

12.3.6.1 FROZEN EMBRYO TRANSFER (FET)

Concept Fertility Centre has been freezing embryos since 1985, and the subsequent transfer of these has resulted in the birth of many healthy babies. There is no increase in abnormalities in children born from embryos that have been frozen.

EMBRYO STORAGE

Embryos can be frozen after 24, 48, 72 or 96 (Blastocyst stage) hours in culture. Once embryos have been frozen they can be stored for a maximum of ten years by law. If you decide you no longer wish to have your embryos kept for yourselves you have the choice of donating them to research or another couple/ person or disposing of them. A combination of these choices is also available.

Six months before your embryo(s) storage period is due to expire, Concept will send you a letter of notification regarding your embryo(s) expiry date. You are asked to contact Concept regarding your choice, ie;

- 1) Replace before expiry date.
- 2) Apply for an extension of period for storage (special circumstances only).
- 3) Donate to another couple/person.
- 4) Donate to research.
- 5) Remove from storage and allow to succumb.

An extension of storage time needs to be submitted to the Reproductive Technology Council **before** your embryo(s) expiry date.

Consent forms are signed relating to the "ownership" of the embryos in the event of death/divorce etc and any disputes regarding the respective rights of the embryo is dealt with through the courts. The Commissioner of Health can direct Concept to continue storage of the embryos on request from one member of the couple until the matter is resolved through the courts.

MANAGEMENT OF THE FET TREATMENT CYCLE.

The frozen embryo replacement cycle is relatively non-invasive compared to an egg collection cycle. The embryos can be replaced either in a natural cycle or in a controlled cycle depending on whether we can easily monitor the time of natural ovulation. We aim to replace the embryos into your uterus at the correct time in relation to ovulation and the thickness of the lining of your uterus (endometrium).

In a controlled cycle Progynova (oestrogen) tablets are administered in order to prepare the endometrium for implantation. Normally we monitor the spontaneous ovulatory cycle to determine the optimal time.

12.3.6.2 FROZEN EMBRYO TRANSFER (FET)

The development of the endometrium is monitored by blood tests and by ultrasound scanning (approximately 1-2 scans). It is important not to have intercourse from the time you have started blood tests. When ovulation has been identified, or when the endometrium is thick enough, your embryos will be thawed for replacement.

CONSENT TO PROCEDURE

Before the laboratory can thaw any of your embryos, both partners must have signed the Consent Form for Embryo Transfer with the co-ordinator at the pre-treatment meeting.

THAWING YOUR EMBRYOS

The laboratory will thaw your embryos so that the age of the embryos corresponds to the age of your uterine lining. The exact timing will depend upon the stage at which the embryos were frozen.

Not all embryos survive the freezing, storage and thawing process. Before your embryo transfer, the laboratory will assess your embryos to see if they are suitable for transfer. If they are, then the embryo transfer can proceed. You are asked to ring the day before your embryo transfer to check the theatre time and survival of your embryos.

THE EMBRYO TRANSFER

Transfer usually takes place around 2 days after ovulation (+2). For this procedure a fine tube (catheter) is passed through the cervix and the embryos are injected high into the uterus in a minute amount of culture medium. No anaesthetic or sedation is normally required and the procedure takes approximately 15 minutes. ***Note** If any form of sedation is used then you **may not** drive home.

AFTER THE EMBRYO TRANSFER

You will be asked to lie quietly for ½ an hour to allow the embryos to settle into the endometrium, then you may get up and sit in a chair. You will be here for approximately 2 hrs from your admission. Approximately two weeks after ovulation a blood test for progesterone and BhCG (pregnancy hormones) will be carried out in order to determine whether there is early evidence of a pregnancy. Menstruation does not necessarily mean that a pregnancy is not developing. You must continue blood tests until a final outcome is known.

The hormone, progesterone, is essential to support the lining of the uterus. Pessaries, and in some cases injections, may be given to supplement the level of progesterone in controlled cycles. Progesterone is NOT usually given in natural cycles, since your ovaries produce their own progesterone.

THE SUCCESS RATE OF FET

The success rate using frozen/thawed embryos is between 15-20% depending on the number and quality of embryos transferred, your age and your cause of infertility.