

#### Sex After Prostate Cancer

By Michael Castleman

The myth is that prostate cancer treatment destroys men's erections. The truth is somewhat more complicated. Men facing treatment for this disease should prepare themselves emotionally for permanent erectile dysfunction (ED), and a major sexual adjustment. But ED is *not* inevitable. And if you develop ED, you can still enjoy a fulfilling sex life—including satisfying orgasms.

## **All Treatments Are Equally Effective**

Most prostate cancer is diagnosed early, before it has spread outside the gland. With early detection, the prognosis is excellent. The American Cancer Society estimates 186,000 new diagnoses in 2008, but only 29,000 deaths, a death rate of 16 percent. For comparison, the prognosis for breast cancer is not as rosy—184,000 diagnoses in 2008, and 41,000 deaths, a death rate of 22 percent.

The three most widely used treatments for early-stage prostate cancer—surgical removal of the gland (radical prostatectomy), high-dose radiation from an external source (external beam), and insertion of a radioactive pellet (seed implantation)—are all equally effective. Researchers at M.D. Anderson Cancer Center in Orlando, Florida, reviewed outcomes for 2,991 consecutive men: 1,034 had prostatectomy, 785 had external beam radiation, and 950 had seed implantation, and 222 had combined external beam and seed. Five-year survival rates were 81 percent for prostatectomy, 81 percent for external beam, 83 percent for seeds, and 77 percent for combined therapy.

An eight-year study of 1,682 men at the Cleveland Clinic also showed equivalent survival: 72 percent for prostatectomy, 70 percent for radiation.

**ED After Treatment: The Three Major Risk Factors** 

- Age. Erection capacity declines with age, in some men starting as young as 40, and typically beginning around 50. Erection capacity continues to decline through old age. The studies generally divide men into two groups—under and over 60. Given normal erection decline, it's not surprising that men treated for prostate cancer before 60 generally enjoy better sexual function than men treated after 60.
- Morning erections or partial erections. Independent of age, some men wake with some penile tumescence. Compared with men who rarely or never wake with semi-erections, those who experience at least occasional firmness are more likely to recover erection function after prostate cancer treatment.
- Type of treatment. All prostate cancer treatments cause considerable ED, but in general, surgery causes more sexual impairment than radiation.

Researchers with the National Cancer Institute followed 1,187 men for five years—901 had surgery, 286 had external beam. Sexual function declined in both groups, but ED was more prevalent in those who had surgery, 79 percent after prostatectomy vs. 64 percent after radiation.

Other studies have come up with somewhat different findings—rates of ED ranging from 60 percent to 82 percent. But almost every study shows that prostatectomy causes somewhat more erection impairment than radiation.

In addition, the type of treatment affects how ED appears. After surgery, most men experience sudden erection impairment, but over time, some recover some function. After radiation, fewer men report sudden ED. But over time, ED becomes more common.

# **Nerve-Sparing Surgery?**

Why does prostate cancer treatment cause such a high rate of ED? Because the nerves involved in erection, specifically two nerve bundles, run very close to the gland. Surgery typically cuts these nerves, and radiation usually damages them.

About 20 years ago, surgeons began developing techniques to remove the prostate while leaving the two nerve bundles intact. This approach, nerve-sparing prostatectomy, reduces risk of ED. Unfortunately, nerve-sparing surgery does not work miracles. At Fred Hutchinson Cancer Center in Seattle, researchers checked in with 1,291 men 18 months after prostatectomies performed in the mid-1990s.

Among those who had ordinary surgery, 66 percent reported serious ED. Those who had nerve-sparing surgery reported less ED, but not much less—57 percent. In this group, age was a better determinant of sexual function than the type of surgery. Among men under 60, 39 percent could raise erections. For the men 60 or older, the figure was 20 percent.

More recent studies have reported somewhat better results. German researchers focused on surgery in the late 1990s. Nerve-sparing surgery that cut just one nerve bundle (unilateral) resulted in at least partial erection in half of men, and erection firm enough for vaginal intercourse in 22 percent. Surgery that spared both bundles (bilateral) allowed erections sufficient for intercourse in 50 percent of men.

Some reports claim that nerve-sparing surgery maintains erection capacity in as many as 90 percent of men. However, these studies measure "*any degree* of erection." Rates of erection sufficient for intercourse generally come in at 25 to 50 percent.

Finally, if the tumor is located near a nerve bundle, nerve-sparing surgery may not be possible.

Bottom line: Compared with ordinary surgery, nerve sparing surgery produces better results, but not much better.

# Surgery Plus Viagra

Several studies show that Viagra and other erection drugs help restore erection after prostatectomy. However, this happens only after nerve-sparing surgery. Here's why:

Erection medications work by coaxing more blood into the penis. But if a man doesn't have enough nerve function for erection, the amount of blood in the penis doesn't matter. No nerve function means no erection. However, with nerve-sparing surgery, much or all of nerve function remains, and erection drugs can help.

Italian researchers analyzed 11 studies of erection in men who took Viagra or similar drugs after prostatectomy. After non-nerve-sparing surgery, erection medication helped from 0 to 15 percent of men. (Non-nerve-sparing surgery sometimes accidentally spares some nerves.) After surgery that spared one nerve bundle, the drugs helped 10 to 80 percent of men. When both nerve bundles were spared, Viagra helped 46 to 72 percent of men.

Bottom line: For best chance of sexual function, have bilateral nerve-sparing surgery and use erection medication.

### **Orgasm Without Erection**

Yes, it's possible. If a man develops ED from prostate cancer treatment, he can still enjoy a fulfilling sex life and have orgasms that feel just as pleasurable as those he used to have when he could raise erections.

Different nerves control erection and orgasm. Even if a man's erection nerves are damaged or severed, chances are that the nerves that govern orgasm are still intact. It's an adjustment to have a flaccid penis stimulated to orgasm. But it's not all that difficult—and after prostate cancer treatment, most men say they'd rather have orgasm without erection than erection without orgasm.

How do you have an orgasm without an erection? The same way you have an orgasm with one—with direct, sustained penis stimulation by hand, or mouth, or a sex toy, any combination of them. It may take several months after treatment to return to orgasm, but if you work at it, either solo or with a lover, you can enjoy fulfilling orgasms with a flaccid penis.

For individual help with sex after prostate cancer, consult a sex therapist. To find one near you, visit aasect.org, the American Association of Sex Educators, Counselors, and Therapists, or sstarnet.org, the Society for Sex Therapy and Research.

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