



Understanding Men's Sexuality and Intimacy After Bladder Cancer webinar

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Part I: The Physical Impact

Presented by



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Bladder cancer, as our audience probably knows, is one of the most common cancers diagnosed in the United States. It ranks fifth most common cancer. There are over 50,000 men who are diagnosed every year in this country. It is a disease that disproportionately affects men—three times more common in men than it is in women—and it is a disease that disproportionately affects Caucasian men. It is twice as common among white men as it is among African American men. The risk of bladder cancer increases with age, so we tend to see this problem more commonly in men in their 50s, 60s, and older. So that's just a demographic that we're dealing with.

Bladder Cancer Statistics: Men at Risk

- **5th** most common cancer in the U.S.
- Approximately **53,000** men diagnosed every year
- Three times more common in men than women
- Risk varies with age and race

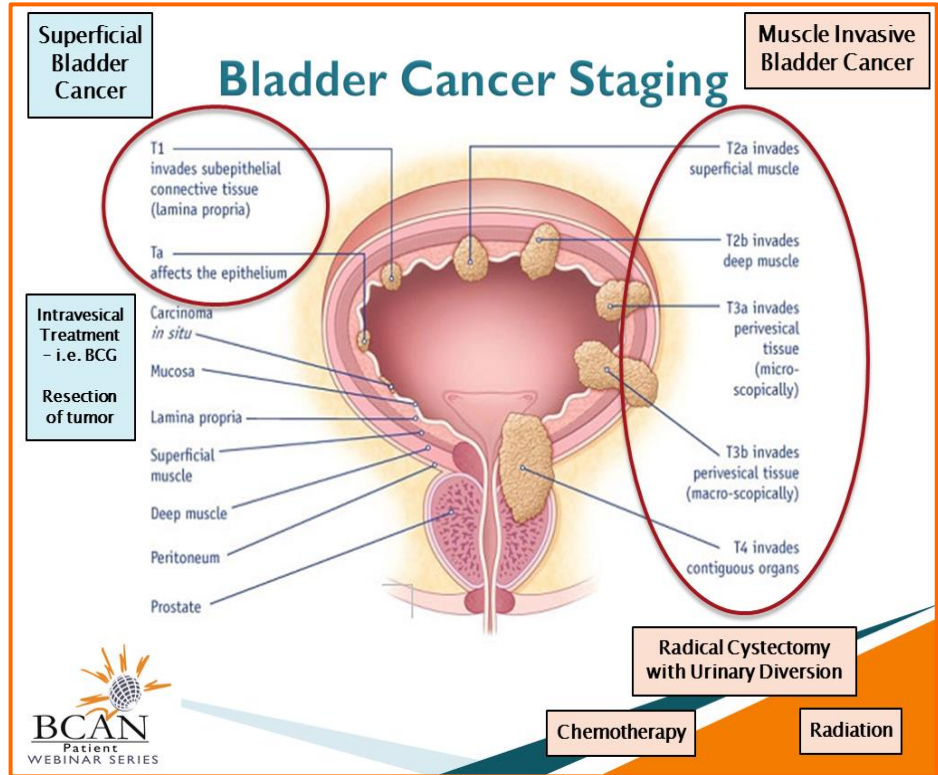


In this patient population, erectile function is sometimes already diminishing and already becoming a concern, and a diagnosis of bladder cancer and treatment for bladder cancer can add to that in multiple ways.

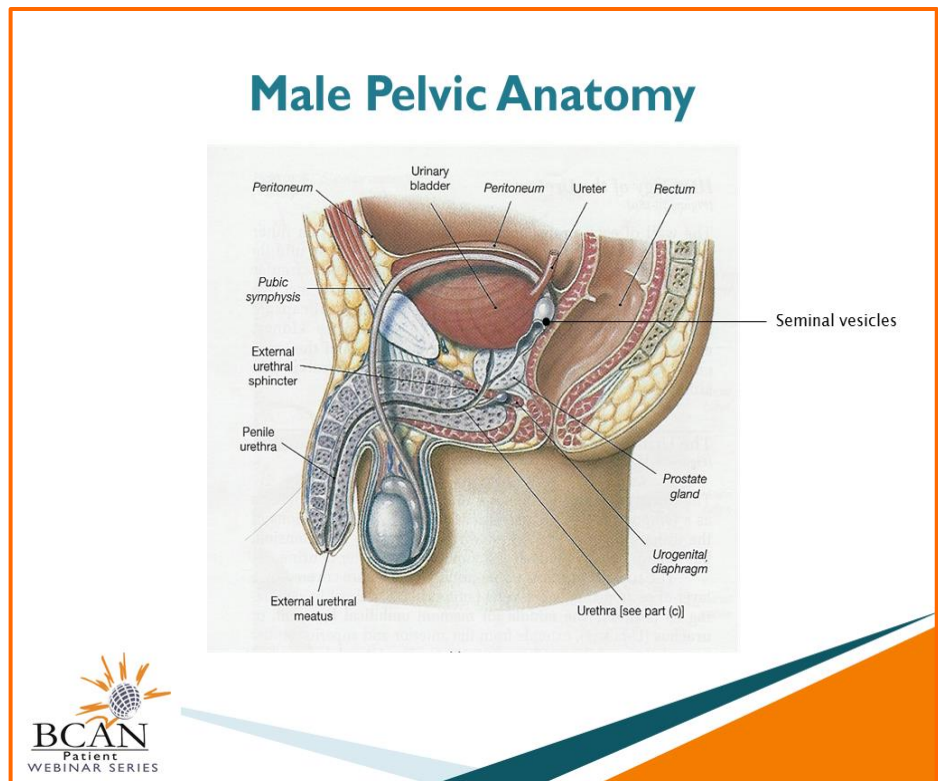
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Bladder cancer treatment really depends on how invasive the tumor is, so for patients who are diagnosed with superficial bladder cancer, you are the folks who are undergoing intravesical treatment with things like BCG and transurethral resection of the bladder tumors, versus the folks who have muscle invasive disease or disease that has spread outside of the bladder, you are the folks who are undergoing Cystectomies with urinary diversion, and/or chemotherapy and radiation.



So it's important to get an idea of where the bladder sits within the pelvis, and on this slide we can see the bladder is sitting, in fact, just above the prostate. That's the prostate there, here are your seminal vesicles. The majority of the semen volume comes from the prostate and seminal vesicles, and then here is your pubic bone, the front of the abdominal wall, and then of course the penis and testes. The rectum, as you can see, sits very close to the bladder, and this is important.



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In a minute we're going to talk about nerve function and how that affect erectile function, so it's important to get a sense of this anatomy.

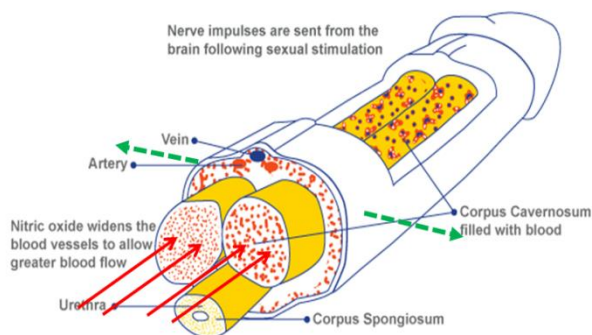
Bladder cancer treatments span the range of minimally invasive to maximally invasive treatments. We already mentioned some of these intravesical therapies like BCG and Mitomycin. Then there are surgical therapies, starting with transurethral resections, partial Cystectomy, which is removal of the portion of the bladder, and then radical Cystectomy, which is removal of the bladder *and* the prostate *and* the lymph nodes around the bladder and prostate, and then undergoing some form of urinary diversion, and of course that falls into multiple different types as well. There are patients who will initially undergo chemotherapy with radiation therapy, depending on the extent of their disease as well as the *histology*, the type of cancer that's growing in their bladder.

Bladder Cancer Treatments

- Intravesical therapy
- Surgery
 - TURBT
 - Partial cystectomy
 - Radical cystectomy and urinary diversion
- Chemotherapy
- Radiation therapy



Normal Erectile Function



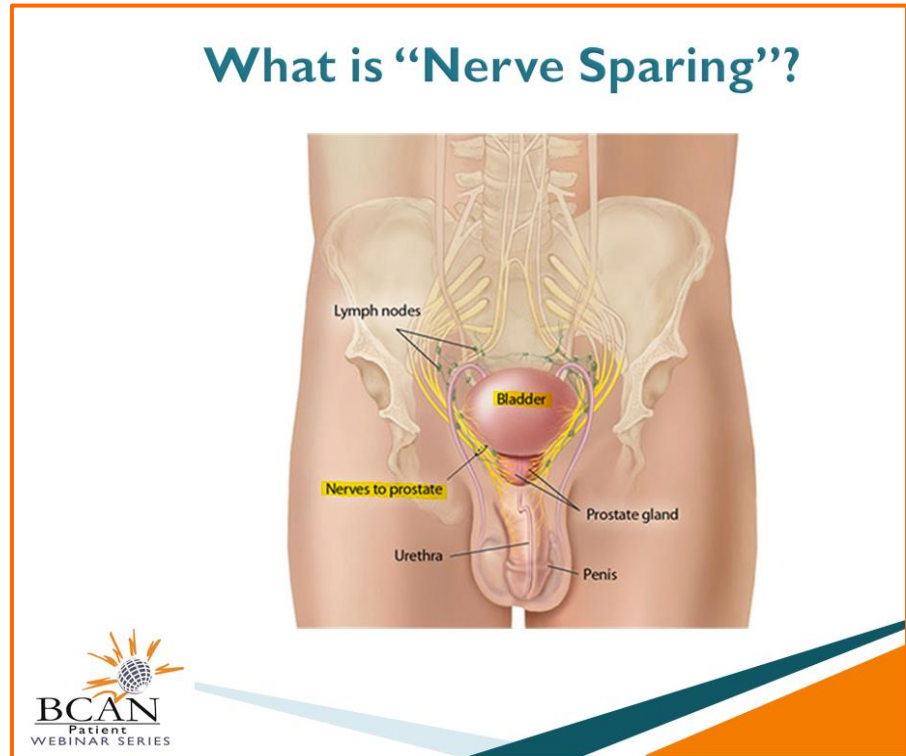
Normal erectile function really depends on nerve input as well as blood flow into and out of your penis. When a man is aroused, the brain sends impulses down to the penis, and the nerves that enervate the penis make a chemical called nitric oxide, which is mentioned down here, and it allows the blood vessels to relax and widen so that blood can rush into the penis. And then when that happens, the penis gets engorged, and the veins draining the penis sort of get collapsed against the wall of the penis so the erection is maintained until after orgasm.

When nerve input is damaged, this doesn't happen, and that's what happens sometimes after treatment for bladder cancer, particularly with Cystectomy and radiation and chemotherapy as well.

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So nerve sparing surgery—this is a term that often gets used when we’re talking about invasive bladder cancer treatments such as Cystectomy—your nerves that enervate your penis are actually originating in your pelvis, they are these green structures and you can see they run very close to the side of the bladder as well as the side of the prostate along the surface of both of these organs before they enter the penis. And that’s why any surgery that happens in the pelvis, near



these organs, can either damage these nerves, so permanently sever them, or even if these nerves are spared, just the act of sparing them—sweeping them off the surface of the bladder or the prostate—can cause them not to function temporarily. And that temporary time period can sometimes be as long as a year or a year and a half in some cases.

The other term that I want to explain, because I’m sure it’s going to come up, is penile rehabilitation. So what is penile rehabilitation? We talk this all the time after surgery for bladder cancer. This is a way of really keeping the penile erectile tissues healthy while your nerves are recovering and while you are

What is “Penile Rehabilitation”?

- A way of keeping the erectile tissues of the penis healthy while you and your erectile nerves recover from surgery
- Use it or lose it

recovering from surgery. Men have erections every day of their lives. Even when they don’t desire them, they’re having erections during nighttime, during sleep. And after bladder cancer surgery, those physiologic erections go away, so penile rehabilitation is a way to maintain natural, normal blood flow to the penis and to mimic those erections so that the health of the penile erectile tissues can be maintained. It’s very much like a muscle. We use

this “use it or lose it” analogy. If you’re not using a muscle over time, you will lose it. But the penis is unlike any other muscle in the body, because once you lose it it’s impossible to build that up again, so we like to maintain it as much as possible.