

## **CENTRAL REGISTRY WEBINAR URINARY SYSTEM EXERCISES**

### **CASE 1: URINARY SYSTEM**

#### **PHYSICAL EXAMINATION**

1/25 This 55-year-old male was referred by his family physician because of dysuria. All other systems are normal

#### **IMAGING**

1/21 Chest x-ray: Negative

#### **LABORATORY**

Creatinine: 1.3 (0.6-1.1)

#### **PROCEDURES**

1/4 Cystoscopy: Raised lesion between 1 and 2 cm in size at right ureteral orifice

1/25 Transurethral resection of bladder tumor

#### **PATHOLOGY**

1/25 FINAL DIAGNOSIS: Confluent poorly differentiated malignancy consistent with papillary transitional cell carcinoma. MICROSCOPIC: Depth of tumor cannot be assessed with material submitted.

#### **ONCOLOGY**

1/31 Patient received intravesical BCG.

## **CASE 2: URINARY SYSTEM**

### **HISTORY**

10/27 Patient is a 70-year-old with a 1 year history of hematuria. He denies pain, irritation, or obstructive symptoms.

### **IMAGING**

5/18 Intravenous pyelogram: Normal

10/25 Chest X-ray: Normal

### **PROCEDURES**

6/14 Fluoroscopy: Multiple papillary bladder tumors.

10/27 Transurethral resection of 1.3 cm bladder fundus tumor and fulguration

### **PATHOLOGY**

10/27 FINAL DIAGNOSIS: Moderately differentiated papillary transitional cell carcinoma.

MICROSCOPIC: Minimal superficial invasion of supporting lamina propria. Tumor does not reach portions of muscularis propria.

## **CASE 3: URINARY SYSTEM**

### **HISTORY AND PHYSICAL EXAMINATION**

6/28 This 62-year-old male has urinary retention secondary to recurrent hematuria. The patient has experienced intermittent hematuria for 2 ½ years. PE: Abdomen soft, tender. Foley catheter present with gross hematuria with clots.

### **IMAGING**

6/26 Intravenous pyelogram: Consistent with neoplasm.  
6/27 Renogram: No significant flow/function to right kidney.  
6/28 Chest x-ray: Negative

### **PROCEDURES**

6/26 Cystoscopy: Hematuria from right kidney; multiple bladder biopsies taken; clot from right ureter extracted.  
  
6/28 Right nephrectomy with retroperitoneal lymph node dissection

### **PATHOLOGY**

6/26 Non-diagnostic.  
  
6/28 **GROSS:** Right kidney including Gerota's fascia, adrenal gland, fat, and retroperitoneal nodes. **MICROSCOPIC:** Tumor directly invades the renal artery, renal vein, nerves, perinephric fatty tissue, and proximal right ureter. Distal ureteral margin is negative. One retroperitoneal lymph node was involved by tumor, 2.5 cm metastasis. **FINAL DIAGNOSIS:** Poorly differentiated transitional cell carcinoma of renal pelvis, tumor size 8.0 cm.

### **ONCOLOGY**

7/15 Patient recently diagnosed with transitional cell of renal pelvis, T4. Recommended course of gemcitabine and cisplatin. Patient will discuss with family and let us know.  
  
9/30 Patient received last chemo treatment today.

## **CASE 4: URINARY SYSTEM**

### **PHYSICAL EXAMINATION**

2/24 This 82-year-old Mexican American male presents with a history of mild dysuria and hematuria. He currently has hematuria with clots and mild urinary pain.

### **IMAGING**

2/11 Renal ultrasound: Negative.  
2/11 Chest x-ray: Negative.

### **LABORATORY**

2/11 Alk phos: 55  
2/11 PSA: 2.7

### **PROCEDURES**

2/24 Left nephrectomy: Mass in the renal pelvis. No lymph nodes involved by tumor.

### **PATHOLOGY**

2/10 Urine: Highly suspicious for transitional cell carcinoma.

2/24 **GROSS:** left kidney. **MICROSCOPIC:** Papillary transitional cell carcinoma, nuclear grade III, is a maximum 3 cm at the renal pelvis, invading regionally through the muscle wall at the pelvis above the origin of the ureter with viable and degenerating tumor in the pelvis and ureter lumen. Margins are negative. **FINAL DIAGNOSIS:** Papillary transitional cell carcinoma.

## **CASE 5: URINARY SYSTEM**

### **PHYSICAL EXAMINATION**

11/7 Patient developed left lower quadrant pain and gross hematuria. IVP done in October revealed non-functioning hydronephrotic left kidney. Cystoscopy revealed tumor. Patient is here now for nephroureterectomy. Remainder of the physical exam is normal.

### **IMAGING**

10/20 CT scan of abdomen: Left hydronephrosis with dilatation of proximal left ureter. The etiology for the hydronephrosis and dilatation is not identified. Probable 3 cm simple cyst of right kidney.

### **LABORATORY**

11/8 HGB: 12.7

11/8 HCT: 37.0

### **PROCEDURES**

10/31 Cystoscopy: Obstructing tumor in left mid ureter. Lower ureter appears normal.

11/7 Left nephroureterectomy

### **PATHOLOGY**

11/7 GROSS: Left kidney and ureter and regional nodes. MICROSCOPIC: Surgical margins are free of tumor. The tumor is 3.5 x 2 x 1.8 cm. The tumor is confined to the lumen and superficial muscular layer. All lymph nodes are negative. FINAL DIAGNOSIS: Moderately differentiated papillary transitional cell carcinoma of the ureter.