Compliance with guidelines for patients with bladder cancer: Variation in the Delivery of Care

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Cancer. 2011 Jul 11. doi: 10.1002/cncr.26198. [Epub ahead of print]

Background: Clinical practice guidelines for the management of patients with bladder cancer encompass strategies that minimize morbidity and improve survival. In the current study, the authors sought to characterize practice patterns in patients with high-grade non-muscle-invasive bladder cancer in relation to established guidelines.

Methods: Surveillance, Epidemiology and End Results (SEER)-Medicare-linked data were used to identify subjects diagnosed with high-grade non-muscle-invasive bladder cancer between 1992 and 2002 who survived at least 2 years without undergoing definitive treatment (n = 4545). The authors used mixed-effects modeling to estimate the association and partitioned variation of patient sociodemographic, tumor, and provider characteristics with compliance measures.

Results: Of the 4545 subjects analyzed, only 1 received all the recommended measures. Approximately 42% of physicians have not performed at least 1 cystoscopy, 1 cytology, and 1 instillation of immunotherapy for a single patient nested within their practice during the initial 2-year period after diagnosis. After 1997, only use of radiographic imaging (odds ratio [OR], 1.19; 95% confidence interval [95% CI], 1.03-1.37) and instillation of immunotherapy (OR, 1.67; 95% CI, 1.39-2.01) were found to be significantly increased. Surgeon-attributable variation for individual guideline measures (cystoscopy, 25%; cytology, 59%; radiographic imaging, 10%; intravesical chemotherapy, 45%; and intravesical immunotherapy, 26%) contributes to this low compliance rate.

Conclusions: There is marked underuse of guideline-recommended care in this potentially curable cohort. Unexplained provider-level factors significantly contribute to this low compliance rate. Future studies that identify barriers and modulators of provider-level adoption of guidelines are critical to improving care for patients with bladder cancer.

Editorial Comment

From a scientific standpoint, guidelines are an evidence-based distillate of the current knowledge on a given disease. So, ideally, every urologist should adhere to at least one guideline and should treat his/her patients accordingly.

This view is over-idealistic indeed, as shown by this paper from Chamie and colleagues. Using SEER data, they showed that only 1 (!) of 4545 patients analyzed received all recommended measures. There was at least a significant improvement over time with regard to BCG treatment.

This study retrospectively assessed treatments until 2002. Further analyses on the developments in the years thereafter, when guidelines really came into everyday's practice, would be highly interesting.

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