

# Influence of stage discrepancy on outcome in patients treated with radical cystectomy

Ja Hyeon Ku<sup>1</sup>, Kyung Chul Moon<sup>2</sup>, Cheol Kwak<sup>1</sup>, and Hyeon Hoe Kim<sup>1</sup>

<sup>1</sup>Department of Urology, and <sup>2</sup>Department of Pathology, Seoul National University College of Medicine, Seoul, Korea

---

## ABSTRACT

---

**Aims and background.** To evaluate the influence of stage discrepancy on clinical outcome in patients with bladder cancer who have undergone radical cystectomy.

**Methods and study design.** We reviewed the records of 155 patients who had undergone radical cystectomy. Of the 155 patients (128 males, 27 females), 68 had clinical nonmuscle invasive disease and 87 had muscle invasive disease. Follow-up ranged from 1.0 to 162.4 months (median, 34.3).

**Results.** There was no significant difference in overall survival according to clinical T stage ( $P = 0.483$ ). However, the actuarial overall survival rate of the pathological muscle invasive disease group was significantly less than that in the pathological nonmuscle invasive disease group ( $P < 0.001$ ). Multivariate analysis with the Cox regression model revealed that lymphovascular invasion ( $P = 0.001$ , relative risk [RR] = 2.463) and pathological T stage ( $P = 0.003$ , RR = 3.148) were strongly associated with overall survival. There was no difference in cancer-specific survival according to clinical T stage ( $P = 0.455$ ). However, cancer-specific survival rate of the pathological muscle invasive disease group was significantly less than that in the pathological nonmuscle invasive disease group ( $P < 0.001$ ). Multivariate Cox proportional hazards model analysis showed that lymphovascular invasion ( $P = 0.001$ , RR = 2.545) and pathological T stage ( $P = 0.002$ , RR = 3.823) were independent predictors of cancer-specific survival.

**Conclusions.** Our findings indicate that clinical stage determined by transurethral resection is not predictive of clinical outcome after radical cystectomy in patients with bladder cancer. Free full text available at [www.tumorionline.it](http://www.tumorionline.it)

---

**Key words:** bladder neoplasm, cystectomy, recurrence, stage, survival.

Correspondence to: Hyeon Hoe Kim, MD, PhD, Department of Urology, Seoul National University Hospital, 28, Yongon Dong, Jongno Ku, Seoul, 110-744, Korea.  
Tel +82-2-2072-2425;  
fax 82-2-742-4665;  
e-mail [hhkim@snu.ac.kr](mailto:hkim@snu.ac.kr)

Received May 14, 2009;  
accepted October 16, 2009.