

## UROLOGICAL ONCOLOGY

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### **Hydronephrosis as a Prognostic Marker in Bladder Cancer in a Cystectomy-Only Series**

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**Objectives:** Hydronephrosis in patients with bladder cancer is caused by tumour at the ureteral orifice, secondary ureteral tumours, intramural or extravescical tumour infiltration, or compression of the ureter. This study investigated the prognostic impact of hydronephrosis in bladder cancer.

**Methods:** A series of 788 patients were treated with radical cystectomy with curative intent for transitional cell carcinoma of the bladder without neoadjuvant/adjuvant radiotherapy/chemotherapy between January 1986 and September 2003. All patients had a complete follow-up until death or until the study's end date. Survival rates were calculated using the Kaplan-Meier method. A multivariate analysis with a Cox regression model was performed with respect to potential influencing factors.

**Results:** A total of 108 patients (13.7%) had unilateral and 25 patients (3.2%) had bilateral hydronephrosis. The rate of organ-confined tumours was significantly higher in patients without hydronephrosis (67.9% vs. 37.6%;  $p < 0.001$ ). Forty-three (32.3%) of the 133 hydronephrotic patients had a tumour involving the ureteral orifice. In this group the rate of organ-confined tumours was significantly higher than in the other patients with hydronephrosis (53.5% vs. 30.0%;  $p = 0.009$ ). In the multivariate analysis, preoperative hydronephrosis was determined as an independent prognostic marker for recurrence-free survival besides the pT classification and lymph node status ( $p = 0.0015$ ). The etiology of hydronephrosis did not affect the tumour-specific survival.

**Conclusions:** Hydronephrosis at the time of diagnosis of bladder cancer is associated with a high probability of advanced tumours. It is an independent prognostic factor for recurrence-free survival.

### **Editorial Comment**

The question if patients with concomitant hydronephrosis and bladder cancer have inferior prognosis is a matter of debate since long. Here, the authors stratify their patients into two cohorts, hydronephrosis without tumor at the ureteral orifice versus no hydronephrosis or hydronephrosis with tumor at the ureteral orifice. This stratification increases significantly the prognostic impact of hydronephrosis. According to their results, a patient with hydronephrosis without tumor at the orifice has a 70% risk of having non-organ confined disease and a 40% risk of lymph node metastases, in contrast to patients with visible tumor at the orifice having risks at 41.7% and 19.4%, respectively. This translates into different tumor-specific survival rates.

Thus, hydronephrosis without visible tumor at the orifice is a very ominous prognostic factor.

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### **Advanced Age Is Associated With Poorer Bladder Cancer-Specific Survival in Patients Treated With Radical Cystectomy**

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**Objective:** Bladder cancer (BCa) is a disease of older persons, the incidence of which is expected to increase as the population ages. There is controversy, however, regarding the outcomes of radical cystectomy (RC), the gold standard treatment of high-risk BCa, in patients of advanced chronological age. The aim of our study was to assess the impact of patient age on pathological characteristics and recurrence-free and disease-specific survival following RC.

**Methods:** The records of 888 consecutive patients who underwent RC for transitional cell carcinoma (TCC) were reviewed. Age at RC was analyzed both as a continuous (yr) and categorical (< or =60 yr old, n=240; 60.1-70 yr old, n=331; 70.1-80 yr old, n=266; >80 yr old, n=51) variable. Logistic regression and survival analyses were performed.

**Results:** Higher age at RC, analyzed as a continuous or categorical variable, was associated with extravesical disease and pathological upstaging (all  $p < 0.02$ ). Older patients were less likely to receive postoperative chemotherapy (< or =60 yr: 32% vs. >80 yr: 14%,  $p = 0.008$ ). In both pre- and postoperative multivariate models, higher age at RC as a categorical variable was associated with BCa-specific survival ( $p < 0.05$ ). Patients >80 yr old had a significantly greater risk of disease recurrence than patients aged < or =60 yr ( $p < 0.05$ ).

**Conclusion:** Greater patient age at the time of RC for BCa is independently associated with adverse outcomes. Better understanding of factors associated with postoperative outcomes in this growing segment of the population is necessary. Prospective corroboration and further refinement of similar analyses in other large datasets is needed.

### **Editorial Comment**

This manuscript gives the results of 888 patients from 4 large centers in the USA and Canada on bladder cancer in the elderly. Some figures may recall the aggressivity of bladder cancer in general e.g. 48% had non-organ confined disease, 42% had pathological upstaging.

Higher age was associated to worse prognostic factors such as risk of extravesical disease and pathological upstaging. In spite of more advanced disease, older patients were significantly less likely to receive adjuvant chemotherapy. The comment of M. Brausi to this paper is also advocated reading as it dissects the present bias in patient selection. In summary, this paper confers mainly well-known facts to urologists, still it is worthwhile reading as it may remind you not to wait too long to proceed with radical therapy as time may not play in favor of your elderly patients.

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## **NEUROUROLOGY & FEMALE UROLOGY**

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### **Comparison of Diagnostic Criteria for Female Bladder Outlet Obstruction**

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