

Embryo Transfer

How to prepare and what to expect

This handout explains how to prepare and what to expect during and after a fresh or frozen embryo transfer cycle. It is important that you fully understand the cycle, so please read this handout carefully. Always feel free to ask any questions now and during your treatment.

What is a frozen embryo transfer cycle?

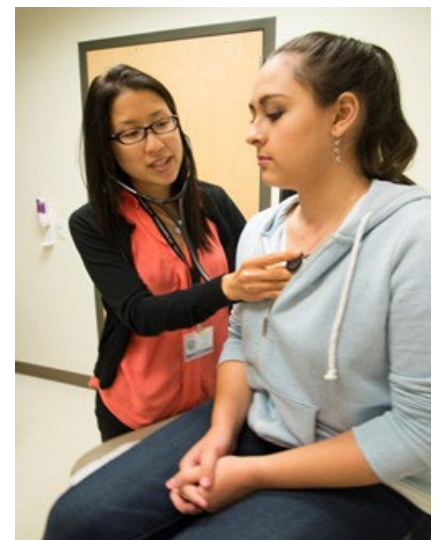
A *frozen embryo transfer (FET) cycle* is a process to help you become pregnant. FET uses *embryos* (fertilized eggs) that have been frozen. During the FET cycle, your embryos are thawed and placed into your uterus. This is done at a time when your uterus can best support a pregnancy. There are two main types of frozen embryo transfer cycles: programmed and natural.

What is a programmed embryo transfer cycle?

In a *programmed FET cycle*, you will be given hormones to help your *endometrium* (lining of your uterus) accept the embryos. While you are taking the hormones, you will have blood tests to check hormone levels and transvaginal ultrasound exams to help us monitor how your body responds to hormone treatment.

Your care team will give you detailed instructions. Carefully follow all instructions to improve your chance of pregnancy success.

- Before a programmed FET cycle, you will typically take medication to reduce ovarian activity.
- After taking this medicine for at least 10 days, you will take the hormone *estradiol*, as a pill, injection, or patch. Estradiol helps prepare your endometrium to accept the embryo.
- A vaginal ultrasound will be done after you have used estradiol for about 2 weeks. This test will determine if your endometrium is thick enough for an embryo transfer.
- When your endometrium is at the right thickness, we will tell you to use the hormone progesterone. Progesterone is given as an injection into a muscle (*intramuscular*) or as a vaginal gel or pill. Your doctor will decide the best method for you.
- **Make sure you know exactly when to start the progesterone.** The timing is very important. It is related to when your frozen embryos will be thawed and transferred.
- Keep using estradiol and progesterone until we tell you to stop.
- When pregnant after a programmed FET, you will keep using estradiol and progesterone until you are 10 weeks pregnant.



Talk with your doctor if you have any questions about your frozen embryo transfer cycle.



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What is a natural embryo transfer cycle?

- In a *natural FET cycle*, you track your body's natural ovulation to time when to have a frozen embryo transfer.
- You will have a transvaginal ultrasound to monitor the endometrial lining and ovarian activity at the beginning and middle of your menstrual cycle.
- You will use ovulation predictor kits and/or a prescribed ovulation trigger injection to determine ovulation timing.
- In an unmodified natural FET cycle you will not take supplemental progesterone. In a modified natural FET cycle you will take supplemental progesterone until you are 8 weeks pregnant.

What happens to the embryos during this process?

Embryos are frozen at different times: day after fertilization (day 1), at *cleavage stage* (day 3), or when they become *blastocysts* (day 5).

Your embryos were frozen either one at a time or in groups. They were frozen inside small vials or straws. The number of vials or straws that will be thawed for the FET depends on:

- Your age at the time the embryos were frozen
- The quality of your embryos
- The number of embryos frozen in each vial or straw
- Other factors that were present when your embryos were frozen

Depending on when and how your embryos were frozen, they may need time to grow in the lab after thawing, before they can be placed into your uterus. Your team will tell you if extra steps are needed and how they affect your FET cycle. These extra steps, if needed, will add more cost.

We will thaw a certain number of embryos for transfer. This number is based on how many give you the highest chance of pregnancy but the lowest chance of *multiple gestation* (being pregnant with more than 1 baby at the same time). After talking with you, your provider will suggest the number of embryos to thaw and transfer.

What is a fresh embryo transfer cycle?

Unlike frozen embryo transfers, fresh embryo transfer utilizes embryos that have not been frozen. Typically, the highest quality embryo(s) available is placed into your uterus either 3 or 5 days after an egg retrieval and fertilization take place.

- In the case of previously frozen eggs, a fresh embryo transfer will occur 3 or 5 days after the eggs are thawed and fertilized. This may be in combination with either a programmed preparation of your endometrial lining or the timing of your natural ovulation.
- You will be prescribed progesterone to hormonally support a potential pregnancy.
- When you have a fresh embryo transfer, any additional embryos created will be frozen for potential later use.

What are the benefits of embryo transfer?

You might get these benefits from FET:

- Pregnancy
- Being able to control how many embryos are transferred into your uterus

Please know that the Center for Reproductive Health and Fertility (CRHF) **cannot** guarantee that:

- Any of the steps in the process will succeed
- The treatment process will result in pregnancy
- The pregnancy will result in delivery of a healthy full-term newborn

What risks or problems can happen with FET or fresh embryo transfer?

- It is possible that none of your frozen embryos will survive being frozen and thawed. This will mean there are no embryos to transfer.
- Using hormones such as estradiol may increase your risk of blood clots. If you get blood clots, you may need to take blood-thinning medicines (*anticoagulants*) for a few months. Very rarely, blood clots cause serious problems such as *pulmonary embolus* (blood clots in the lungs), stroke, or even death.
- The embryo transfer procedure may cause some cramping, discomfort, and a small amount of bleeding. Rarely, infection occurs from the catheter. If this occurs, you may need antibiotics.
- *Multiple gestation* (being pregnant with more than 1 baby at the same time) is a risk of embryo transfer. This risk increases when more embryos are placed into your uterus.
- The risks of multiple gestation include:
 - You may have preterm (early) labor. Preterm labor and delivery may place you at higher risk for cesarean section, bleeding, and infection.
 - Your babies may be born premature and need intensive care.
 - Your babies may have long-term problems from being born too early. Or they may not survive.
- Problems may occur during pregnancy. Two of these problems are:
 - *Gestational diabetes*, which causes high blood sugar in the pregnant person and can affect the baby's health
 - *Preeclampsia*, a serious condition that includes a sudden rise in blood pressure
- Sometimes it takes longer than we expect for your endometrium to thicken after you start taking hormones. This may change the expected date of your FET. You may need extra hormones and more monitoring. This may add additional costs.

Questions?

Your questions are important. Call your UWMC healthcare provider if you have questions or concerns.

Center for Reproductive Health and Fertility: Call 206.598.4225 weekdays between 8 a.m. and 5 p.m.

- After hours and on weekends or holidays, call 206.598.6190 and ask for the CRHF provider on call to be paged.
- Website: uwmedicine.org/specialties/obstetrics-gynecology/fertility-care