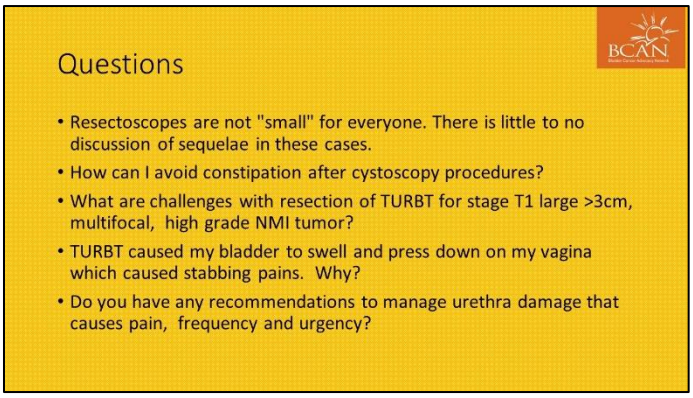
Dr. Kristen Scarpato:



So here are some of the questions and throughout the presentation I've interspersed some of these, but resectoscopes are not small for everyone. There is little to no discussion of sequelae in these cases and I'm really glad that somebody pointed this out because resectoscopes are not small. And even as someone who's been doing this for quite some time, I appreciate that. They're not small and no case is small and I hope that no one ever says to you, "Oh, it's just a little TURBT." It's not. So the sequelae of passing a large scope through a small channel, whether you're a female or a male, can be dramatic and can cause some of those side effects that we talked about.

Not only just pain from passing the scope, but also scar tissue, irritation, bleeding, burning. And so I certainly agree with this comment and we really do try and place things without pushing. We try and use as much lubrication or gel as possible to help facilitate a smooth transfer into an out of the urethra. But even in males too, the tip of the penis, or the urethral meatus, can become irritated and scarred with the passing of these catheters. And so unfortunately in some patients over time that that scar tissue can lead to the need for the urethra to be dilated or opened up. So how can I avoid constipation after cystoscopy? And the best thing, again, staying hydrated, eating fiber and stool softeners, especially in the setting of anesthesia or narcotic pain medicines and then remaining active. So when we're inactive, that helps our bowels get a little sleepy.

And so those are the best things to do. In some cases you may need a suppository to help move things along or a MiraLax type medication. What are the challenges with resection of TURBT for a stage one large multifocal tumor? Well, we're often doing this procedure the vast majority of the time with a rigid scope and you saw a picture of that scope. But the bladder is a sphere, right? It's like a balloon. And so

we're using a rigid instrument to try and access all areas of a balloon. And so managing your bladder's fullness and your distension of the bladder wall so that we can access all areas is challenging. Some bladders are really tall, some bladders are really short. We want to balance getting muscle, which is a quality metric with not perforating or making a hole in your bladder.

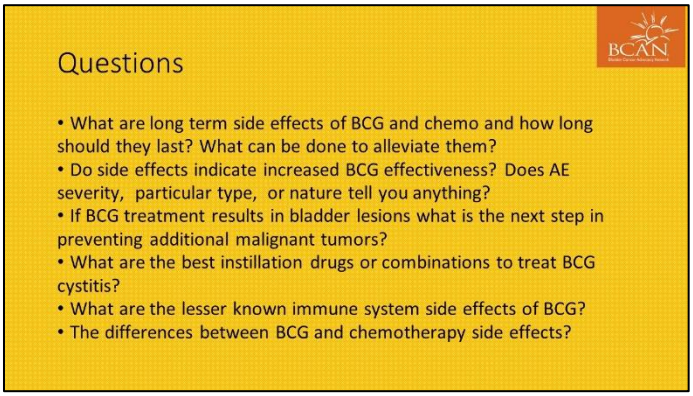
And there certainly is a learning curve associated with doing a TURBT. And now we are seeing more published about the importance of quality in TURBT and what makes quality. So I think having experience in volume of these procedures can be challenging for some depending on your practice setting. Having the right equipment can be a challenge. And then the volume of tumor, it's not something that we want to spend hours and hours doing. So sometimes you need to come back for an additional procedure or even a third procedure. And the reason for that is we would do it for hours of course, but as we're pushing fluids into your bladder, you may reabsorb some of that and that can cause problems throughout your body. So our challenges are to do the highest quality resection for you for the best outcomes and limit the side effects.

But the patients, for those of you who have T1 disease, that's a high risk disease and we want to prevent spread and remove all of the tumor. And so really focusing on quality and careful resection is important, getting muscle in the specimen.

TURBT caused my bladder to swell and press down on my vagina, which caused stabbing pains. Why? It's hard to say, but my thought with this particular question is that maybe the bladder is not being emptied fully because it's not functioning as well or maybe there's some evidence of retention after the TURBT. And so the bladder's full, and as you might recall from one of the earlier pictures, or you can go back and check it out, but the bladder and the vagina sit right next to one another and share a wall. And so if your bladder's full or there's irritation of the bladder wall that is right next to the vaginal wall, there can be stabbing pains associated with that. So I think it's just that close proximity and potentially bladder not emptying as fully as it should be or even constipation playing a role here as well.

Do you have any recommendations to manage urethral damage that causes pain, frequency and urgency? I think the best thing here is prevention and hopefully, and I'm sure your urologists are being careful and trying to do all the things to mitigate urethral damage, but when it does happen, trying to make sure that you're on the right medications to limit that burning and that pain, and again, maintaining healthy bladder habits so that you're emptying regularly and not developing what we call dysfunctional voiding habits. There are medications that we briefly alluded to before too, that can help limit that pain frequency and urgency. So the peridium, the trospium, ditropan and constipation medicines.

Dr. Kristen Scarpato:



So a number of questions from y'all about BCG. What are the long-term side effects of BCG and chemo and how long should they last? What can be done to alleviate them? This is a great question and fortunately most of the side effects with intravesical therapies last during the therapy and then may persist for several weeks, maybe months afterwards.

But in the long term it is a rare patient who develops significant scar tissue in the bladder or refractory urinary symptoms, so symptoms that just don't respond to anything. But we would

start with oral medications. If that doesn't work then we actually can use other medications like rectal Valium, so something that might relieve and improve some of the stress, “relax” is the word I'm looking for, some of the stress and pain and cramping down in the pelvis. We can do those bladder installations like I talked about that have that combination of Marcaine and a steroid and a medication that causes lower acidity in the bladder, and then Botox. Very rarely would a patient's bladder really be de-functionalized or not useful after these therapies and require more aggressive surgery.

This is a great question. Does the side effect indicate the BCG effectiveness? And I’d like to think that it does. I don’t know that we have great evidence that shows that. But given that BCG harnesses your own immune system, it makes sense that you might think that if you’re having a lot of symptoms, that means your body’s generating a lot of response to this. And anecdotally I have seen that in some patients, but is there any great evidence that I know of that says if you have more severe symptoms, then you have a better response? Not necessarily. That may just mean that you have more severe symptoms, unfortunately.

If BCG treatment results in bladder lesions, what is the next step? And that's a patient who's BCG unresponsive. Fortunately, we do have other agents that can be used in that scenario now like pembrolizumab, like nadofaragene firadenovec, which was most recently approved. And we're seeing more use of the combination of gem-doce, gemcitabine and docetaxel. So I think one of the positives that came out of the BCG shortage is that we started investigating other agents for patients with high risk and other combinations and we're seeing a pretty good response. And so it's possible that there will be many alternatives for patients who either don't want, can't get BCG. And then there's bladder removal.

What are the best installation drugs or combinations to treat BCG cystitis? I think we've highlighted some of that already.

What are the lesser known immune system side effects of BCG? And I think these are some of the immune side effects and someone asked previously about red eyes associated with treatment and conjunctivitis has been associated with BCG, which can be immune mediated. So local steroid treatment to the eyes maybe something that helps their writer's syndrome. Other arthritis type side effects can be seen with BCG.

And so any of these itises or immune mediated responses can occur and we treat them depending on what the particular response is, but oftentimes it's with a steroid or something that's going to decrease the immune response to the BCG. The differences between BCG and chemotherapy side effects I think we've spoken about as well.

Dr. Kristen Scarpato:

There are many resources available to you and I think the best resource is the Bladder Cancer Advocacy Network. Really just provides a forum, provides community, provides science, provides research support, and so utilizing the Bladder Cancer Advocacy Network in addition to your urologist and your urology team, I like the Urology Care Foundation, which I listed the website there, a lot of helpful information on mitigating side effects, and then your local and national support groups.

So I'm going to stop there.

Stephanie Chisolm:

Dr. Scarpato, I do think there's three takeaway points. First of all, always talk to your doctor. Don't think that anything is insignificant. If you don't tell your doctor, they won't know how to help you. And so I think that they'll let you know if it's not something to worry about. But if you're just sitting there laying awake, worrying about something, not knowing if it's normal or not, speak to your doctor. And if not the doctor, then maybe they have a physician's assistant or nurse practitioner in the office that will also spend some time talking to you. So that's first takeaway.

Second, thank you so much. We did not pay Dr. Scarpato to sing our praises, but she definitely knows the resources that BCAN offers. Look to bcan.org. There are a ton of answers even in the middle of the night. We're open 24 hours a day, seven days a week online.

And then the third is you talked a little bit about some of the psychosocial aspects, the stress of dealing with this. I'm not sure if everybody knows, but BCAN launched a partnership with CancerCare in January, and if you call 833 A-S-K, number four BCA, 833-ASK-4-BCA, you can talk to a whole team of licensed clinical oncology social workers, and they will help you find resources in your own community.

I want to thank everybody for joining us. Dr. Scarpato, again, our greatest thanks. We do appreciate it.