Erectile Dysfunction After Cancer Treatment

Many men may have difficulty obtaining or maintaining erections after various forms of cancer treatment. Surgery and radiation therapy to the pelvic area, hormonal therapy, chemotherapy, and various medications may all significantly impact a man's ability to obtain or maintain an erection. Erectile dysfunction can cause significant angst and anxiety for the man and his partner.

**Surgery**

Pelvic surgery can result in changes to the nerves and blood vessels responsible for erections. This can result in a decreased ability to obtain and maintain erections. Even "nerve-sparing" surgery results in some damage to the nerves. For some men, it can take up to 2 years to regain erectile function after surgery for cancers in the pelvic area (prostate, testicular, colorectal and anal cancers). Experts recommend starting "penile rehabilitation" (achieving erections with the help of medications) be started soon after surgery to achieve the best outcomes. The prostate and seminal vesicles produce the fluid that makes up ejaculate and surgery for pelvic cancers can result in their removal or damage to the nerves that control their function. As a result, men may have "dry" ejaculations. This is not harmful and does not affect the ability to achieve orgasm.

**Radiation Therapy**

Erectile dysfunction (ED) can occur in some men after radiation therapy for prostate cancer. This tends to happen slowly, over a year or more after treatment. The chance of developing erectile dysfunction due to radiation damage increases with age. Men who had poor erectile function before treatment are at higher risk of ED after treatment. In addition, radiation therapy damages the prostate gland and seminal vesicles, which are responsible for creating the fluid that makes up ejaculate. In turn, ejaculate after radiation therapy for prostate cancer is diminished or absent (called dry ejaculation). This is not harmful and does not affect the ability to achieve orgasm.

**Chemotherapy & Hormone Therapy**

Chemotherapy does not often cause erectile dysfunction, though it may affect desire for sexual activity. Your desire may fluctuate over the course of treatment. Hormone therapy, a common treatment for prostate cancer, can lead to a loss of desire for sex, erectile dysfunction and difficulty achieving orgasm, which tends to develop slowly over the first few months of hormone therapy.

**Available Treatments for ED**

Since this is a common concern after cancer treatment, remember that your healthcare provider has seen many patients with similar problems. You should not hesitate to discuss these concerns with your provider. There are treatments to help patients restore and maintain erections. Your healthcare provider can determine if the treatment is appropriate for you, and the likelihood you will benefit from a specific treatment. These treatments may include the following:

- **Vacuum Constrictive Devices (VCDs):** This is a pump that you place over the penis. As air is pumped out of the cylinder, blood is drawn into the penis to produce an erection. A ring slides over the base of the penis to keep the blood in the tissues to maintain an erection for up to half an hour.
- **Oral Medications:** A number of oral medications are now available to help men attain and maintain an erection. These medications include Viagra®, Cialis®, and Levitra®.
- **Penile Injections:** Medications may be injected into the side of the penis, which promote blood flow. The most common drug used for injection is Prostaglandin E1 (Caverject®). The medication typically needs to be adjusted to the correct
dose based on how long the erection is maintained.

- **Muse System:** This system also utilizes Prostaglandin E1. Instead of an injection, a small suppository is placed into the urethra (opening in the penis where urine & semen exit) using a specialized applicator.
- **Penile Prosthesis (Implants):** There are various types of penile prostheses, which a man can consider. Some are malleable rods that are placed in the penis. Most men now utilize a type of inflatable prostheses, which can be inflated and deflated as needed.
- **Sex Therapy:** This is recommended for patients with anxiety based erection problems. Typically the patient and his partner are both involved in the therapy sessions.
- **Lifestyle interventions:** such as weight loss, exercise, and smoking cessation, may also help.

Each type of treatment has its own advantages, disadvantages and side effects. If you are experiencing erectile dysfunction, you should discuss the pros and cons of each treatment option with your healthcare provider. If you are experiencing ED, you may want to see an urologist (a doctor trained in the care of male genitals), who can offer treatments for erectile dysfunction and other sexual concerns.