

## ONCOLOGY 2 BLADDER CANCER

### PGY 3 OBJECTIVES

#### MEDICAL EXPERT

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##### *Basic Science Knowledge*

Be able to describe the basic and clinical biological mechanism responsible for chemical carcinogenesis in the etiology of bladder cancer.  
To understand and describe the natural history and prognostic indicators of bladder cancer.  
Be able to describe and recognize the pathologic presentations of bladder cancer and upper tract urothelial tumors.  
Be able to describe the epidemiological aspects of bladder including etiology and risk factors.  
Have a basic understanding of the theories of the origin and the dissemination of transitional cell carcinoma.

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##### *Clinical Knowledge*

Be able to describe and recognize the signs and symptoms of a patient presenting with a urothelial tumor.  
Be able to describe and order the appropriate diagnostic tests to make the diagnosis of a urothelial tumor.  
Be able to read and interpret the radiologic tests used to diagnose urothelial tract tumors (IVP, CT scan, U/S, retrograde pyelography)  
To understand the staging system for urothelial tumors.  
To be able to outline stage specific treatments for urothelial tumors  
To describe intravesical therapy options for urothelial tumors and their potential side effects  
To outline treatment options for invasive urothelial tumors and their potential side effects.  
To outline the side effects and potential complications of transurethral resection of bladder tumors, radical cystectomy, and urinary diversions.  
To outline chemotherapeutic options and survival outcomes for metastatic transitional cell carcinoma.  
To outline disease surveillance for stage specific urothelial tumors

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##### *Recognition and Management of Emergencies*

Be able to describe the clinical scenarios that constitute an emergency in the patient with a urothelial tract tumor (clot retention, bilateral ureteral obstruction).  
Be able to manage patients in these situations.

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##### *Technical and Procedural Skills*

Be able to perform cystoscopy and retrograde pyelography for the diagnosis and treatment of urothelial tumors  
Be able to perform bladder biopsy and fulguration of small urothelial tumors.  
Be able to perform diagnostic flexible ureteroscopy for the investigation of suspected urothelial tumors of the upper urinary tract.  
Be able to perform transurethral resection of small to medium urothelial tumors.  
Be able to perform laser ureteroscopic ablation of upper tract urothelial tumors.  
Be able to perform percutaneous ablative procedures for upper tract urothelial tumors.  
Be able to perform an extended pelvic lymph node dissection as part of a radical cystectomy in a male and female patient

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**ONCOLOGY 2 BLADDER CANCER**  
PGY 3 OBJECTIVES

CONTINUED . . .

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*Specific Clinical  
Expectations*

Expected to attend two ambulatory clinics with Dr. Moore. The emphasis will be on the diagnosis, treatment and follow-up of patients with urothelial cancer.  
Expected to attend two ambulatory GU oncology clinics with either Dr. Scott North or Dr. Peter Venner at the Cross Cancer Institute.  
Will spend one half-day at the BCG clinic at the Cross Cancer Institute to observe and perform instillation of BCG to bladder cancer patients.  
Expected to review the interactive CD on urothelial pathology.

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**ONCOLOGY 2 BLADDER CANCER**  
**PGY 4 AND PGY 5 OBJECTIVES**

**MEDICAL EXPERT**

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*Basic Science Knowledge*

Be able to describe same concepts as in PGY 3 year:

Describe the basic and clinical biological mechanism responsible for chemical carcinogenesis in the etiology of bladder cancer.

Understand and describe the natural history and prognostic indicators of bladder cancer.

Describe and recognize the pathologic presentations of bladder cancer and upper tract urothelial tumors.

Be able to describe the epidemiological aspects of bladder including etiology and risk factors.

Have a basic understanding of the theories of the origin and the dissemination of transitional cell carcinoma.

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*Clinical Knowledge*

Be able to describe same concepts as in PGY 3 year:

Describe and recognize the signs and symptoms of a patient presenting with a urothelial tumor.

Describe and order the appropriate diagnostic tests to make the diagnosis of a urothelial tumor.

Be able to read and interpret the radiologic tests used to diagnose urothelial tract tumors ( IVP, CT scan, U/S, retrograde pyelography)

Understand the staging system for urothelial tumors.

Able to outline stage specific treatments for urothelial tumors

Describe intravesical therapy options for urothelial tumors and their potential side effects

Outline treatment options for invasive urothelial tumors and their potential side effects.

Outline the side effects and potential complications of transurethral resection of bladder tumors, radical cystectomy, and urinary diversions.

Outline chemotherapeutic options and survival outcomes for metastatic transitional cell carcinoma.

Outline disease surveillance for stage specific urothelial tumors

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*Recognition and Management of Emergencies*

Be able to describe the clinical scenarios that constitute an emergency in the patient with a urothelial tract tumor (clot retention, bilateral ureteral obstruction).

Be able to manage patients in these situations.

Be able to manage the acute intra-operative bleed that may occur during radical cystectomy.

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**ONCOLOGY 2 BLADDER CANCER**  
**PGY 4 AND PGY 5 OBJECTIVES**

CONTINUED . . .

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*Technical and  
Procedural Skills*

Be able to perform diagnostic flexible ureteroscopy for the investigation of suspected urothelial tumors of the upper urinary tract.  
Be able to perform transurethral resection of urothelial tumors.  
Be able to perform laser ureteroscopic ablation of upper tract urothelial tumors.  
Be able to perform percutaneous ablative procedures for upper tract urothelial tumors.  
Be able to perform an extended pelvic lymph node dissection and radical cystectomy in a male and female patient  
Be able to perform urinary diversion including ileal conduit, heterotopic and orthotopic diversions

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*Specific Clinical  
Expectations*

Expected to attend two ambulatory clinics with Dr. Moore. The emphasis will be on the diagnosis, treatment and follow-up of patients with urothelial cancer.

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