Partial cystectomy for invasive bladder: the sirens’ song?

Daniel J. Canter, MD¹,²,³

¹Einstein Health Network, Philadelphia, Pennsylvania, USA
²Urologic Institute of Southeastern Pennsylvania, Philadelphia, Pennsylvania, USA
³Fox Chase Cancer Center, Philadelphia, Pennsylvania, USA

Referring to the article published on pp. 7520-7527 in this issue

It is well established that radical cystectomy (RC) with urinary diversion is an operation with considerable morbidity and potential mortality for patients of all ages. Although often curative, in certain populations, it can result in a reduction in life expectancy due to the complications of the surgery itself. Recently, investigators have focused their attention in not only cataloguing the exact incidence of perioperative complications after RC but also in seeking alternative, objective methods for quantifying risk preoperatively.

One method which recently has gained a good deal of traction is the concept of surgical frailty. Originally developed in the geriatric population, frailty has been extended to the surgical setting because it can reliably identify patients whose physiology may not be able to handle the intended stresses of surgery.

Although improved preoperative risk stratification for RC patients is needed, alternative therapies, especially for high risk surgical patients, may be another way for patients with invasive bladder cancer to avoid RC. There has been a renewed interest in the use of combined chemotherapy and radiation therapy for this population with a number of ongoing clinical trials. Also, the use of partial cystectomy (PC) is another bladder preserving therapy which, in select patients, may be curative while sparing the morbidity of the urinary diversion.

In this month’s Canadian Journal of Urology, Faiena and colleagues used the Nationwide Inpatient Sample data from 2001-2010 to assess the temporal trend in utilization of PC as well as predictors for its utilization.

Although the authors found that the use of PC decreased by 4% annually over the study period, the factors that predicted for the continued use of PC highlight the challenges associated with caring for patients with invasive bladder cancer. Specifically, the authors found that patients who underwent PC were more likely to be older, Medicare beneficiaries, and have more comorbid diseases. Conversely, patients who underwent PC experienced less perioperative complications than patients who underwent RC. Also, of note, PC was more likely to be offered at rural and non-teaching hospitals. Although difficult to interpret intent from this data, it is not unreasonable to surmise that PC was offered/chosen as therapy for a patient’s bladder cancer in this study to avoid postoperative adverse events. Furthermore, the fact that PC was more likely to be offered at rural and non-teaching hospitals probably underscores the issue of access to care for high complexity procedures. In sum, the data underlying this study illustrates two very important points regarding patients with invasive bladder cancer: 1) a more precise manner for preoperative risk assessment is needed as well as alternate, effective therapies for high risk surgical patients, and 2) care for these patients should be centralized to high volume referral centers.

References