# 2016 Bladder Cancer Study
# BLADDER CANCER SITE REVIEW

*Report and Conclusion submitted by Nathaniel Cook, MD to Morton Hospital Cancer Committee 5/05/16.*

The charts of all analytic patients from 2015 bladder cancer cases were reviewed for adherence to NCCN treatment guidelines. 18 patients met the criteria for review. Dr. Nathaniel Cook, chairman of the Cancer Committee, conducted the study and the site review.

As outlined in the definitions of the Commission on Cancer Standard 4.6, the role of this standard is to ensure that evaluation and treatment conforms to evidence-based national treatment guidelines using AJCC stage or other appropriate staging, including appropriate prognostic indicators. The study must determine that diagnostic evaluation is adequate and the treatment plan is concordant with a recognized guideline. It must also include the following components:

- A site-specific sample (Morton Hospital chose the source for the study involving all cases of bladder cancer) to a maximum of 300 cases
- A determination that the *first course of therapy* is concordant with an evidence-based national treatment guideline and/or prognostic indicators, when available
- Reporting format that permits analysis and provides an opportunity to recommend performance improvements

According to the National Cancer Institute, bladder cancer is the sixth most common type of cancer in the United States after lung cancer, prostate cancer, breast cancer, colon cancer, and lymphoma. It is the third most common cancer in men but only the eleventh most common cancer in women. The most common risk factor for bladder cancer in the United States is cigarette smoking. It is estimated that up to half of all bladder cancers are caused by cigarette smoking and that smoking increases a person's risk of bladder cancer two to four times above the baseline risk.

Of the 18 bladder cases diagnosed, the histology breakdown is as follows:

Bladder Neck-3 cases
Bladder, Trigone-3 cases
Bladder, Posterior Wall- 4 cases
Bladder, Wall-5 cases
Lateral Wall-1 case
Anterior Wall-1 case
Bladder, NOS-1 case

According to the American Cancer Society, the risk of bladder cancer increases with age. The majority of patients diagnosed with bladder cancer at Morton Hospital were between 70-79 years of age. The table below provides an analysis of age, gender and stage at diagnosis of Morton Hospital bladder cases. This data mirrors both the National Cancer Institute and the American Cancer Society statistics.

| Age At Dx | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90+ | Total |
|---|---|---|---|---|---|---|---|
| All Cases | - | 2 | 4 | 7 | 3 | 2 | 18 |

| | AJCC 1 | AJCC 2 | AJCC 3 | AJCC 4 | Non-Invasive | TOTAL |
|---|---|---|---|---|---|---|
| Under 60 years of | 1 | 1 | 0 | 0 | 0 | 2 |
| 60 + years of age | 1 | 4 | 1 | 1 | 9 | 16 |
| Male<br>Female | 1<br>1 | 4<br>1 | 1<br>0 | 1<br>0 | 9<br>0 | 16<br>2 |

Below is a table with the breakdown of clinical exams, diagnostic/biopsy procedures, pre-treatment evaluations, surgical procedures, stage at diagnosis, prognostic indicators, and first course treatment for each case. Please note that smoking history is not always available in the patient EMR for those presenting for out-patient procedures.

| Pt Info | Symptom | Clinical Exam | Smoker Hx | Work up Imaging | Urine | Cysto/ Turbt | Surgery | Grade | Stage | Tx |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 M | hematuria | Cysto-MD office | U | CT, PET | Y | 8/13/15<br>10/15/15 | - | High | T2aN0M0<br>Stage II | MVAC 11/15/15 |
| 62 M | hematuria | Cysto-MD office | N | CT, US | Y | 1/23/15 | 5/18/15<br>Cystoprostatec | High | T2aN1M0<br>Stage IV | MVAC 3/4/15 |
| 91 M | hematuria | Cysto-hospital | U | CT, Retro US | Y | 1/7/15 | - | High | T2aN0M0<br>Stage II | None due to comorbids per MD-exp 1/27/15 |
| 69 M | hematuria | Cysto-hospital | Y | CT, US Bone Scan | Y | 1/30/15 | 5/7/15<br>Cystoprostatec | High | T4aN0M0<br>Stage III | Gemcita/Cisplat 3/10/15 |
| 76 M | hematuria | Cysto-hospital | N | US | Y | 2/2/15 | - | Low | TaN0M0<br>Stage 0a | - |
| 61 F | hematuria | Cysto-MD office | U | US, CT, Bone Scan | N | 3/13/15<br>4/24/15 | - | High | T2aN0M0<br>Stage II | XRT 5/11/15<br>Cisplatin 5/11/15 |
| 70 F | hematuria | Cysto-hospital | U | US, Bone Scan, CT | Y | 3/2/15<br>4/2/15 | - | High | T1N0M0<br>Stage I | Mitomycin 4/6/15 |
| 92 M | hematuria | Cysto-hospital | N | CT | N | 3/10/15 | - | Low | TaN0M0<br>Stage 0a | - |
| 86 M | hematuria | None-NH pt | N | CT | N | 8/17/15 | - | High | T2bN0M0<br>Stage II | Pt expired 8/19/15 |
| 73 M | hematuria | Cysto- | U | CT | Y | 5/19/15 | - | Low | TaN0M0 | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | hospital | | | | | | | Stage 0a | |
| 55 M | hematuria | Cysto-MD office, hospital | U | CT | Y | 5/5/15 | - | High | T1N0M0 Stage 1 | - |
| 57 M | hematuria | Cysto-MD office | Y | CT, US, CT | Y | 8/22/15 Cysto/ fulguration | 8/22/15 Prostate resection | High | T2aN0M0 Stage II | Pt expired 9/21/15 renal failure |
| 70 M | hemturia | Cysto-hospital | U | US, CT | Y | 8/31/15 | - | High | TaN0M0 Stage 0a | 11/2/15 BCG |
| 68 M | hematuria | Cysto-MD office | U | CT | N | 8/18/15 | - | Low | TaN0M0 Stage 0a | - |
| 77 M | hematuria | Cysto-MD office | U | US-MD office | Y | 9/29/15 | - | Low | TaN0M0 Stage 0a | - |
| 87 M | hematuria | Cysto-hospital | U | US | Y | 10/20/15 | - | High | TaN0M0 Stage 0a | 11/9/15 BCG |
| 85 M | hematuria | Cysto-MD office | U | CT | N | 9/21/15 | - | High | TaN0M0 Stage 0a | - |
| 70M | hematuria | Cysto-MD office | U | US, CT | N | 12/21/15 | - | Low | TaN0M0 Stage 0a | - |

***Conclusion, Program Planning and Improvements:***

Upon review of all 2015 analytic bladder cases, it was determined that the demographics do mirror those in the literature; that all patients had received appropriate recommended NCCN diagnostic evaluations; that these evaluations included cystoscopy and/or biopsy, appropriate pre-treatment imaging, and clinical assessments; that these pre-treatment evaluations were performed prior to any surgical procedures or treatment discussion for the purpose of staging and determining appropriate treatment; and that all patients received first course treatment concordant with evidence-based NCCN guidelines.

It was also determined upon review of all cases that all patient pre-treatment, diagnostic and surgical procedures along with all first course treatment information was available, complete, and recorded in the patient records and in the cancer registry database. In addition, it was determined that all cases were staged appropriately; that all cases had clinical and pathological staging complete and recorded in all patient records and in the cancer registry database; that all first course treatment, or lack of treatment, was appropriate and documented in all patient records and in the cancer registry database.

Lastly, bladder cancer is one of many cancers that is directly related to cigarette smoking. Patients who have bladder cancer who do smoke should be encouraged to stop smoking. Morton Hospital offers free smoking education and cessation programs to our community in cooperation with the American Cancer Society Freshstart Program.

*Nathaniel Cook, MD*

*References: NCCN Guidelines Version 1.2016, National Cancer Institute, Health Professional Version, American Cancer Society: Cancer Facts and Figures 2016*