

FERTILITY PRESERVATION FOR FEMALE PATIENTS

What is fertility?

Fertility is the ability to have children.

Why discuss fertility?

If you have been diagnosed with cancer or are going to receive a bone marrow transplant, you may receive treatments that will affect your ability to have children.

Girls are born with a set amount of eggs (oocytes). Once they go through puberty, girls start having menstrual cycles (periods). A menstrual cycle is the process of hormones causing an egg to develop and be released from the ovary (called ovulation). If the egg is fertilized by sperm, it then travels down the Fallopian tubes and attaches to the uterus. If it is not fertilized, the egg goes through a process of breaking down. The lining of the uterus (called endometrium) also breaks down if there is not a fertilized egg to support. This process of breaking down is what causes menstrual bleeding. Several eggs start to develop during every cycle, but only one is chosen and released.

Some treatments for cancer can decrease the number of eggs a girl has. This causes the girl to stop having periods sooner than normal because there are not as many eggs available (premature ovarian failure). Other treatments cause a girl to not to start or restart having menstrual cycles, which is called ovarian failure.

Treatments that affect fertility include high doses of certain chemotherapies, radiation that hits the ovaries or the uterus, radiation to the brain, or surgery that affects the reproductive organs (uterus/ovaries etc.).

Are there options to help preserve fertility (help me have kids)?

There are some options. These options depend on if you have undergone puberty or not, the type of cancer and how soon treatment needs to start.

If you have started your menstrual cycles, options are:

1) Egg cryopreservation (freezing)-

This involves using hormones to cause the ovaries to release more eggs during ovulation. These eggs are then collected by transvaginal ultrasound and frozen (cryopreserved). This process takes about two weeks.

2) Embryo Freezing-

Eggs are collected the same way as for egg cryopreservation. After eggs are harvested, they are fertilized with sperm. If you have a committed partner, their sperm can be used, or you can use a sperm donor. This is usually an option chosen by adults in committed relationships.

3) Gonadotropin Releasing Hormone Suppression-

These drugs are given by shots every one or three months. They cause you not to have periods. They may help preserve fertility, but this is still being studied.

If you have not started your menstrual cycle or do not have time to freeze eggs prior to start of therapy, there is an option to freeze all or part of an ovary. This is done using a surgical procedure. This option is experimental (meaning it is being studied and you have to be on research trial to have this done). This is not recommended for certain types of tumors.

When should I preserve my fertility?

It is best to have eggs/embryos or ovary tissue frozen before you start cancer therapy or undergo bone marrow transplant.

If I am not able to undergo fertility preservation prior to treatment, do I still have options?

For many reasons, females are unable to undergo fertility preservation prior to therapy (need to start therapy right away, type of tumor, cost etc.). After therapy, some women can still freeze eggs. There are also other ways to become a parent– having a surrogate carry a child, egg donor, adoption. It is important to talk with your doctor about options or for referral to a specialist.

How much will this cost?

Egg, embryo or ovarian tissue preservation costs around \$5,000 to \$7,000. Unfortunately, insurance usually does not cover this cost.

There are some resources to help cover these costs:

LiveSTRONG Fertility Discount Program (formerly FertileHope)-

LiveSTRONG Fertility Discount Program is a national LiveSTRONG initiative dedicated to providing reproductive information, support and hope to cancer patients and survivors whose medical treatments present the risk of infertility. They offer financial assistance options through their Sharing Hope program. For more information: http://www.livestrong.org/we-can-help/fertility-services/.

ReproTech, Ltd.-

ReproTech, Ltd., strives to make fertility preservation services available to all individuals who are facing fertility threatening treatment and offer a financial assistance program called Verna's Purse. For more information: <u>http://reprotech.com/financial-assistance.html</u>. ReproTech, Ltd. also offers financial assistance for active military clients. For more information, contact ReproTech: <u>http://reprotech.com/contact.html</u>.

HeartBeat Program-

Ferring Reproductive Health, in collaboration with Walgreens pharmacies, are offering financial assistance for fertility preservation treatments for female cancer patients of reproductive age through their HeartBeat Program. For more information: <u>https://www.ferringfertility.com/savings/heartbeat/</u>.

For more information regarding fertility preservation, please go to the following:

KU Center for Reproductive Medicine Fertility Preservation Program for Cancer Patients: http://bit.ly/1Q1E12Z.

Seattle Children's YouTube Video on Women's Fertility preservation options: https://www.youtube.com/watch?v=aySswe8NMgI.

www.KidsHealth.org/teen

Follow links to Diseases and Conditions Cancer and Tumors Can I have children after cancer therapy.

Developed in collaboration with the Hematology/Oncology Teen Advisory Board.

