

# **Fertility and Cancer**

Thanks to advances in cancer treatment, more child and young adult cancer patients than ever before have become cancer survivors. However, patients who undergo cancer treatment before they complete their family face the possibility of infertility. Those considering certain treatment options may wish to explore fertility preservation strategies.

#### **Statistics**

- Men over age 40 are less likely to regain fertility after cancer treatment.
- Women treated for cancer before age 35 have a better chance of conceiving after treatment.
- Sperm production can slow or cease after chemotherapy treatment. It can take years to return, reducing the likelihood of it returning at all.
- Chemotherapy, surgery, and radiation therapy can decrease fertility in both males and females.
- Women treated for some types of cancer are at risk for infertility and early menopause.

## Information for Men

Men treated for cancer will find that the effects of treatment on their fertility vary by the type and dosage of treatment chosen, age at treatment, the location of their cancer, and whether they had fertility issues before treatment. Some treatments impair fertility temporarily, and others may have permanent effects. Generally, men are advised to wait at least six months after completion of treatment before trying to father a child.

## **Fertility Preservation Options for Men**

For men whose fertility may be impaired by treatment, there are options for fertility preservation that may work for them. For men who have gone through puberty, freezing and banking sperm prior to starting treatment is the standard recommendation for fertility preservation. Patients receiving radiation may also consider shielding their testicles using a lead shield during treatment. For boys who have not yet gone through puberty, there are ongoing studies into procedures that prevent infertility through freezing and reimplanting healthy testicular tissue, called testicular tissue cryopreservation.

#### Information for Women

While pregnancy after cancer does not raise the risk of recurrence, women are advised to wait at least six months before trying to conceive, depending on their type and stage of cancer, treatment method, and age. Some physicians suggest waiting two to five years. Additionally, women who have undergone radiation, certain chemotherapy treatments that cause the heart to work harder during pregnancy and delivery, or certain surgical procedures to reproductive organs may face difficulties with pregnancy, labor, and delivery. Women who have undergone these treatments should consult an obstetrician who specializes in high-risk cases.

## **Cancer Treatment During Pregnancy**

Cancer can be treated during pregnancy, though certain accommodations may be necessary. Generally, treating cancer in the second or third trimester is less harmful to the baby than an early delivery. After the first trimester, chemotherapy is generally not harmful to the baby, but radiation can increase risk of birth defects. Each pregnant woman's treatment plan will be unique to her situation and will balance the mother's health with her baby's health. Breastfeeding during cancer treatment can pass certain medications to the baby and is generally not recommended.

## **Fertility Preservation Options for Women**

For women whose fertility may be impaired by treatment, there are several fertility preservation strategies available. For women who have been through puberty, freezing embryos or eggs for future fertility treatments may be the easiest and most reliable means of fertility preservation. Fertility-sparing surgery that spares the uterus or an ovary is sometimes an option. For girls who have not gone through puberty, freezing and reimplanting healthy ovarian tissue, called ovarian tissue cryopreservation, has proven to be an option. Fertility preservation options depend on the urgency

of initiating treatment, as well as patient age, physical and sexual maturity, relationship status, and personal preferences, and should be discussed with a reproductive endocrinology and infertility specialist.

# **About Texas Oncology**

With more than 550 physicians and 300 locations, Texas Oncology is an independent private practice, a member of The US Oncology Network, that sees more than 71,000 new cancer patients each year. Founded in 1986, Texas Oncology provides comprehensive, multidisciplinary care, and includes Texas Breast Specialists, Texas Center for Proton Therapy, Texas Colon & Rectal Specialists, Texas Imaging & Infusion Center, Texas Oncology Surgical Specialists and Texas Urology Specialists. Texas Oncology's robust community-based clinical trials and research program has contributed to the development of more than 100 FDA-approved cancer therapies. Learn more at <a href="TexasOncology.com">TexasOncology.com</a>.

Sources: American Cancer Society, Centers for Disease Control and Prevention, National Cancer Institute, and the U.S. Census
Bureau



