

# Managing Side Effects of Procedures and Treatments in the Bladder

Dr. Kristen Scarpato



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## Stephanie Chisolm:

I'd like to thank everybody for joining us this evening. My name is Stephanie Chisolm and I'm the Director of Education and Advocacy at the Bladder Cancer Advocacy Network. We're really delighted to have you here to participate in tonight's program on managing the side effects and procedures and treatments that go along with bladder cancer.

Many procedures and treatments for bladder cancer take place inside the bladder and sometimes they can lead to some side effects and we sometimes call them adverse events because sometimes they can be pretty terrible and hard to deal with, but Dr. Scarpato is going to talk about that.

So whether you've experienced a transurethral resection of your bladder tumor, or a TURBT, or if you've had medication put into your bladder known as intravesical therapy, those kinds of things can cause issues within your bladder and your urethra and many other areas. And so Dr. Scarpato is here. She does a lot of treatments for bladder cancer in the Vanderbilt area in Tennessee, and I'm sure she's doing things for patients that come in elsewhere. Dr. Scarpato is an associate professor of urology and the program director for the urology residency program. So she does a lot of training for new doctors as they go through. And so Dr. Scarpato is going to explain how TURBTs and intravesical therapies work and why they can sometimes create side effects and what you can do to help mitigate any problems that you have with any of the treatments that you have for bladder cancer. So I'm going to turn it over to Dr. Scarpato. Thank you so much for joining us this evening. If you want to share your screen, go right ahead and I'm going to go on mute and turn off my camera.

## Dr. Kristen Scarpato:

Great. Thank you Stephanie. I appreciate that introduction and I just want to say what a pleasure it is to be here today. I am a longtime member, supporter, collaborator with the Bladder Cancer Advocacy Network and it's really special to be here tonight to talk about managing the effects of treatment for bladder cancer. As Stephanie said, there certainly are a number of different impacts on the bladder and the urethra and honestly the entire body, the

pelvis systemically, that bladder cancer treatments may cause. And part of the journey for bladder cancer patients and their families is managing and mitigating these side effects of the treatments. Fortunately, many of the treatments are beneficial and cure the cancer, keep the cancer at bay, prevent recurrence and progression, but unfortunately it comes at the cost of some bladder symptoms or systemic symptoms that we need to work together to mitigate.

# Managing Side Effects of Treatment for Bladder Cancer



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## Dr. Kristen Scarpato:


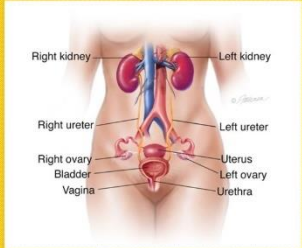
So over the course of the next hour or so, we're going to talk about the treatments for bladder cancer just briefly to set the stage for the discussion and really focus primarily on non-muscle invasive bladder cancer, the bladder cancer that requires frequent looks in the bladder, bladder scrapings, or TURBTs, and intravesical therapies. And then we'll talk about briefly just muscle invasive bladder cancer as well. So not only are we going to talk about the physical side

effects associated with bladder cancer management, but also there are emotional and psychological side effects that warrant mention and consideration of the implications of the therapy on caregivers, an important part of the bladder cancer journey. We'll also go through some of the questions that were submitted ahead and any that you want to ask during the course of the webinar. And then I will highlight a couple of useful resources.

So as most of you are well familiar with the bladder is an organ that sits deep down in the pelvis. It stores the urine that drains down from the kidneys through the ureters and then ultimately is evacuated from the body through the urethra. There are several structures in the pelvis that are closely associated with the bladder that can experience symptoms too, like the prostate, in some cases the vagina, and really anywhere along the urinary tract can be impacted by bladder cancer. And so having an understanding of that anatomy can be important so you can understand the management and some of the symptoms or side effects you may experience with treatment.

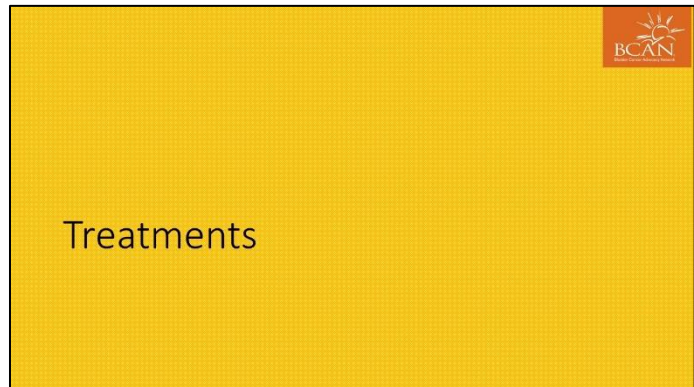
### Outline

- Treatments
  - NMIBC, MIBC
- Side Effects and management
  - Physical, emotional
  - Caregiver
- Questions
- Resources



**Dr. Kristen Scarpato:**

So before we talk about the side effects, we're going to just briefly talk about the treatments.

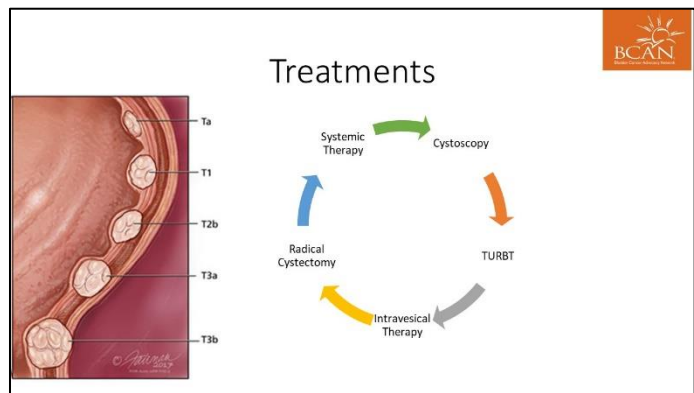


**Dr. Kristen Scarpato:**

Most patients with bladder cancer are very familiar with a cystoscopy, which is a look in the bladder.

That often is the first step prior to TURBT or transurethral resection of a bladder tumor. That can be something that happens once depending on the pathology report. It can be something that happens multiple times. And as you may imagine, each intervention, each invasive investigation of the bladder, whether it's cystoscopy or TURBT, can lead to progressive symptoms over time. Intravesical therapy, that's into the bladder therapies, either immunotherapy like BCG, which we'll talk about, or intravesical chemotherapies that are effective but can certainly cause symptoms. For patients who don't respond to intravesical therapies but have non-muscle invasive bladder cancer that keeps recurring and is at high risk for spread, sometimes we do what's called a radical cystectomy and take out the bladder. That is one of the mainstays of treatment for patients who have muscle invasive bladder cancer.

And I didn't put it here on this slide, but another consideration and something to discuss is that we're now seeing more what's called bladder preservation therapy for patients who have muscle invasive disease and that is keeping the bladder, doing a maximal bladder scraping or TURBT, and then offering chemotherapy systemically and radiation therapy to the bladder. As you might imagine, the surgery to scrape out the bladder tumor, the



chemotherapy, and its systemic effects and then the impact of radiation can certainly be important for patients. And then the systemic therapies. So when we're talking about non-muscle invasive bladder cancer, the primary systemic therapy that we refer to is pembrolizumab or immunotherapy for patients who have a type of disease called CIS or high grade disease that doesn't respond to BCG therapy. So it's not always in this circular fashion like I've set it up here, but oftentimes it is, and each of these treatments are important and can impact a patient's symptoms.

You see the image here on the left shows the different stages of bladder cancer. What's not shown or was maybe cut off here above TA is CIS, carcinoma in situ, that is cancer that is sitting in the lining of the bladder. It's a high risk cancer that's noninvasive but can still unfortunately progress and spread. Then there's TA tumors which sit in the lining. T1, which grow deeper into the lining but not into the muscle. And then anything above T1 is muscle invasive or locally advanced. And so that's T2 cancer, muscle invasive or above, and that requires more invasive therapies.

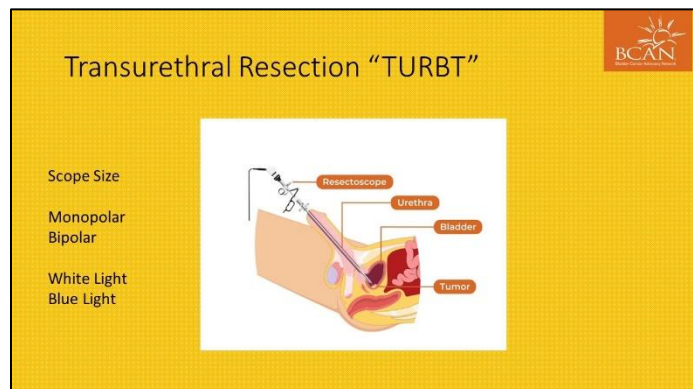
### Dr. Kristen Scarpato:

Cystoscopy, there are two main types of cystoscopy, often flexible cystoscopy is what is performed in the office. So that's when you come in as a patient for investigation either of gross hematuria or of known bladder cancer, and your nursing staff will place numbing jelly or lidocaine jelly into the urethra and pass this small scope into the urethra and bladder. Now I say small scope because it's a relatively narrow caliber, but if it's your urethra, it doesn't always feel like a small scope and certainly can cause symptoms that we will talk about, first what they are and second of all, how to manage them. And then a rigid cystoscopy, and that's almost never done in the office because as you can tell just from looking at this scope, it is a bigger caliber and it's obviously stiff and would be quite uncomfortable to pass into the urethra to take a look in the bladder in an office setting. So those are the two main types of cystoscopy.



### Dr. Kristen Scarpato:

Transurethral resection, or TURBT, that uses a resectoscope. So like the cystoscope, it is a rigid structure, but actually it's bigger. It's a bigger caliber scope and that definitely requires general anesthesia and that scope needs to be bigger because it has to accommodate our instruments to appropriately scrape and cauterize any areas of bladder cancer that we see. Now when we're talking about TURBTs, there are a number of different ways to do the procedure. And so patients and families may hear things like monopolar, TURBT or bipolar TURBT. What I want to impart to you is that those different modalities don't necessarily correlate with any difference in symptoms for patients, but they are both effective in terms of diagnosing and treating bladder cancer. The scope sizes for both of those are the same. The fluid that is used during the procedure is a little bit different, but that does not impact the side effects associated with a TURBT.



And then many of you may be familiar with white light versus blue light, and while those don't necessarily correlate with a difference in symptoms for patients, the blue lights importantly requires that a catheter be placed in advance, typically in an awake patient prior to the procedure. And so blue light cystoscopy can be performed, excuse me, either in the clinic with a flexible scope or in the OR with the rigid scope, but typically patients are thoroughly counseled in advance that you need to come in before you would normally for your TURBT so that we can place a catheter in the bladder, put in a small volume of what's called Cysview, and then allow that to dwell so that when we go back to the OR for the bladder scraping when we shine the blue lights, we're able to more readily appreciate certain types of

cancer which may translate into a more complete resection or identifying cancer that may not have been seen with the white light. So those are some terms that you may hear associated with TURBT.

### Dr. Kristen Scarpato:

Intravesical therapies. This is not an exhaustive list, but it is some of the more common therapies that we use. And I just want to make a distinction about what some of the different terms you may hear related to the intravesical therapies are. There is immediate intravesical therapy and that's also known as perioperative chemotherapy, and that is something that's given typically on the day of surgery when you have your TURBT. When you're still asleep, the urologist will place a catheter in the bladder and then instill medicine, in this case chemotherapy into the bladder one time. And we know that that can decrease the recurrence compared to patients who don't have that. And that is more commonly done. We have great data to have that therapy for patients who have low grade bladder cancers and those two agents typically are gemcitabine, which is what we most commonly use and mitomycin, importantly not BCG.

Many of you are familiar with BCG. That is not something that we can give fresh post-op in a patient who has just had a bladder scraping because of the risks of immunotherapy in that setting. So there's immediate, and then there's what's called adjuvant intravesical therapy, and that can be given in a number of different ways. If a patient's going to have adjuvant chemotherapy, and the bladder, adjuvant therapy, it's always first given as induction, and so many of you may be familiar with that. It is six weeks typically after your surgery and it's once a week for six consecutive weeks. And then your urologist will look in your bladder after that to see your response. And depending on your risk stratification, then you may go on to get maintenance therapy, and that's instead of six weeks in a row, it's once weekly for three weeks, and that can be given out to three years.

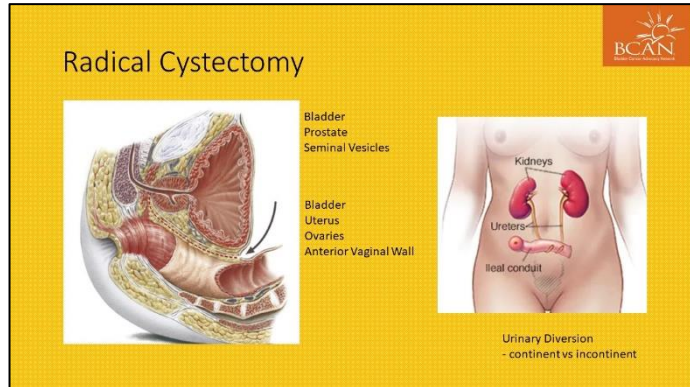
And what I have listed here, the three, six, 12, 18 months, et cetera, that is the standard regimen that we use for maintenance therapy for BCG patients. But as we're using more gemcitabine and other chemotherapeutic agents, oftentimes you'll see that once a month for maintenance out for several months. So these are the commonly used adjuvant medications.

Immediate ("perioperative")	Adjuvant
<ul style="list-style-type: none"><li>• Within 24 hrs of TURBT</li><li>• Gemcitabine</li><li>• Mitomycin</li></ul>	<ul style="list-style-type: none"><li>• Induction<ul style="list-style-type: none"><li>• ~6 weeks after TURBT</li><li>• once weekly x 6 weeks</li></ul></li><li>• Maintenance<ul style="list-style-type: none"><li>• once weekly x 3 weeks</li><li>• 3, 6, 12, 18, 24, 30, 36 months</li></ul></li><li>• BCG</li><li>• Gemcitabine</li><li>• Mitomycin</li><li>• Docetaxel</li></ul>

### Dr. Kristen Scarpato:

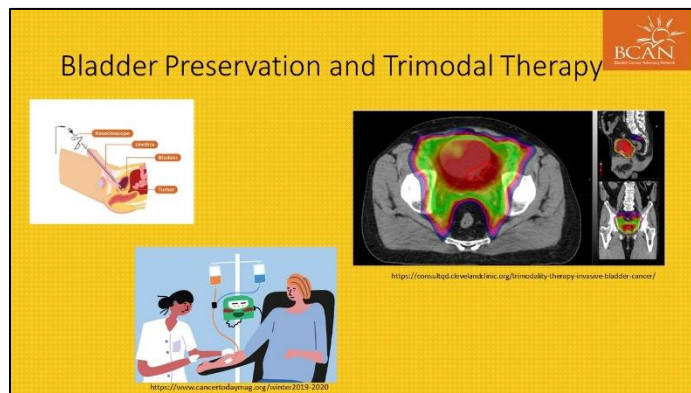
For patients who are at high risk with non-muscle invasive bladder cancer or have failed intravesical therapy, then radical cystectomy is performed and that's when we removed the bladder and the pelvic lymph nodes. And in a male we also removed the prostate and seminal vesicles. In females, historically, we always removed the female pelvic organs as well, although less commonly now.

We're more commonly doing female pelvic organ sparing surgeries to improve quality of life afterwards, particularly in terms of sexual function. So once those organs come out, then we need a place for the urine to go. And there are many different types of diversions that are available. And I know recently the Bladder Cancer Advocacy Network just had a great webinar on types of urinary diversions, and so if you didn't attend that one, you might want to check that out. But there are continent and incontinent diversions, so ones that are freely draining urine at all times into a bag and those that you may urinate relatively normally or pass a catheter when you want to empty out the diversion.



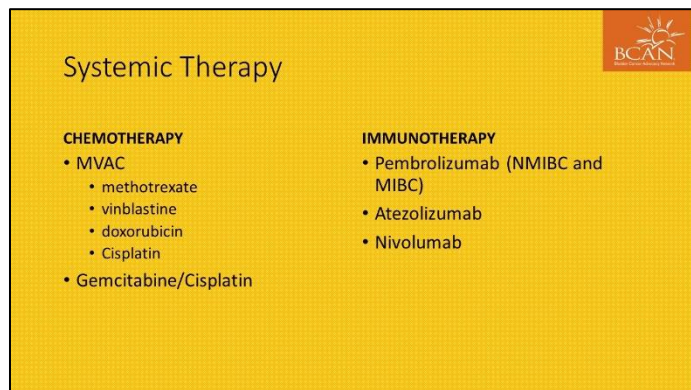
**Dr. Kristen Scarpato:**

Briefly, I'll just mention bladder preservation and trimodal therapy. This is not for non-muscle invasive. This is for patients who have muscle invasive disease and it requires three things. Trimodal therapy, so removing all of the bladder tumor via TURBT or as much as possible, systemic chemotherapy, and then radiation therapy to the bladder and pelvis.



**Dr. Kristen Scarpato:**

What are the systemic therapies? Pembrolizumab is the only systemic therapy that we are currently using with any regularity for non-muscle invasive patients, and that's for patients who don't respond to BCG. And then the other therapies you see here are for patients who have muscle invasive bladder cancer and can be given before their surgery or trimodal therapy, or in the case of surgery, given after surgery. And so these certainly can have an impact on symptoms and the need for mitigation or management of these treatment side effects.



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