FEMALE SEXUAL DYSFUNCTION AFTER CANCER TREATMENT

Sexuality is a complex characteristic that involves the physical, psychological, interpersonal, and behavioral aspects of a person. Recognizing that "normal" sexual functioning covers a wide range is important. Ultimately, sexuality is defined by each patient and her partner according to sex, age, personal attitudes, and religious and cultural values.

Many types of cancer and cancer therapies can cause sexual dysfunction. Research shows that approximately one-half of women who have been treated for breast and gynecologic cancers experience long-term sexual dysfunction. A woman’s sexual response can be affected in many ways. The causes of sexual dysfunction are often both physical and psychological. The most common sexual problems for women who have cancer are loss of desire for sexual activity, a change in genital sensations due to pain, loss of sensation and numbness, or decreased ability to reach orgasm. Most often women are still able to reach orgasm, however, it may be delayed due to medications and/or anxiety.

Unlike many other physical side effects of cancer treatment, sexual problems may not resolve within the first year or two of disease-free survival and can interfere with the return to a normal life. Patients recovering from cancer should discuss their concerns about sexual problems with a health care professional.

FACTORS AFFECTING SEXUAL FUNCTION IN PEOPLE WITH CANCER

Both physical and psychological factors contribute to the development of sexual dysfunction. Physical factors include loss of function due to the effects of cancer therapies, fatigue, and pain. Surgery, chemotherapy, and radiation therapy may have a direct physical impact on sexual function. Other factors that may contribute to sexual dysfunction include pain medications, depression, feelings of guilt from misbeliefs about the origin of the cancer, changes in body image after surgery, and stresses due to personal relationships. Getting older is often associated with a decrease in sexual desire and performance, however, sex may be important to the older person’s quality of life and the loss of sexual function can be distressing.

SURGERY-RELATED FACTORS

Surgery can directly affect sexual function. Factors that help predict a patient's sexual function after surgery include age, sexual and bladder function before surgery, tumor location and size, and how much tissue was removed during surgery. Surgeries that affect sexual function include breast cancer and other pelvic tumors.
**Breast Cancer**

Sexual function after breast cancer surgery has been the subject of much research. Surgery to save or reconstruct the breast appears to have little effect on sexual function compared with surgery to remove the whole breast. Women who have surgery to save the breast are more likely to continue to enjoy breast caressing, but there is no difference in areas such as how often women have sex, the ease of reaching orgasm, or overall sexual satisfaction. Having a mastectomy, however, has been linked to a loss of interest in sex. Chemotherapy has been linked to problems with sexual function.

**Other Pelvic Tumors**

Women who have surgery to remove the uterus, ovaries, bladder, or other organs in the abdomen or pelvis may experience pain and loss of sexual function depending on the amount of tissue/organ removed. With counseling and other medical treatments, these patients may regain normal sensation in the vagina and genital areas and be able to have pain-free intercourse and reach orgasm.

**Chemotherapy-Related Factors**

Chemotherapy is associated with a loss of desire and decreased frequency of intercourse for women. The common side effects of chemotherapy such as nausea, vomiting, diarrhea, constipation, mucositis, weight loss or gain, and loss of hair can affect an individual’s sexual self-image and make her feel unattractive.

For women, chemotherapy may cause vaginal dryness, pain with intercourse, and decreased ability to reach orgasm. In older women, chemotherapy may increase the risk of ovarian cancer. Chemotherapy may also cause a sudden loss of estrogen production from the ovaries. The loss of estrogen can cause shrinking, thinning, and loss of elasticity of the vagina, vaginal dryness, hot flashes, urinary tract infections, mood swings, fatigue, and irritability. Young women who have breast cancer and have had surgeries such as removal of one or both ovaries, may experience symptoms related to loss of estrogen. These women experience high rates of sexual problems since there is a concern that estrogen replacement therapy, which may decrease these symptoms, could cause breast cancer to return. For women with other types of cancer, however, estrogen replacement therapy can usually resolve many sexual problems. Also, women who have graft-versus-host disease (a reaction of donated bone marrow or peripheral stem cells against a person’s tissue) following bone marrow transplantation may develop scar tissue and narrowing of the vagina that can interfere with intercourse.

**Radiation Therapy-Related Factors**

Like chemotherapy, radiation therapy can cause side effects such as fatigue, nausea and vomiting, diarrhea, and other symptoms that can decrease feelings of sexuality. In women, radiation therapy to the pelvis can cause
changes in the lining of the vagina. These changes eventually cause a narrowing of the vagina and formation of scar tissue that results in pain with intercourse, infertility and other long term sexual problems. Women should discuss concerns about these side effects with their doctor and ask about the use of a vaginal dilator.

**Psychological Factors**
Loss of sexual desire and a decrease in sexual pleasure are common symptoms of depression. Depression is more common in patients with cancer than in the general healthy population. It is important that patients discuss their feelings with their doctor. Getting treatment for depression may be helpful in relieving sexual problems.

Cancer treatments may cause physical changes that affect how an individual sees her physical appearance. This view can make a woman feel sexually unattractive. It is important that patients discuss these feelings and concerns with a health care professional. Patients can learn how to deal effectively with these problems.

The stress of being diagnosed with cancer and undergoing treatment for cancer can make existing problems in relationships even worse. The sexual relationship can also be affected. Patients who do not have a committed relationship may stop dating because they fear being rejected by a potential new partner who learns about their history of cancer. One of the most important factors in adjusting after cancer treatment is the patient’s feeling about her sexuality before being diagnosed with cancer. If patients had positive feelings about sexuality, they may be more likely to resume sexual activity after treatment for cancer.

**General Factors Affecting Sexual Functioning**
When a possible sexual problem is identified, the health care professional will do a detailed interview either with the patient alone or with the patient and her partner. The patient may be asked any of the following questions about her current and past sexual functioning:

- How often do you feel a spontaneous desire to have sex?
- Do you enjoy sex?
- Do you become sexually aroused (does your vagina expand and become lubricated)?
- Are you able to reach orgasm during sex? What types of stimulation can trigger an orgasm (for example, self-touch, use of a vibrator, shower massage, partner caressing, oral stimulation, or intercourse)?
- Do you have any pain during sex? Where do you feel the pain? What does the pain feel like? What kinds of sexual activity trigger the pain? Does this cause pain every time? How long does the pain last?
- When did your sexual problems begin? Was it around the same time that you were diagnosed with cancer or received treatment for cancer?
- Are you taking any medications? Did you start taking any new
medications or did the doctor change the dose of any medications around the time that these sexual problems began?

- What was your sexual functioning like before you were diagnosed with cancer? Did you have any sexual problems before you were diagnosed with cancer?

PSYCHOSOCIAL ASPECTS OF SEXUALITY
Women may also be asked about the significance of sexuality and relationships whether or not they have a partner. Patients who have a partner may be asked about the length and stability of the relationship before being diagnosed with cancer. They may also be asked about their partner's response to the diagnosis of cancer and if they have any concerns about how their partner may be affected by their treatment. It is important that patients and their partners discuss their sexual problems and concerns and fears about their relationship with a health care professional with whom they feel comfortable.

MEDICAL ASPECTS OF SEXUALITY
Patients may be asked about current and past medical history since many medical illnesses can affect sexual function. Lifestyle risk factors such as smoking and high alcohol intake can also affect sexual function as well as prescribed and over-the-counter medications. Patients may be asked to fill out questionnaires to help identify sexual problems and may undergo a variety of physical examinations, blood tests, ultrasound studies, and hormone tests.

EFFECTS OF MEDICINES ON SEXUAL FUNCTION
The side effects of medicines can add to the sexual side effects of surgery, radiation therapy, and chemotherapy. Cancer patients may receive drug therapy that can affect nerves, blood vessels, and hormones that control normal sexual function. Mental alertness and moods may also be affected. These side effects may occur in cancer patients who take opioids for pain and drugs to treat depression, for example.

TREATMENT OF SEXUAL PROBLEMS IN PEOPLE WITH CANCER
Many patients are fearful or anxious about their first sexual experience after cancer treatment. Fear and anxiety can cause patients to avoid intimacy, touch, and sexual activity. The partner may also feel fearful or anxious about initiating any activity that might be thought of as pressuring to be intimate or that might cause physical discomfort. Patients and their partners should discuss concerns with their doctor or other qualified health professional. Honest communication of feelings, concerns, and preferences is important. In general, a wide variety of treatment modalities are available for patients with sexual dysfunction after cancer. Patients can learn to adapt to changes in sexual function through reading books, pamphlets, and internet resources.
or listening to and watching videos and CD-ROMs. Health professionals who
specialize in sexual dysfunction can provide patients with these resources as
well as information on national organizations that may provide support.
Some patients may need medical intervention such as hormone
replacement, medications, medical devices, or surgery. Patients who have
more serious problems may need sexual counseling on an individual basis,
with his or her partner, or in a group. Further testing and research is needed
to compare the effectiveness of various treatment programs that combine
medical and psychological approaches for people who have had cancer.

Works Cited
National Cancer Institute
www.cancer.gov