

## Defining Your Goals—Making Shared Decisions in Surgical Bladder Cancer Treatment

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### Part 1 of 4

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#### **Patricia Rios:**

When facing bladder cancer treatment decisions, it's important that your medical team understands what matters most to you. This is especially important when you're deciding on a urinary diversion that will be created during your bladder removal surgery, known as radical cystectomy.

During this webinar, Dr. Kevin Chan, a leading urologic oncologist, along with wound and ostomy nurse, Kathy Manuel from City of Hope Cancer Center in California, will discuss the role of radical cystectomy in the treatment of bladder cancer, will provide key questions to ask your healthcare team, and also what factors should be considered when facing radical cystectomy.

So if you're facing radical cystectomy and considering your choices, this session will empower you to take an active role in shaping your care. I will now hand over the screen to Dr. Chan and Ms. Kathy Manuel for their presentation.

#### **Dr. Kevin Chan:**

Okay. So, hi, I'm Kevin Chan. I'm a urologist at City of Hope specializing in reconstructive surgery for bladder cancer, and I'm accompanied by Kathy Manuel. She's our nurse coordinator. Whenever anybody gets diagnosed with bladder cancer, the patients will meet with me as well as with Kathy. Usually we spend about an hour each with each patient. I now realize we've been doing this 19 years together, so we definitely know each other's tendencies.

I think more importantly it's nice to have some consensus when we're making recommendations. I might say, "Hey, I think this patient is great for an Indiana pouch." Then Kathy will say, oh, we talked more, and she may be better for an ileal conduit. It's really nice to have multiple people in the decision-making.

Today really I want to spend this time talking about just important considerations in guiding your decision when your urologist recommends bladder removal surgery or radical cystectomy.

### Dr. Kevin Chan:

So we'll first talk a little bit about bladder cancer just to give you some context. We'll talk about the role of radical cystectomy in the treatment of bladder cancer. We'll spend most of our time talking about the reconstruction options and the pros and cons of each one. Then finally, we'll talk about important factors to think about as you make your decision.

### Dr. Kevin Chan:

Bladder cancer is pretty common. It happens in men to women, two to one. So very common in men, and it's actually the fourth most common cancer in men, the sixth most common cause of cancer death in men. So it's a pretty common cancer and it can be pretty dangerous if not caught early.

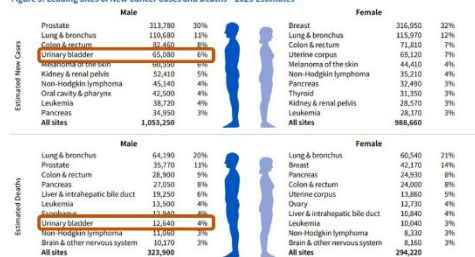
## Introduction

- Bladder Cancer
- Role of radical cystectomy in the treatment of bladder cancer
- Treatment/Reconstruction options for bladder cancer patients
- Important factors for patients to consider when making treatment decisions



## Bladder Cancer Incidence

Figure 3. Leading Sites of New Cancer Cases and Deaths - 2025 Estimates



Estimates exclude US territories and are rounded to the nearest 10; cases exclude basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder. Ranking is based on modeled projections and may differ from observed data.

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**Dr. Kevin Chan:**

In 2025, there will be about 85,000 new cases. Like we talked about, it occurs in men two to one, and the main risk factors are smoking, chemical exposures. The mean age of diagnosis is 73, and the typical presentation is painless blood in the urine.

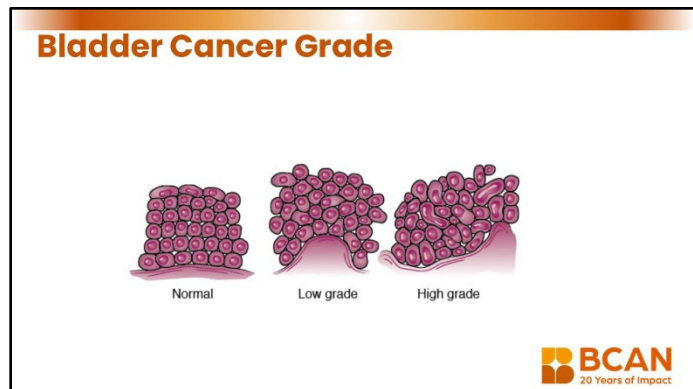
### Bladder Cancer

- Epidemiology – 2025
  - 84,870 New cases of bladder cancer
    - Men: 77%
    - Women: 23%
- Risk Factors:
  - Smoking
  - Chemical exposures – Aromatic amines
- Mean age at diagnosis: 73 years old
- Typical presentation
  - Painless gross hematuria



**Dr. Kevin Chan:**

So whenever anybody gets diagnosed with bladder cancer, probably the two most important things you want to know are grade and stage. Grade is a microscopic description of the cancer. If you think of bladder cancer as the uncontrolled growth of bladder lining cells, there's normal but if something's growing very quickly, the cells look very immature.



When they're very immature and almost unrecognizable because they're growing so quickly, that's a high grade bladder cancer. Microscopically sometimes they look a little more like bladder cancer lining cells, and so that would be a low-grade bladder cancer, and that's a slow-growing cancer. The low-grade cancers do not tend to spread or metastasize, but high-grade bladder cancers are the ones we worry about that can spread. Microscopically they can tell the difference between high-grade and low-grade.

When we're dealing with high-grade disease, the second part of that equation is stage. Where have we caught it at this particular point in time?

**Dr. Kevin Chan:**

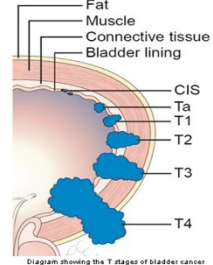
So with staging, we do a CT scan of the chest, abdomen, pelvis that lets us know that the lungs, the liver, the lymph nodes are clear of disease, but also in that staging information is the depth of invasion on the biopsy that was done.

That critical metric is the presence or absence of muscle invasion.

About 75% of patients will present with non-muscle invasive disease or earlier stage disease, that's T1 or less. About 25% of patients will present with muscle invasive disease or higher, so that's T2 or higher.

### Bladder Cancer Staging

- CT Scan – Chest/Abdomen/Pelvis
- Pathology on Presentation<sup>1,2</sup>
  - 70-75% are non-muscle invasive
    - Ta: <5% risk of stage progression
    - Tis: 40-83% progression to muscle invasive tumor<sup>2</sup>
    - T1: 7-33% progression to muscle invasive tumor
  - 25-30% are muscle invasive



1. Campbell-Walsh Urology, 10<sup>th</sup> Ed. 2011  
2. L. Cheng et al. J Clin Oncol 17:3182-7; 1999

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**Dr. Kevin Chan:**

So for non-muscle invasive bladder cancer, that can be treated relatively minimally invasively. That's the resection with the scope. Then medicine in the bladder, that's either BCG, which is the tuberculosis vaccine that we put into the bladder using a catheter. We'll do that once a week for about six weeks. Or we can

actually put chemotherapy through a catheter into the bladder, and we do that once a week for six weeks as well. Both of them can be very effective at taking care of this.

### Treatments for non-muscle invasive bladder cancer

- Transurethral resection of bladder tumor (TURBT)
- Intravesical Therapy (Medicine placed in the bladder)
  - BCG (Tuberculosis vaccine)
  - Chemotherapy in the bladder
    - Gemcitabine
    - Docetaxel

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**Dr. Kevin Chan:**

When we're talking about muscle invasive bladder cancer, typically the gold standard is bladder removal, plus or minus chemotherapy before surgery. There is some select patients if they have an isolated tumor or if they're not a good surgical candidate, radiation therapy with chemotherapy can also be a potential option.

For the focus of this talk, we're going to be talking about radical cystectomy. In men, this is the surgical removal of the bladder, the prostate, the lymph nodes. In women, this is the surgical removal of the bladder, the uterus, the ovaries and a very small part of the vagina as well as the pelvic lymph nodes.

### Treatment of muscle invasive bladder cancer

- Radical Cystectomy +/- chemotherapy
- Men
  - Surgical removal of the bladder, prostate, pelvic lymph nodes, and distal ureters
- Women
  - Surgical removal of the bladder, uterus, ovaries, anterior vagina, pelvic lymph nodes, and distal ureters
- Radiation therapy with chemotherapy



#### Dr. Kevin Chan:

So the indications to remove a bladder are for muscle invasive disease or for earlier stage, high grade T1 or carcinoma in situ that's not responsive to therapies like BCG or intravesical chemotherapy. Every once in a while there are cancers that are earlier stage that we just cannot endoscopically control. So these are the typical people that will ultimately require radical cystectomy.

### Radical Cystectomy

- Indications:
  - Muscle-invasive urothelial carcinoma of the bladder
  - High grade T1 and Carcinoma in-situ of the bladder refractory to intravesical BCG therapy
  - Extensive high grade T1/Ta/TIS of the bladder not endoscopically controllable



#### Dr. Kevin Chan:

So as we mentioned earlier, about 25% of patients with bladder cancer will ultimately undergo bladder removal surgery. What's important to know is that about 75% of these patients will be cured of their disease. So we expect to cure you of your disease, and that's why quality of life is so important. You've got 20 years ahead of you, and we want to make sure you're able to enjoy your life and do the things you want.

### Radical Cystectomy

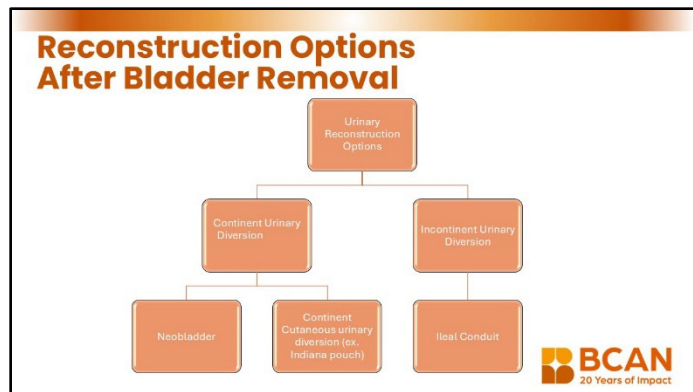
- 25-30% of patients with bladder cancer will undergo radical cystectomy and urinary diversion
- 65-75% of patients undergoing radical cystectomy will be cured of their disease



**Dr. Kevin Chan:**

When we remove a bladder, we have to give you another way to urinate. This other reconstruction option is called a urinary diversion. Urinary diversions are grouped into two categories. One is a continent diversion, meaning you have control of the urination. One is to the original plumbing, and that's an orthotopic diversion or a neo-bladder. Or to the skin, and that's a continent cutaneous urinary diversion. The popular one is the Indiana pouch.

Then there's an incontinent diversion, and it's almost a misnomer. It's a controlled incontinence. You have urine coming out of a stoma continuously, so they describe it as incontinent, but it's controlled with a bag obviously. You can uncup and empty that bag every four hours. It's a controlled incontinence. We'll talk about each of these.



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