

# **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. Long-term trends of having children later in life have led to a growing number of patients with special concerns about fertility after cancer treatment. Those considering certain treatment options may wish to explore fertility preservation strategies.

## **Statistics**

- The average age at which an American woman begins her family has increased to 26 years.
- 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 slows or ceases 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 men and women .
- Women treated for 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, age at treatment, the location of their cancer, and whether they had fertility issues before. Some treatments will impair fertility temporarily, and the effects of others will be permanent. Generally, men are advised to wait at least six months 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. For men who have gone through puberty, freezing and banking sperm 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 address 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 patient 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. Often, 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 cancer and should balance the mother's health with her baby's health. Breastfeeding during cancer treatment can pass medications to the baby and is 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 age, physical and sexual maturity, relationship status, and personal preferences, and should be discussed with a reproductive endocrinology and infertility specialist.

### **About Texas Oncology**

Texas Oncology is an independent private practice with more than 500 physicians and 210 locations across the state. Meeting the oncology needs of Texans for more than 35 years, the practice includes Texas Center for Proton Therapy, Texas Breast Specialists, Texas Oncology Surgical Specialists, Texas Urology Specialists, and Texas Center for Interventional Surgery. As a lead participant in US Oncology Research, Texas Oncology played a role in the development of more than 100 FDA-approved therapies. For more information, visit www.TexasOncology.com.

Sources: American Cancer Society, American Society of Clinical Oncology, Centers for Disease Control and Prevention, and Pew Research Center



www.TexasOncology.com 888-864-4226

