650, Option 4

A Glossary of terms is available on page 9.

Why do I need egg donation?

There are many reasons why egg donation treatment may have been suggested by your doctor. Many women are unable to have children because their ovaries do not produce eggs. This ovarian failure may be due to genetic causes, cancer treatment, or premature menopause; other women may produce eggs that are of poor quality or that contain genetic abnormalities (in other words they may be carriers of heritable diseases) and will have a poor chance of achieving a healthy pregnancy.

In the past, there was no treatment that could be offered to women with ovarian failure. Today, treatment can be an egg donation from another woman. Egg donation can help recipient couples realize their dream of having children.

How is egg donation done?

Egg donation treatment relies upon the techniques of in vitro fertilization (IVF): eggs are collected from the donor's ovaries and mixed with the sperm of the recipient's partner in a laboratory dish and then the fertilized eggs (embryos) will be transferred to the womb of the recipient for pregnancy. The recipient of an egg donation will carry the pregnancy and give birth to her child (that is not genetically related to her).



Is more than one egg donated?

IVF treatment works best when a number of eggs can be fertilized and transferred because not every egg will fertilize or give a pregnancy. Also, it is always hoped there will be enough remaining embryos to attempt a second “try”. For these reasons, one goal of treatment is the donation of a number of eggs at once.

If I have egg donation treatment, what will my baby get from me / will my baby look like me?

All heritable traits are determined by the genetic material contained in the egg and sperm. During pregnancy, the recipient’s body provides nourishment, but no genetic material is exchanged. Following birth, an infant may develop learned behaviours that are similar to the recipient’s and will be similar to the recipient in this way, however physical similarities will be coincidental.

What are the success rates with egg donation?

The success rates of egg donation treatment compare favourably to those of conventional IVF. Success is usually related to egg quality and in turn to the age and fertility of the donor. The success of egg donation treatment is not usually related to the age of the recipient. Because of this, your success

with egg donation treatment will be much higher than it would be if you were undergoing treatment with your own eggs.

Will I be eligible for egg donation treatment if I do not have a normal menstrual cycle?

The success of egg donation does not depend in any way on the recipient’s own menstrual cycle or hormone supply. Each recipient is provided with the hormones needed to develop her endometrium and support her pregnancy.

In fact, any women in good health can be considered as a candidate for egg donation treatment until she reaches the age of 50 years, regardless of her menstrual status.

What does the treatment involve?

During egg donation treatment, both the egg donor and recipient are usually asked to take medication. Most egg donors will take medications in order to be able to donate a maximum number of eggs (The medications prescribed for donors are described in detail separately; see *Information Guide for Potential Egg Donors*). Recipients are given medications so that the endometrium or lining of the uterus will be well prepared for implantation of the embryos at the time of transfer. Medications will vary, depending on the planned treatment

schedule and the need to synchronize the recipient's treatment cycle with that of the donor. The medications that are prescribed for recipients include:

BCP

The birth control pill (Marvella®) is prescribed for recipients who are naturally cycling (having menstruations). These are taken at the start of treatment in order to help synchronize the recipient and donor treatment cycles. The recipient will usually take birth control pills for 2- 3 weeks, depending on the timing of her natural cycle in relation to the donor's expected start date. (Sometimes, recipients who are no longer cycling, will be asked to take birth control pills for a few months before treatment in order to better prepare the uterus for pregnancy.)



Buserelin

Like the Pill, Buserelin (Suprefact®) is prescribed for recipients that are cycling. Buserelin blocks natural hormone secretion and will prevent the recipient from having a menstrual cycle during treatment. Buserelin is taken after the birth control pill and is continued until the end of treatment.

**Estradiol
Valerate**

The recipient will begin taking estradiol valerate (Estrace®), a form of estrogen, to thicken and develop the lining of her uterus (endometrium) at the same time as the donor takes hormones (FSH) to stimulate her ovaries to produce eggs. Estrace is taken as a pill, three times daily and is continued until the pregnancy test (and for the first twelve weeks of pregnancy).

Progesterone

Just prior to retrieval of the donor eggs, recipients are instructed to begin taking progesterone to ensure that the endometrium is well supported for pregnancy. Progesterone is taken by vaginal suppositories or by intramuscular injection and is continued (along with Estrace) on a daily basis until the pregnancy test (and for the first twelve weeks of pregnancy).

How are the eggs retrieved and what happens once they are retrieved / afterward?

At the end of treatment, the donor will undergo a short egg retrieval procedure to collect the eggs that developed during treatment (For details of the egg retrieval procedure please see *Information Guide for Potential Egg Donors*).

Following the egg retrieval, all of the eggs that have been collected are donated to the recipient couple (or couples if the donation is shared between two couples) and are mixed with sperm of the male (recipient's partner) that has been prepared in the lab. Attempt is made to fertilize every egg collected. Eggs and sperm will be left in an incubator (warmer) to promote fertilization and cell division. Most but not all of the eggs will fertilize during the 24 hours following egg retrieval (failure of all eggs to fertilize can occur but is very rare). Fertilized eggs or embryos are transferred to the recipient's uterus after the embryos have developed for two or three days.

Sometimes there are surplus embryos remaining after the transfer. When these are of good quality, they may be cryopreserved for later use.

How is the embryo transfer done?

At the time of transfer, depending on age of donor, an embryo will be placed in the uterus of the Recipient. The MUHC Reproductive Centre is bound by the RAMQ policy concerning the number of embryos transferred, which as of August 5, 2010, is one embryo per transfer (the policy applies to both private or government funded cycles). However, depending on the quality of the embryos, your physician may opt to transfer more than one embryo.

During the embryo transfer, a soft plastic catheter (tube) is inserted into the vagina and is passed through the opening to the uterus. Selected embryos are then injected into the uterine cavity via the catheter. The embryo transfer procedure takes only a few minutes and is not painful.



How will I know if I am pregnant?

Pregnancy is confirmed by means of a blood test that is done 16 days after the fertilization of the eggs. It is not possible to confirm a pregnancy before then, even despite “pregnancy-like” symptoms.

Is egg donation treatment safe?

Egg donation treatment is very safe; however, no treatment is entirely without risk.

The most serious risk of egg donation treatment is one that many couples have already encountered with other fertility treatment namely, the increased risk of a multiple pregnancy (i.e. twins or triplets). A multiple pregnancy can occur when two or more embryos are transferred, and it occurs in about 20% (one in five) of IVF pregnancies. A multiple pregnancy is associated with higher risks for mother and babies and requires close follow up. A multiple pregnancy may be more likely when the egg donor is very young and/or very fertile.

An additional risk of egg donation may be the risk of transmission of infection. It may be possible to transmit donor viruses with donated eggs (the risk is similar to the risk of blood donation). For this reason, egg donors are carefully screened and every effort is made to ensure that the risk of transmission of viruses is reduced.

Finally, it may be possible for any donor to carry and transmit a heritable disease that she is not aware of. Every donor will be asked to give a family health history however; genetic testing is usually not done.

Risks to the donor are remote. Donors are advised separately (see *Information Guide for Potential Egg Donors*) of the risks associated with donation.

How will I find a donor?

Many couples in need of egg donation begin by speaking with people they know. A donor may be a friend or family member, or even a casual acquaintance. Some people have met donors through newspaper ads or the Internet, while others have asked friends to help them find a donor.



Who can donate to me?

Any woman who is between the ages of 21–34 years can be considered for egg donation. Before treatment can start, it's important to confirm that each donor is fertile and in good health. For this reason prospective donors will be asked to complete a health history and some diagnostic tests before being accepted for treatment. Also, because we want to be absolutely certain that donors have thought about donating carefully, we require all prospective donors to meet with one of our counsellors (before treatment begins) to discuss the implications of egg donation.

Can I offer payment to my donor or offer her a gift to express my appreciation?

In Canada it is illegal to buy or sell eggs. This means that you may not offer payment of any nature. Gifts are considered payment “in kind” and also, are not permitted.

Does the donor have any legal rights or responsibility to a child that is born through the donation?

The recipient is recognized as the birth mother (and legal mother) following the birth of a child and assumes the rights and responsibilities of any child born of egg donation. While there is no law governing this (or the resolution of dispute), it is generally believed that the donor has no rights and no responsibilities.

Donors have an obligation to inform the clinic of any new information concerning inherited disease however.

Do I need to consult with a lawyer?

Egg donation is a legal treatment. You are not required to consult with a lawyer prior to treatment; however, you may consult if you have questions or concerns about the legal implications of egg donation.

Will I be required to disclose that I have had egg donation treatment?

You are not legally required to disclose that you have had egg donation treatment; however, during your pregnancy it will be important for you to notify your obstetrician of your egg donation treatment so that you can receive optimal prenatal care.

You are not required to disclose your egg donation treatment to your children but it may be possible for them to discover by other means, that you are not genetically related.

The clinic will keep record of your donation and may submit this record if required by Assisted Human Reproduction Agency of Canada.

I have found a donor. What's my next step?

You will need to contact the egg donation nurse in order to discuss the details of treatment and to ensure that required pre treatment tests and consultations are organized.

Before starting treatment your donor will need to visit the clinic twice – one time to complete some initial tests (see *Information Guide for Potential Egg Donors*) and meet the egg donation nurse and a second time, for the counselling session, review of test results with a physician, and to

complete the plan for treatment. You may accompany the donor if you wish.

If you would like to proceed with egg donation, or if you would like to learn more, please call:

Nursing InfoLine
514 843-1650, Option 4.

WHAT YOU NEED TO KNOW ABOUT CMV AND EGG DONATION

What is Cytomegalovirus (CMV)?

It is a common virus from the herpes viruses' family. It is harmless to most people, and most people have caught the virus by the time they reach adulthood.

What Are the Symptoms of CMV Infection?

On occasion, CMV infection will cause temporary symptoms such as fever, sore throat, fatigue and swollen glands.

How is CMV Transmitted?

CMV is transmitted by close contact with body secretions such as urine, saliva, feces, blood, semen and cervical secretions.

Who is at Risk from a Contact with a Person with Active CMV?

Two groups of people are particularly at risk. Immunosuppressed patients will be at risk because they can develop an acute illness. The unborn children of women who catch CMV (for the first time) during pregnancy are also at risk because CMV may cross the placenta and causing "Congenital" infection.

What are the Risks of Congenital CMV?

Congenital CMV may affect the central nervous system causing varying degrees of mental retardation or hearing loss. It may also lead to pneumonia, liver and spleen infection or smaller-

than-normal head size (Cytomegalic inclusion disease).

What are the Implications of Donation between a CMV (+) Donor and CMV (-) Recipient?

In normal circumstances, fewer than half of the women who catch CMV during pregnancy will pass it to their babies and only some infected babies will develop symptomatic infections, either at birth or during the first few years of life. It is not known whether CMV transmission can occur through egg donation from a donor who carries the virus. If CMV transmission can occur, it is not known what the risk is that the mother will contract the infection or what the outcome would be for the foetus. For this reason, egg donation from a donor who carries CMV to a recipient who has not been infected with CMV is not generally recommended. One study has shown that CMV is not present on eggs from CMV positive donors¹ however no other studies have been done that repeat this finding and at present it must be concluded that the risk of transmission via egg donation is more likely theoretical but may be possible.

1. Is there a risk of cytomegalovirus transmission during in vitro fertilization with donated oocytes? Witz CA, Duan Y, Burns WN, Atherton SS, Schenken RS. Fertil Steril. 1999 Feb; 71(2): 302

For further information regarding egg donation, please refer to the other documents contained in this package:

- Microbiology Requisition
- Infertility investigations for the recipient and her partner
- Basic Blood Requisitions for both partners
- Consent form for recipient of egg donation

GLOSSARY OF TERMS

BCP

Birth Control Pill

Cryopreservation

A freezing process used to store embryos

Donor

Person donating eggs

Embryo

An egg that has been fertilized by sperm

Endometrium

Lining of the uterus

Follicle

Fluid filled sac containing an egg

FSH

Follicle Stimulating Hormone that causes follicles to grow

IVF

In vitro fertilization

Recipient

Person receiving eggs

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