# Bladder Case Scenario 1

**History**

5/23/16: A 52-year-old male, smoker was admitted to our hospital with a 3-month history of right pelvic pain, multiple episodes of gross hematuria, dysuria, and extreme fatigue. The performance status (PS) was equal to 1. There was no mass palpable in the pelvis area. The ganglionic areas were free from the disease.

**Imaging**

5/25/16: CT scan of the pelvis showed a heavily tissular polycyclic tumor at the right bladder wall with intraluminal and extravesical extension without enlargement of the pelvic lymph nodes. The largest diameter of the tumor measured 10 cm.

5/26/16: CT scan of the abdomen showed a multinodular liver disease highly suspicious for metastasis and hydronephrosis of the right kidney.

6/19/16: Postoperative CT scan of the lung and bone scan were normal.

6/21/16: Postoperative CT scan of the brain and chest were negative for additional disease.

**Procedures**

5/27/16: Cytoscopy revealed a vegetative tumor.

6/15/16: TURBT of the bladder tumor removed 20 g of the cancerous tissue.

**Pathology Report**

6/16/16:

- Medical cytology revealed atypical cells with irregular nuclei and high nuclei to cytoplasm ratio

- Immunocytology showed malignant cells with epithelial origin

- Hematoxylin and eosin staining revealed morphologically small cells with minimal cytoplasm and hyperchromatic nuclei

- Invasion to the muscle of the bladder wall

- Transitional carcinomatous components were present

- Morphology and immunophenotype of the specimen consistent with small cell carcinoma

**Immunohistochemistry**

6/17/16: showed that the tumor expressed synaptophysin and neuron-specific enolase (NSE).

**Treatment**

The patient received 12 cycles of platinum-based chemotherapy. The chemotherapy consisted of intravenous cisplatin at 75 mg/m2 on day 1 plus intravenous etoposide at 120 mg/m2 on day 1, 2, and 3, repeated every 3 weeks. After twelve cycles, the clinical evaluation showed a significant improvement in symptoms. The performance status was 0. Hematuria and pain disappeared with the treatment. A CT scan of the abdomen and pelvis showed an excellent partial response of the bladder tumor and liver metastasis. The patient is still alive, 18 months after diagnosis (TURBT).

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| * **What is the primary site?** * **What is the histology?** | | | | * **What is the grade/differentiation?** | | |
| **Stage/ Prognostic Factors** | | | | | | |
| Summary Stage |  | | Tumor Size Summary | |  | |
| TNM Clin T |  | | TNM Path T | |  | |
| TNM Clin N |  | | TNM Path N | |  | |
| TNM Clin M |  | | TNM Path M | |  | |
| TNM Clin Stage |  | | TNM Path Stage | |  | |
| TNM Clin Descriptor |  | | TNM Path Descriptor | |  | |
| TNM Clin Staged By |  | | TNM Path Staged By | |  | |
| CS SSF 1 |  | |  | |  | |
| CS SSF 2 |  | | Regional Nodes Positive | |  | |
| CS SSF 3 |  | | Regional Nodes Examined | |  | |
|  |  | | Mets at Dx - Bone | |  | |
|  |  | | Mets at Dx - Brain | |  | |
|  |  | | Mets at Dx - Liver | |  | |
|  |  | | Mets at Dx - Lung | |  | |
|  |  | | Mets at Dx - Other | |  | |
|  |  | | Mets at Dx – Distant LN | |  | |
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| **Treatment** | | | | | | |
| Diagnostic Staging Procedure | |  |  | | |  |
| **Surgery Codes** | |  | **Radiation Codes** | | |  |
| Surgical Procedure of Primary Site | |  | Radiation Treatment Volume | | |  |
| Scope of Regional Lymph Node Surgery | |  | Regional Treatment Modality | | |  |
| Surgical Procedure/ Other Site | |  | Regional Dose | | |  |
| **Systemic Therapy Codes** | |  | Boost Treatment Modality | | |  |
| Chemotherapy | |  | Boost Dose | | |  |
| Hormone Therapy | |  | Number of Treatments to Volume | | |  |
| Immunotherapy | |  | Reason No Radiation | | |  |
| Hematologic Transplant/Endocrine Procedure | |  | Radiation/Surgery Sequence | | |  |
| Systemic/Surgery Sequence | |  |  | | |  |

# Bladder Case Scenario 2

**History**

54 year-old white female presents with hematuria and cystitis cystica.

**Imaging**

4/06/16 CT Chest/Abdomen/Pelvis:

1. Possible left side wall bladder diverticulum

**Procedure**

4/7/16 Cystoscopy:

Urethra: No abnormalities of the urethra are noted

Bladder: Cystitis cystica noted left lateral wall Ecchymosis present on the posterior wall. A sessile tumor is present in the area of the trigone. Approximate size is 1.5 cm. No significant trabeculation noted. There was no direct cytoscopic evidence of a bladder diverticulum.

Ureter: Clear efflux noted both orifices. Orifices normal configuration and location.

4/13/16 Cystoscopy/TUR of bladder mass right trigone medium sized and random biopsies of the posterior wall of the bladder to look for findings of chronic interstitial cystitis:

The Iglesias resectoscope was placed through the sheath and connected to continuous flow irrigation with sterile water. The position of the ureteral orifices were marked in relation of the bladder neck in relation to the mass on the right trigone well above and lateral to the position of the ureteral orifice. Using the cutting mode of the Bovie through the loop this bladder tumor was resected entirely and including muscle in the specimen. The edges in the inferior aspect were fulgurated with Bovie electrocautery. The right ureteral orifice was intact. The bladder tumor chips were irrigated out of the bladder with the Ellik evacuator and sent as pathology specimen #1. However, further evaluation of the bladder revealed areas of cracking and bleeding and erythema on the posterior wall of the bladder and two of these areas were biopsied. The gross findings were somewhat suggestive for chronic interstitial cystitis. These were biopsied using the cutting mode of the Bovie through the loop and the area was fulgurated and these were sent as a second specimen and marked posterior bladder wall biopsies to evaluate for chronic interstitial cystitis. These two were irrigated out of the bladder using the Ellik evacuator. A final look cystoscopy revealed no bleeding from the biopsied areas and no other abnormal lesions. Ureteral orifices were intact.

**4/15/16 Pathology**

1. Bladder Tumor Right Lateral Wall, TUR: Urothelial carcinoma, high-grade, invasive into smooth muscle
2. Bladder lesion, posterior wall, biopsy: Urothelial carcinoma in situ, focal
3. Tumor size: 1.5 x 2.0 x .73 cm

**Treatment**

After thorough consideration of treatment options, she was evaluated by a medical oncologist for neoadjuvant chemotherapy, and was enrolled in a clinical trial of neoadjuvant paclitaxel, carboplatin and gemcitabine. Patient tolerated chemotherapy without complications, and underwent a restaging transurethral resection of the bladder tumor per protocol to assess treatment response. She had a residual minute focus of muscle-invasive bladder cancer and, therefore, underwent radical cystectomy with an orthotopic neobladder. The final pathology from the cystectomy specimen demonstrated a high-grade lesion with microscopic invasion in the perivesical tissue. Of the 23 lymph nodes examined all were found to be negative for metastasis. She is currently without evidence of disease, approximately 12 months following her surgery.

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