



## **Fertility Issues**

### **Chemotherapy**

#### **Radiation**

#### **Procreative Alternatives**

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.

### **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.

### **Procreative 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