

Ability to Have Children: Fertility Issues

Radiation therapy and chemotherapy treatments may cause temporary or permanent infertility. These side effects are related to a number of factors including the patient's sex, age at time of treatment, the specific type and dose of radiation therapy and/or chemotherapy, the use of single therapy or many therapies, and length of time since treatment.

When cancer or its treatment may cause infertility or sexual dysfunction, every effort should be made to inform and educate the patient about this possibility. When the patient is a child, this can be difficult. The child may be too young to understand issues involving infertility or sexuality, or parents may choose to shield the child from these issues.

Chemotherapy

For patients receiving chemotherapy, age is an important factor and recovery improves the longer the patient is off chemotherapy. Chemotherapy drugs that have been shown to affect fertility include: busulfan, melphalan, cyclophosphamide, cisplatin, chlorambucil, mustine, carmustine, lomustine, vinblastine, cytarabine, and procarbazine. In women older than 40 years, adjuvant endocrine therapy increases the risk that chemotherapy will cause permanent loss of menstrual periods.

Radiation

For men and women receiving radiation therapy to the abdomen or pelvis, the amount of radiation directly to the testes or ovaries is an important factor. In women older than 40 years, infertility may occur at lower doses of radiation. Fertility may be preserved by the use of modern radiation therapy techniques and the use of lead shields to protect the testes. Women may undergo surgery to protect the ovaries by moving them out of the field of radiation.

Fertility Alternatives

Patients who are concerned about the effects of cancer treatment on their ability to have children should discuss this with their doctor before treatment. The doctor can recommend a counselor or fertility specialist who can discuss available options and help patients and their partners through the decision-making process. Options may include freezing sperm, eggs, or ovarian tissue before cancer treatment.

Resources on Fertility Preservation for Cancer Survivors

Oncofertility Consortium (<http://oncofertility.northwestern.edu>)

NIH-supported interdisciplinary research consortium exploring relationships between health, disease, survivorship, and fertility preservation in young cancer patients

MyOncofertility.org

Patient education resource provided by the Oncofertility Consortium

Fertile Hope (www.fertilehope.org)

Nonprofit organization affiliated with the Lance Armstrong Foundation that provides information and support to cancer patients and survivors at risk for infertility

American Society of Clinical Oncology (www.asco.org)
Recommendations on fertility preservation in people treated for cancer

Livestrong.org (www.livestrong.org)
Founded in 1997 by Lance Armstrong, Livestrong offers information for cancer patients on a variety of topics including fertility information.

Local Resources for Sperm Banking, Egg and Embryo Preservation

The following resources are listed as a convenience for our patients and do not constitute an endorsement by City of Hope.

- Fertile Future Sperm, egg, embryo storage
www.fertile-future.com/
- Huntington Reproductive Center Medical Group Fertility treatment, egg freezing
www.havingbabies.com
- Live: On Sperm banking kit by mail for cancer patients
www.liveonkit.com

Financial Considerations

Although some insurance companies will often pay for infertility treatments, procedures such as sperm banking, egg freezing and embryo freezing are usually not covered. Since insurance coverage varies widely we encourage you to discuss these options with your insurance company.

Financial assistance program are available through organizations such as Fertile Hope's Sharing Hope program. Find out more at www.fertilehope.org.

Resources Available at City of Hope

It is important that you talk with your doctor about your concerns and your options. You may find helpful information, education and support in the Sheri and Les Biller Patient and Family Resource Center located near the entrance to the Main Medical building or call 626-218-CARE (2273).

References

This information was summarized or adapted from the following sources:

- <https://www.cancer.gov/about-cancer/treatment/research/fertility-preservation>
- <https://www.cancer.gov/about-cancer/treatment/side-effects/fertility-women> June 2017.