Bladder cancer – How to improve?

Mark S. Soloway

Department of Urology, University of Miami Miller School of Medicine, Miami, Florida, USA

The article by Borkowska et al. [1] addresses more than a comparison of the accuracy of the EORTC risk tables between a relatively small Polish cohort and the original predictions of recurrence and progression in the article by Sylvester et al based on patients accrued to EORTC bladder cancer (BC) trials. The authors have reviewed and commented on many aspects of the management of patients with BC. I would like to comment on many of these points. The purpose of a risk table is to inform the patient and the treating physician about their risks related to BC and adjust the type and intensity of treatment accordingly. The goals therefore are to limit the burden of this cancer as it relates to the patient's quality of life, i.e. do not overtreat a low grade Ta tumor, yet aggressively manage a potentially life threatening cancer, e.g. high grade T1 or T2/3 tumor. The authors address many of these issues. Thus the issue is not so much about the actual "recurrence" or progression rate but to understand in a general way the risk level for each patient's tumor type based on all the risk factors mentioned in the article (grade, stage, presence of CIS, etc.).

Over the last decade several guidelines or recommendations specifically related to BC have been published after a rigorous review of the literature. The most referenced are from the European Urological Association, the American Urological Association, and the International Consultation on Urologic Diseases. The latter was recently published in European Urology. In my opinion they have all provided an opportunity to focus attention on BC and provide expert opinions on a comprehensive review of diagnosis and treatment. This has allowed clinicians to avail themselves of the current standards of treatment. Combined with the ready access to this information via the internet it is my opinion that the level of care has improved.

Borkowska et al. mention the risk factors for BC and at the top of the list is cigarette smoking. Interestingly the public seems to know that cigarette smoking can lead to cancer but very few are aware that smoking can cause BC. This is important since there needs to be a link between gross hematuria, BC and smoking just as there is between a young woman, hematuria, and acute bacterial cystitis. The latter scenario

suggests a culture and an antibiotic but the former association should instigate a prompt referral to a urologist. This may sound simplistic and obvious but it is not the case. We have all seen significant delays from the onset of hematuria until a diagnosis of BC is made. The goal would be to make the public aware of the association between cigarette smoking and BC so they would seek out a urologist without delay.

The authors mention the use of the FISH test which is expensive and not needed, in my opinion, in the vast majority of BC cases. Urinary cytology, on the other hand, has an important role in the monitoring of patients with high grade BC. It is not needed for the majority of patients with recurrent low grade tumors. Patients with low grade Ta tumors account for a significant percentage of all patients with BC and if we follow the guidelines of less frequent cystoscopy, no upper tract imaging beyond the initial one at diagnosis, and office fulguration for small new tumors we could minimize the inconvenience, side effects and cost of managing this mostly benign neoplasm.

The need for a reTUR BT was emphasized by the authors for a patient with a HG T1 BC. I think this is an important step and has gained wide acceptance. Is a reTUR BT needed for all patients with a HG Ta tumor? I do not think we have adequate data and consensus on this topic. Whereas I am an advocate of the guideline for a reTUR BT for all HG T1 tumors I am less so for HG Ta. It is important to emphasize that the efficacy of intravesical BCG will be related to the absence of obvious cancer when it is initiated. Thus I think the urologist must strive to ensure removal of all tumor prior to initiating BCG. If this requires a reTUR BT then this should be performed.

Lastly the authors indicate that a variety of tumor markers have been proposed as being of prognostic value for the individual patient. As far as I am aware we do not have a marker which will tell us which patient with a HG T1 BC should have a cystectomy at diagnosis and which should have a reTUR BT followed by a course of BCG once we have resected all evident tumor in the bladder. These tissue based "tumor markers" are not ready for prime time. Understanding the risk factors and treating each patient accordingly is.

References

1. Borkowska E. EORTC risk tables – their usefulness in the assessment of recurrence and progression risk in non-muscle-invasive bladder cancer in Polish patients. CEJU. 2013; 66: 14–20. ■

Correspondence

Prof. Mark S. Soloway
msoloway@med.miami.edu