Bladder Cancer (TURBT)

What is Bladder Cancer?
Bladder cancer is the most common cancer associated with the urinary system. Bladder cancer exists when cancer cells begin to grow inside the bladder, most often, in the lining of the bladder. The majority of bladder cancers are transitional cell carcinoma, where the cancer develops in the transitional epithelial cells. Other forms of bladder cancer that are less common include small cell carcinoma, primary lymphoma and sarcoma.

Bladder cancer typically affects older adults, though it can occur at any age.

The majority of bladder cancers are diagnosed at an early stage when bladder cancer is highly treatable. However, even early-stage bladder cancer is likely to recur. For this reason, bladder cancer survivors often undergo follow-up tests to look for bladder cancer recurrence for years after treatment.

Approximately 70 percent of all new cases of bladder cancer are classified as non-muscle invasive, also called superficial bladder cancer. The initial treatment for this stage of bladder cancer is surgical removal of the tumor by a procedure called a TURBT (Transurethral resection of bladder tumor). This procedure is performed under general anesthesia, typically at an outpatient surgical center.

What are the symptoms of bladder cancer? The most common symptom of cancer of the bladder is blood in the urine (hematuria). Sometimes, blood in the urine may exist, but not be seen by the naked eye (micro hematuria). Aside from blood in the urine, difficulty urinating, pain during urination, blot clots, extreme swelling in the lower legs and weight loss are symptoms associated with bladder cancer.

What are common causes of bladder cancer? Cigarette use and cancer-causing agents (carcinogens) are the number one cause of bladder cancer. Cigarettes alone contribute to more than 50% of the cases. Age, diet high in fat, family history of bladder cancer, Marijuana and smoking history and chronic bladder disorders are also all common causes.

How is bladder cancer diagnosed? Typically, biopsies of abnormal bladder tissue are taken during an in office cystoscopy. The pathology from these biopsies confirm a diagnosis of bladder cancer.

How is bladder cancer treated? Bladder cancer treatment depends on the age of the patient and progression of the disease. Surgery, chemotherapy, radiation therapy and immunotherapy are often used by themselves or in combination with one another to treat bladder cancer. Bladder cancer treatment will be an integrated program and individualized for each patient. If bladder cancer is in the early stages, the tumor can oftentimes be removed through surgery. The most common first treatment of non-muscle

invasive bladder cancer is surgery to remove any abnormal areas inside the bladder; this is called a transurethral resection of bladder tumor or TURBT.
If bladder cancer has spread into the muscle, then a partial or full cystectomy (removal of the bladder) will need to take place. Bladder cancer treatment is more difficult once it has reached a later stage.

What is a transurethral resection of bladder tumor (TURBT)?
A transurethral resection of the bladder tumor (TURBT) is a surgical procedure performed under general anesthesia typically at an outpatient surgical center. It is performed with a scope (cystoscope) that is inserted through the urethra into the bladder. It is used to see inside the bladder and remove any abnormal appearing areas. In most cases, you can go home after the procedure with a Foley catheter in place temporarily.

Why is cardiac clearance required before surgery?
Some patients have complicated cardiac history and we will require cardiac clearance from a cardiologist if we feel it is indicated. We will provide referrals if you do not currently have a cardiologist. When you call the cardiologist office to schedule your appointment, please mention the date of your surgery and that you are being referred to their office by Midtown Urology for cardiac clearance before surgery. The cardiologist will go over what is involved in obtaining clearance. Clearance must be obtained prior to surgery in order to proceed.

Why has lab work been ordered for me before surgery?
Oftentimes, we would like to check certain blood work before surgery with some patients. This will be performed by the surgery center or by a lab. Labs will need to be received before the surgery in order to proceed.

What should I expect?
Surgeries are usually performed at different outpatient surgery centers in Austin. All surgeries will require general anesthesia. Most of the surgeries are only outpatient surgeries, but in some cases it may be necessary to be admitted for 24 hours to the hospital. You will need a driver to and from the surgical center. Typically, the surgery itself is approximately 1 hour, but you will be in the surgery center for preparation for the surgery and recovery after. You will be sent home with a Foley catheter in place. It is recommended you take off the day of surgery and the day after surgery.

- **Pre-surgery**
  You will hear from our office shortly after it is decided to proceed with the surgery. Our surgery scheduler will notify you of the date, time and location of the surgery. The surgery center will usually contact you 24 hours before the surgery to go over instructions and get a thorough medical history. Also, the surgery center will go over insurance coverage of your surgery, but it is also recommended you discuss the potential costs with your insurance company directly if you are insured. Below are specific instructions previous to surgery:
    1. Pick up prescriptions.
    2. Discontinue any blood thinners, including aspirin, approximately 7 days before the surgery.
    3. Disclose all medical and surgical history to Midtown Urology and the surgery center, including any medications or supplements that you take.
    4. Secure a driver to and from the procedure.

5. If cardiac clearance has been requested, we ask that this is done as soon as possible as our office must be notified of the results before surgery.
6. If any blood work has been ordered, we ask that this is done as soon as possible as our office must be notified of the results before surgery.

Please fill all prescriptions that we give you and read the instructions on the bottle. These prescriptions will have been given to you at your preoperative appointment or when we call prior to your procedure.
Please note: Any narcotic medication (Tylenol with Codeine, Hydrocodone, Vicodin, Norco, Oxycodone, and Percocet) can cause constipation. It is recommended to get over the counter
Miralax and a stool softener to help prevent constipation if you choose to use these Medications.

You must notify your provider if you are taking any **SGLT2 inhibitors** such as

- Brenzavvy (bexaglifloxin)
- Inovokana (canaglifozin)
- Farziga (dapagliflozin)
- Jardiance (empagliflozin)
- Steglatro (ertugliflozin)

OR any **GLP-1 receptor agonists** such as

-Ozempic (semaglutide subcutaneous)
-Trulicity (dulaglutide)
-Bytetta (exenatide)
-Bydureon Bcise
-Victoza (liraglutide)
-Adlyxin (lixisenatide)

If you take any **blood thinners** on the following list, this will need to be discussed with your provider. Do not stop these medications on your own. According to the schedule below, unless otherwise noted by your cardiologist or Dr. Trotter/Dr. McClintock.
o Plavix (Clopidrogel)
o Pradaxa (Dabigatran)
o Xarelto (Rivaroxaban)
o Elquis (Aphixaban)
o Effient (Prasugel)
o Brillinta (Ticagrelor)
o Aspirin or Baby Aspirin
o Fish Oil
o Meloxicam

- **Day of Surgery**

Most surgeries take approximately one hour depending on the amount of abnormal bladder tissue that may be removed. Although the surgery is short, you will likely spend most of the day at the surgery center being prepared for the surgery and waiting for you to be alert after the procedure. We will speak with anyone that you give permission after the surgery to inform them of how the surgery went and provide any specific post-surgery instructions.

You will go home with a Foley catheter in place. It will be removed in our office shortly after surgery.

1. Once you are awake and alert after the surgery, you will likely be sent home unless admitted to the hospital.
2. Finish your prescribed antibiotic. All other prescribed medications for surgery can be used as needed. The reasons to use the medications and instructions will be on the medication bottles.
3. You can continue to use your prescribed prostate medications until you are seen in our office for the voiding trial.
4. We will call you usually the day after surgery to see how you are doing and schedule a follow-up appointment (voiding trial) in our office in order to remove the Foley catheter.
5. You are not to perform any strenuous activity.
6. Hydrate well with water. Stay away from foods and drinks that may irritate your bladder. (spicy foods, caffeine, acidic foods/drinks and alcohol)
7. You may restart blood thinners approximately 5 days post-surgery, if your urine is clear, however if you see blood in your urine after your catheter is removed, you are to discontinue any blood thinners (including Aspirin), if able, and hydrate well with water. When your urine clears you can restart your blood thinners. This may be an ongoing process.

- **Post-Surgery**
  You will have a catheter when you are sent home from surgery. The catheter may be left in place for 1-5 days depending on what is best. This is to help urine to pass initially after the surgery. It is normal to see blood, tissue and sometimes clots in the catheter bag. Discomfort is also normal and will subside once the catheter is removed. We ask that you still not restart blood thinner, including aspirin and hydrate well with water.

  When we call you after surgery we will set up the office visit in which the catheter will be removed. This is called a voiding trial. It is important that your urine is cleared and that you are still taking your antibiotic. If your urine is not clear then we may choose to postpone the Foley catheter removal. Removing a Foley catheter may be uncomfortable and you can take a Motrin prior to the visit. If you choose to take any pain medication or Valium then we ask you to have a driver to and from the appointment.

  During a voiding trial, we will fill your bladder with sterile water while the Foley catheter is still in place. Once you have an extreme urge to urinate we will remove the Foley catheter and you will urinate as much as you can.

  We will discuss normal expectations after surgery at this time. We also provide an in-and-out catheter and lubricant and will show you how to use it if needed.

This is only needed if you are unable to urinate post-surgery. It is not common that men use the catheter, but it is sometimes necessary to prevent you from going to the ER.

Once the voiding trial is completed, we ask that you schedule an appointment for one week to go over the pathology from your surgery. You may go home or back to work directly after the voiding trial.

We will call you the day after the voiding trial to see how you are doing and answer any further questions.

We ask that you follow the below instructions after the voiding trial.
1. No strenuous activity for 3 weeks, including intercourse.
2. If there is blood in your urine, you are to stop blood thinners (including aspirin) if able, and hydrate well until your urine is clear. You can then restart your blood thinner. This may happen multiple times.
3. Finish your antibiotic.
4. Do not consume dietary irritants for at least 3 weeks including caffeine, nicotine, alcohol, spicy foods, acidic foods and drinks.
5. Hydrate well with water.
6. If you have to use the in/out catheter, you are to notify our office.

What are normal expectations after surgery?
-Once the catheter is removed, you may experience burning with urination, frequency, blood or tissue in your urine. This is all normal and should subside within 2-3 weeks. Hydrate well with water.
-Over the next 3 months you may notice tissue or blood occasionally in your urine. This is part of the healing process (scar tissue) and will subside.
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What are the risks?
Every surgical procedure includes risk:
-Excessive bleeding
-Severe pain
-Infection
-Need for repeat surgery
-Urinary retention

When do I need to call the office?
We ask you contact our office if you have:
-Symptoms of infection
-Bleeding that won't resolve even after stopping blood thinners
-Inability to urinate
-Use of the self-catheter
-Severe pain

Adjuvant bladder cancer therapy
Most patients will have a single dose of intravesical chemotherapy (treatment inside of the bladder) at the time of the initial TURBT. It is thought that this single dose of intravesical chemotherapy will help prevent floating tumor cells dislodged from the TURBT from seeding and starting new tumors.

Additionally, depending on the risk of recurrence, adjuvant intravesical bladder cancer (BCG) may be advised on an outpatient, in-office basis within 2-6 weeks after the TURBT. This is performed intravesically once a week for six weeks and is typically followed by an in-office cystoscopy in order to evaluate the bladder tissue. These therapies allow for a high concentration of the treatment to be applied directly to the areas where the tumor cells could remain, potentially destroying these cells and preventing them from reemerging in the bladder and forming new tumors. They are commonly followed by additional booster treatments once a complete response is obtained.

Even with adjuvant bladder cancer therapy, repeat TURBT may be recommended.

What happens after initial BCG treatment?
Tests are usually performed about three months after the start of BCG treatment to make sure that the cancer has not recurred. If there are no signs of recurrence, maintenance BCG treatment may be recommended.

If there are signs of tumor recurrence, any abnormal areas will be biopsied and possibly removed with a repeat TURBT. Treatment after a TURBT will depend upon the tumor's stage at recurrence and the amount of time that has passed since the first course of BCG.

Maintenance BCG is generally recommended for patients with high-risk non-muscle invasive bladder cancer. The benefit of maintenance treatment is that it may further delay a recurrence of cancer. It is usually given for at least one year. Maintenance BCG is typically given once a week for 3 weeks at three, six and 12 months after the initial BCG treatment. In some cases, maintenance BCG will be recommended for an extended period of time.

What is the surveillance after bladder cancer treatment (with or without BCG treatments)?
Bladder cancer can recur even with appropriate treatment. Repeat cystoscopy and urine tests are recommended for surveillance, beginning three months after treatment ends. If there are no signs of recurrence, cystoscopy and urine testing are usually recommended every three to six months for four years and then once per year.

If there are signs of recurrent bladder cancer the next step may depend on several factors, but often includes a second course of intravesical BCG or other surgical options.

Oftentimes, imaging will also be ordered periodically as part of surveillance.

Important Contact Information
Midtown Urology
911 W. 38th Street, Suite 200
(512) 451-7935 phone
(512) 451-7965 fax

If you need to reach the doctor after hours for an urgent matter, please call our office at 512-451-7935 and follow the prompts to be connected with the on-call provider.

You may also go to Seton Main Emergency Room on 38th and N. Lamar. Please only go to this hospital as our physicians have privileges there.

Hospital for Emergencies
Seton Main Medical Center
1201 W 38th St, Austin, TX 78705