

## BODY

# Understanding ED

BY DON VAUGHAN

*Causes of erectile dysfunction can vary, while treatment options abound.*

Erectile dysfunction—the inability to achieve or maintain an erection during sex—is a common and often long-lasting side effect of cancer treatment. While the cause is most often physical, there can be a psychological component as well.

The stress of healing from cancer can frequently affect a man's ability to achieve an erection, explains Debra Thaler-DeMers, RN, staff nurse IV and resource nurse at Stanford Hospital & Clinics' Peterson Cancer Treatment Center in California.

“Some men equate fertility with potency and they think that if they are infertile because of their cancer treatment that they are impotent as well,” she says, “and that psychological barrier can cause problems. Many men also experience ED because they're anxious that things won't work properly when it comes time to have sex following cancer treatment.”

## Physical and Emotional

Erectile dysfunction is most commonly seen in men who've had a prostatectomy to treat prostate cancer, says Arthur Burnett, MD, professor of urology at the Johns Hopkins Medical Institutions in Baltimore. Interventions for other cancers of the pelvic region, such as colorectal cancer, may also result in ED, as can radiation and chemotherapy in other parts of the body.

A variety of factors play a role in determining whether ED will occur following cancer treatment, Burnett notes. Foremost are interventions that directly impact the blood supply or nerves that are crucial to achieving erections.

No matter the cause, the personal, psychological, and social effects of post-cancer erectile dysfunction can be devastating, says David Latini, PhD, assistant professor of urology, psychiatry, and health services research at Baylor College of Medicine in Houston.

“ED can influence many things, including self-esteem, self-confidence, and a man's willingness to interact with other people,” Latini notes. Some men who have erectile difficulties may develop depression or anxiety that bleeds over into social relationships or makes them unwilling to initiate a new relationship.

“Because they know they would be unable to achieve an erection, they feel, ‘why bother?’ So there can be a sense of defeat based on the idea that they are

somehow damaged goods.”

Latini adds that a therapist or counselor familiar with the issues of cancer recovery can be helpful in overcoming these feelings.

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—Debra Thaler-DeMers, RN

## Getting Help

When to seek help for erectile dysfunction depends on the individual, says Burnett. “Sometimes ED caused by cancer treatment will reverse itself, but if it’s something that is certain to have permanent effects, then I believe it should be dealt with forthrightly,” he notes. “Patients and their partners should work with their health care providers in deciding just how far they want to go with intervention.

“Some may feel that they have a happy relationship with just conversation and hugging and they don’t need anything more than that. Others want to regain as much sexual function as they can.”

Men who are eager to regain sexual function should first discuss their situation with both their oncologist and a urologist, says Thaler-DeMers. These are the medical specialists who can best determine if all of the systems necessary for sexual function are intact.

“If everything is intact, patients should next look at the medications they are on,” says Thaler-DeMers, noting that many drugs can result in ED, including blood pressure medications and some antidepressants. “If it’s believed that a medication is at fault, it can be tweaked or replaced with another that doesn’t carry the same risk for erectile dysfunction.”

## Available Treatments

Numerous interventions are available for patients whose ED has a physiological cause. “In general, we move from least invasive to more invasive, and from most convenient to less convenient,” notes Burnett. “The exception is the patient whose level of dysfunction suggests that he will not respond to lesser forms of therapy. We won’t waste that patient’s time with oral medications because we know they won’t work—instead we’ll move him further along the plan of treatment.”

Treatment for erectile dysfunction typically begins with oral medications, specifically those in a class called PDE5 inhibitors such as Viagra (known generically as sildenafil citrate), Cialis (tadalafil), and Levitra (vardenafil HCl), says Latini. This approach is most effective among patients whose cancer therapy did

not affect the nerves that help produce an erection, which unfortunately is not the case for many men, he says.

“So the next step would be a vacuum erection device, which pulls blood into the penis and causes it to become erect,” Latini says. “Some men get a good result from that approach.”

A subsequent option, should a vacuum pump prove ineffective, might be a penile suppository or injection of a substance known as prostaglandin E1, which can help induce an erection by boosting blood flow to the penis. However, this approach, while often effective, is not as widely used because some men are uncomfortable with the idea of injecting themselves in the penis. There also may be side effects, including a burning sensation or scarring at the injection site.

The intervention of last resort for cancer-related ED is a penile prosthesis. These devices, which are surgically implanted in the penis, come in a variety of types, including malleable and inflatable. The downside to this approach, says Latini, is that it is not reversible; once a patient has a prosthesis in place, he has one for the rest of his life. In addition, potential complications from this approach include infection (infrequently) and the need to replace the prosthesis over time.

### Treatments of the Future

Post-cancer erectile dysfunction is an area of ongoing research, but substantive new approaches to treatment are probably years if not decades away.

“What’s hot in urology right now is the development of pharmacotherapies [medicines] that could help nerve function,” notes Burnett. He suspects that within several years there also will be more effective therapies to counter the detrimental effects of pelvic surgery or radiation. “However, more dramatic approaches such as stem-cell therapy or gene therapy, which potentially could rejuvenate smooth muscle cells and nerve tissues, are likely to take much longer,” Burnett says.