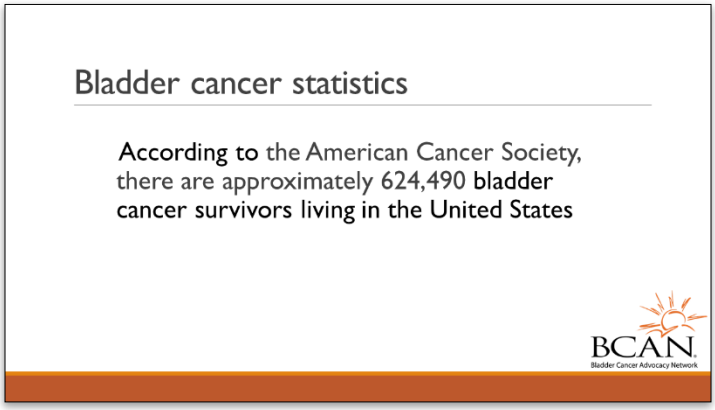
Meet Our Presenters:

Dr. Daniela Wittmann: Dr. Wittmann is a psychologist at University of Michigan. She's a sexual medicine specialist and a member of the American Society of Sex Education Counselors. And she does a wonderful job for us with addressing some of these key issues. Dr. Wittmann, we are so delighted to have you join us today.

How Bladder Cancer Can Affect Sexuality and Intimacy

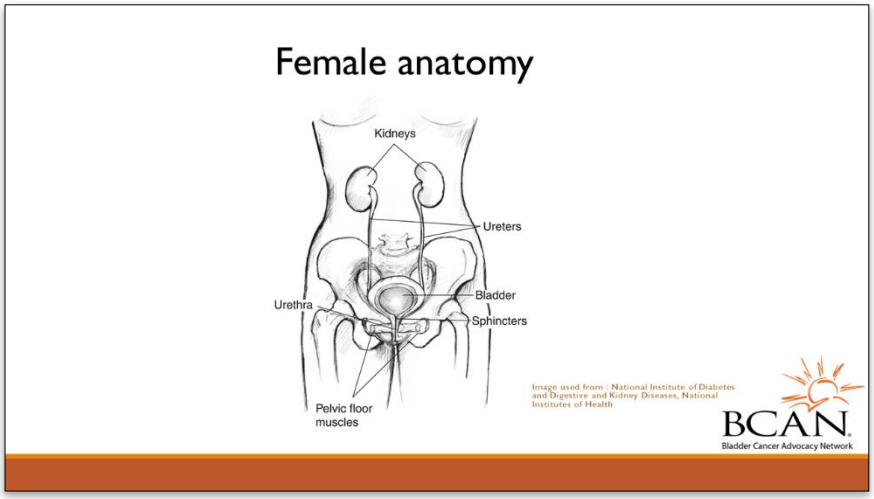
Dr. Wittmann: I have learned in my career as a sex therapist and sexuality researcher that sexuality is important to everyone, but when a person has cancer, it's usually affected and there's generally very little counseling about how people maintain their sex lives with their partners.

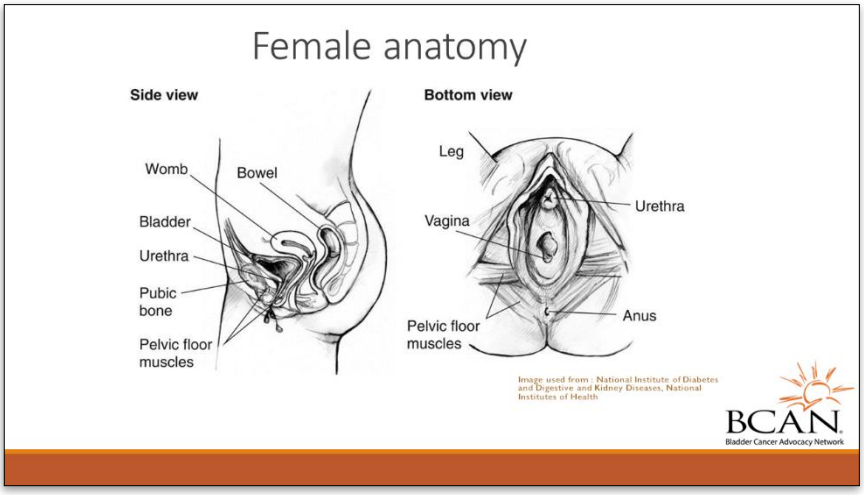


And that can be quite sad because people don't want to give up sex if they don't have to. So just a statistic, about how many bladder cancer survivors there are in the United States? This accounts for both men and women. And so there are a lot of people living with bladder cancer in the United States and are affected in their sexual domain. All of you know that, we stage bladder cancer based on how evasive it becomes, which is anywhere

from being quite superficial to invading tissues, muscles issues of the bladder and beyond. And the goal of treatment for bladder cancer is to protect as much as possible the bladder itself.

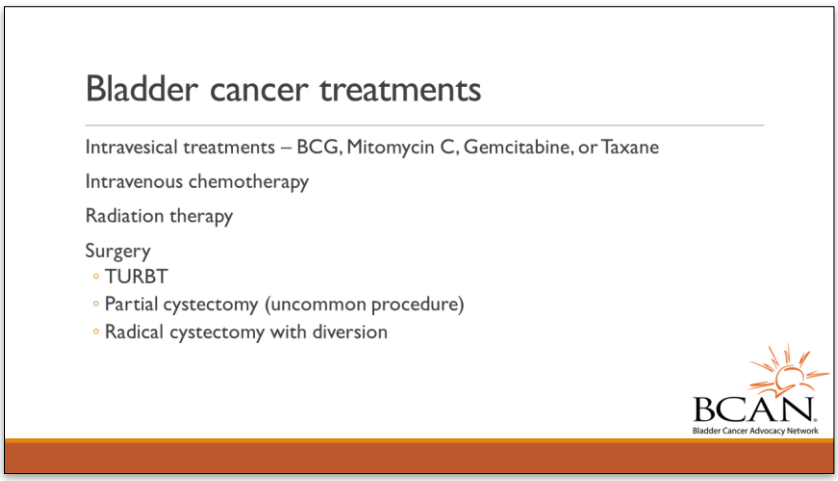
Dr. Wittmann: And when that's not possible, certainly the tissues and the structures around to protect a person's life. As you can see in this diagram, the bladder is very closely placed in the pelvis. In fact all the organs are extremely closely placed. That means that the ability of cancer of any of these organs to jump to other organs is quite significant. And this is what oncologists worry about when they diagnose bladder cancer. They want to protect the other organs and if possible they want to protect the bladder. Here is another picture that again shows you how close the bladder is to the vagina, to the womb, to the bowel and to the pelvic floor.



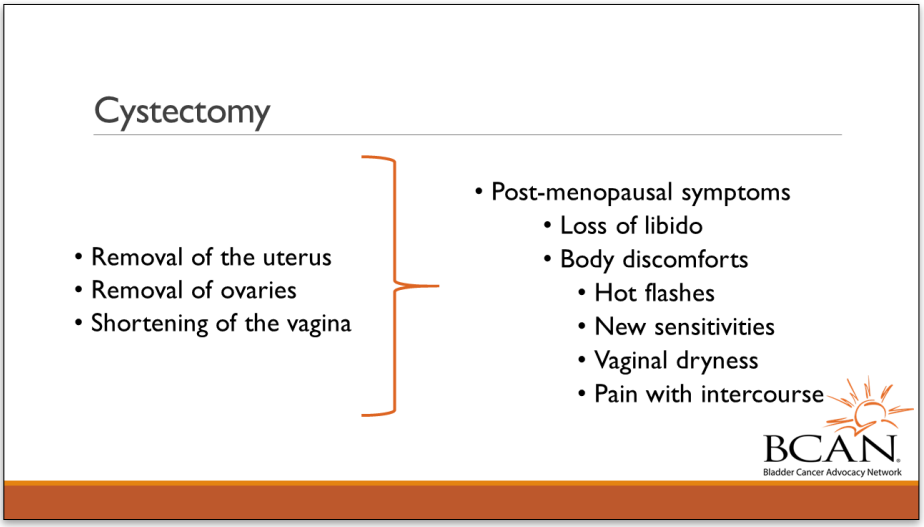


So treatment depends on just how far the cancer has gone and how aggressive it is, so that the body and the life can be protected. All treatments affect sexuality. And there are many of them. Four non muscle invasive bladder cancer, there are intravesical treatments such as BCG, Mytomycin C, Gemcitabine. There's intravenous chemotherapy. There's radiation therapy. Surgery can involve TURBT when just the cancer is removed and radical cystectomy would be diversion. I have partial cystectomy here, but actually I don't think I've ever heard of anyone having that done.

Dr. Wittmann: But I guess it's in the repertoire of treatment for bladder cancer. All those treatments, as I said, have side effects. So with chemotherapy comes fatigue, loss of hair, people can be physically uncomfortable. They can experience ulceration in the mouth and also in the vagina because that happens on the mucus membrane. There's been difficulty with lubrication and therefore pain with intercourse, because the quality of skin has changed. And with fatigue and physical comfort comes lower desire and then the woman has to deal with the partner's reaction as well, who may be worried, upset, disappointed or trying to be supportive in spite of feeling upset.

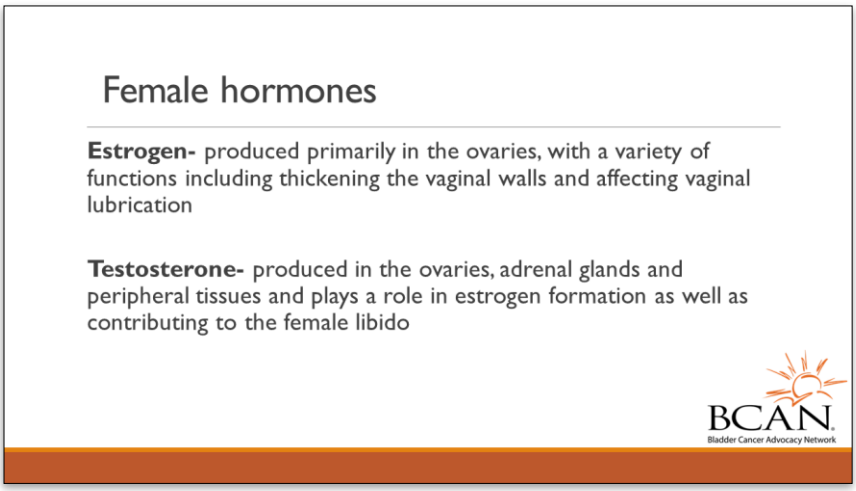


Cystectomy, the surgery that removes the bladder involves also the removal of the uterus and the ovaries, and even the top of the vagina. When everything is removed out of the pelvis it's called accentuation. And in removing the ovaries, the surgery causes a surgical menopause. So a woman who was not necessarily menopause at all, like she's 50 or she's 35, is suddenly thrown into menopause. Very often when women have a hysterectomy for example, they try to preserve the ovaries to protect the hormones that are associated with lots of things, but also the sexual function.



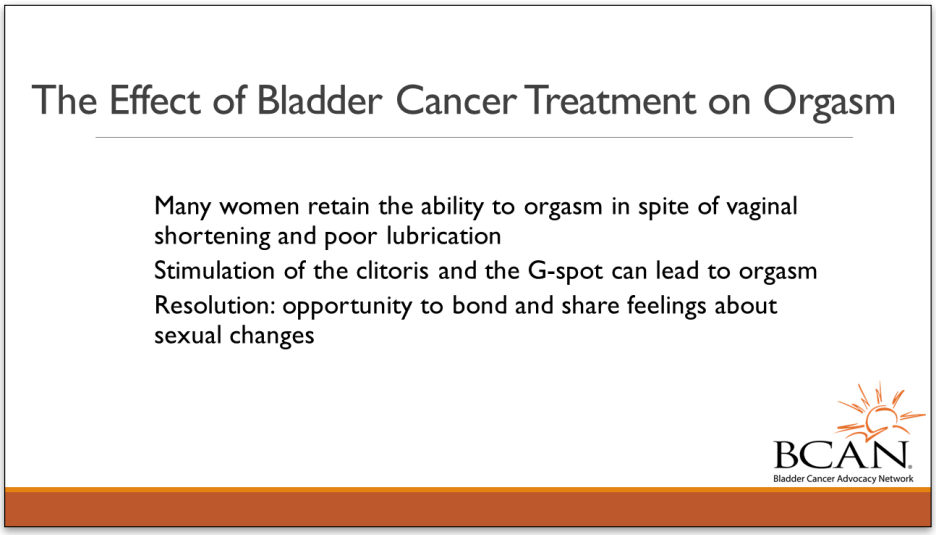
Menopause, loss of estrogen causes the loss of libido. It creates physical comfort such as hot flushes, sexual sensitivity changes; lubrication of the vagina becomes more difficult, which causes pain with intercourse. Radiation has a dramatic effect. It can change the tissues of the vagina. They become thicker, less elastic. They can ulcerate. They can begin to stick together and that makes okay intercourse very painful. They can also lead to loss of sensation, even difficulty with the range of motion of the legs and the body in general.

Dr. Wittmann: And so that can become very difficult to navigate with the partner, especially when a person doesn't really know what to do and has not being advised how to manage that situation. I already mentioned these female hormones that are in the ovaries and the estrogen, which is associated with desire and also the thickening of vaginal walls, and lubrication. Testosterone has some role in libido and arousal. Generally speaking, women can be able to be orgasmic even after, before removal of organs in the pelvis, as long as the clitoris is preserved and as long as there is that a sufficient blood flow to the clitoris.



And this is something that is probably rarely discussed, when physicians and their patients are planning the surgeries. But however that kind of buzz killer path is preserved, that would be very, very important. If the vagina is preserved, about an inch and a half in on the front wall is something that's called a G-spot. It's never been really identified physiologically or from a nerve point of view as a very sensitive spot. But when stimulated, about 30% of women can experience orgasm. So that is often also preserved.

The other aspect of sexuality, it's called resolution. The opportunity to enjoy each other's sensuality and post-orgasmic coziness obviously still remains as well. But sexuality is complex. It's not just sexual function, but we'll start there. This is a classic model of sexuality starting with desire, which is typically the psychological start where we begin to think about sex, we begin to queue to sexual stimuli. Maybe we approach the partner, we start having sexual fantasies. When you begin to have those thoughts, a neurotransmitter called dopamine rises in the brain and that's a neurotransmitter that's focusing on pleasurable outcomes and it potentiates testosterone.



And then we begin to feel the physiologic changes such as blood flow into the vaginal wall, lubrication, engorgement of the clitoris, engorgement of nipples. Breathing gets faster, heart rate begins to be faster. And there's an experience of pleasure with stimulation, which eventually leads to orgasms. Orgasm is characterized by contractions of the pelvic floor and for the women who have a uterus of the uterus, about 0.8 seconds apart. And it's the pleasure by experience, which is letting go and very overwhelming and very lovely. The resolution period is the one that I just mentioned before is, when people bond and feel very satisfied and glad if everything proceeded reasonably well.

Dr. Wittmann: And during that time, other neurotransmitters rise in the brain dopamine and oxytocin, which are also called bonding hormones. As it turns out, a mother who just gave birth has a high level of oxytocin in her brain because, well not because, it does facilitate bonding with the new baby. The word refractory period is associated with men. Men generally have a hard time obtaining a second erection after they've had an orgasm. This is generally not true of women who, some of them can have more than one orgasm and if they do, they don't have to wait. But that's not true for every woman.