to develop interventions that improve surveillance care for patients with low-risk NMIBC.

SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found in the online version at https://doi.org/10.1016/j.urology.2019.04.036.

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EDITORIAL COMMENT

Cystoscopic surveillance, as recommended by the American Urology Association and the European Association of Urology guidelines, is the current gold standard for monitoring non–muscle-invasive bladder cancer (NMIBC).[1,2] For low-risk NMIBC, at low risk of recurrence or progression, these guidelines recommend surveillance cystoscopies at 3 and 12 months, and annually thereafter. Moreover, there is recommendation by some national expert bodies to curtail continual cystoscopic surveillance beyond 12 months in those at lowest risk for recurrence.[3] The rationale for such recommendations is to promote a more risk-adapted approach to surveillance which attempts to counterbalance overuse in low-risk cases against underuse in high-risk cases. Variations in practice, which are not risk adapted and which are significantly different to those recommended by international guidelines, may adversely affect the outcomes of the individual patient.[4] Moreover, from a healthcare systems perspective, such practices may add considerable costs to a disease which is already known to be one of the most expensive to manage.[5]

In the Department of Veterans Affairs Healthcare system, cystoscopy is the most frequently performed surgical procedure with approximately 80,000 procedures annually.[6] In this context, the current study needs to be commended on highlighting the overuse of cystoscopic surveillance in low-risk NMIBC in the US VA system during the study period 2005 and 2011.[6] Allowing

for the limitations of a retrospective design and the nature of data within the VA national database, the authors performed sensitivity analyses to estimate the spectrum of likely cystoscopic overuse and found this to be significant, ranging from 45% (assuming intermediate-risk) to 75% (assuming low-risk). Multilevel logistic regression demonstrated that those diagnosed at an earlier year were more likely to have experienced cystoscopic "overuse." The authors explain that one of the factors for this improvement in recent years may be the increasingly better appreciation and adherence to updated guidelines. By highlighting this issue, it is anticipated that the practice of cystoscopic surveillance is increasingly better risk adapted and, in particular, better aligned to the recommendations of current guidelines, not only in the Veterans Affairs system but more widely across healthcare systems, moving forward.

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