



Cryo-Preservation of Oocytes (Freezing Your Eggs for Fertility Protection) Information Sheet and Consent Form

Background

- The female produces oocytes (eggs) by the maturation of primordial follicles (miniscule cysts) which exist in many thousands in the outer layer of the ovaries (the ovarian cortex).
- The number of primordial follicles falls dramatically as a woman approaches the age of 40.
- Chromosomal defects in eggs increase as a woman approaches the age of 40.
- These effects of age could be avoided by collecting eggs at an earlier age and keeping them frozen for later use.
- While we have been able to successfully freeze sperm and embryos for many years, reliable methods for freezing oocytes have only been developed very recently and continue to be improved. QFG has achieved several pregnancies and live births from the use of frozen oocytes however the success rate remains unclear due to low numbers and is likely to be less than that from fresh oocytes.

How Will the Oocytes be Collected and Frozen?

- The person having the oocytes frozen has them collected in a similar manner to those having conventional IVF. The procedure involves:
 - Stimulation of the ovaries for ten days or so with injections of follicle stimulating hormone (FSH) to stimulate the development of a number of oocytes rather than the usual one.
 - The surgical collection of oocytes from the ovaries under anaesthesia with the aid of a vaginal ultrasound probe.The information sheet available from Queensland Fertility Group on In Vitro Fertilisation and Embryo transfer (IVF-ET) has more detailed information on the procedure and must be consulted.
- The oocytes are placed in individual plastic straws in a liquid designed to protect them from damage by ice crystals as they are frozen.
- The straws containing the oocytes are then frozen and stored in liquid nitrogen at -196°C .

How Could the Oocytes be used?

- When the oocytes are required to produce a pregnancy they would be thawed and placed in IVF culture media. Using currently available freezing and thawing procedures, around 70% of oocytes survive the freeze/thaw process.
- A single sperm from the male partner would then be injected by the ICSI procedure into each oocyte in an attempt to fertilise it. The information sheet available from Queensland Fertility Group on Intra-Cytoplasmic Sperm Injection (ICSI) has more detailed information on the procedure and must be consulted. Research has shown that the injection process is necessary to obtain fertilisation in previously frozen eggs. Using currently available freezing and thawing procedures, around 60% of oocytes injected with sperm will fertilise. This is similar to the fertilisation rate achieved with fresh oocytes in the IVF programme using both fresh normal sperm and injected sperm.
- Embryos arising from the procedure would then be transferred into the uterus of the female with the balance frozen for later use.

The Potential for Failure of the Procedure

The procedure is under continual development and, like all assisted reproduction procedures, has potential for failure in a number of ways:

- None of the oocytes may survive the freeze/thaw process. This is more likely to occur if the number of oocytes frozen is low.
- None of the thawed oocytes may fertilise despite having sperm injected into them. This is more likely to occur if the number of thawed oocytes for sperm injection is low.
- No pregnancy results from the transferred embryos. The pregnancy rate per treatment cycle from the transfer of embryos to the uterus is around 40%, this rate being inversely related to the age of the patient when the oocytes were collected. The chances of achieving a pregnancy are maximised when there are a number of embryos available to allow multiple embryo transfer cycles.

Having read the above document I/we consent to the collection, freezing and storage of my oocytes.

I acknowledge that:

1. I have read and understood the above information and additional information sheets mentioned.
2. The collection, freezing and thawing of my oocytes does not guarantee that a pregnancy will be achieved from the resulting embryos.
3. I understand that my best chance of pregnancy will be achieved by attempting normal conception before the age of 36 years.
4. Storage of the oocytes will cease upon any of the following occurring:
 - Upon my request for them to be thawed and used for myself
 - Upon my written request for storage to be discontinued
 - Upon my death
 - Upon my being uncontactable at the last address known to Queensland Fertility Group for more than two (2) years
 - Upon 6-monthly storage fees remaining unpaid to Queensland Fertility Group for more than two (2) years
5. I must keep the Queensland Fertility Group notified of my mailing address.

DATED.....day of.....19.....

SIGNED _____ WITNESS _____

PRINT NAME _____ PRINT NAME _____

N.B. One copy of this document to be returned to the doctor prior to surgery and one to be retained by the patient.