

Balancing disease and risk in octogenarians undergoing radical cystectomy

Ronak Gor, DO,¹ Daniel J. Canter, MD^{1,2}

¹Einstein Health Network, Philadelphia, Pennsylvania, USA

²Urologic Institute of Southeastern Pennsylvania, Philadelphia, Pennsylvania, USA

Referring to the article published on pp. 6826-6831 in this issue

GOR R, CANTER DJ. Balancing disease and risk in octogenarians undergoing radical cystectomy. *Can J Urol* 2013;20(4):6832.

In this issue Berneking et al¹ thoughtfully present their 10 year retrospectively reviewed data on perioperative and late complications in octogenarians undergoing open radical cystectomy. The authors report that no differences were identified between octogenarians (mean age 82.7 years, n = 43) and younger patients (mean age 66.1, n = 316) when accounting for overall minor and/or major complications according to the modified Clavien classification system. Although radical cystectomy has been shown to be relatively safe in elderly patients by some authors,² other recent, large, population based studies have identified increasing age, especially those older than 80 years, as a risk factor for 90-day mortality.^{3,4} Clearly, the elderly bladder cancer patient represents a challenging clinical scenario in that the urologist must balance the biologic behavior of the disease versus the potentially considerable risk of curative treatments, especially surgery.

There are several aspects of Berneking et al's paper that are worthy of further clarification: (1) selection bias is inherent in any retrospective study; (2) it would be interesting to know the percentage of patients in each age group in whom radical cystectomy is indicated that actually proceeded with cystectomy; and, (3) in this patient cohort, octogenarians were less likely to receive neoadjuvant chemotherapy than younger patients ($p = 0.02$) and less likely to have a lymph node dissection performed ($p = 0.02$) or receive a continent diversion ($p = 0.001$). All three of the above aspects of bladder cancer care can carry morbidity and potentially may be skewing the ability to draw meaningful comparisons between the two groups in this article. Nevertheless, the intent of this paper is important in attempting to better risk stratify elderly patients who require radical cystectomy as a multi-modal part of their bladder cancer care.

The ability to accurately predict a bladder cancer patient's pathologic stage is notoriously poor,⁵ leaving much of the modifiable risk assessment for these patients to pre-operative assessment of a patient's physiologic state. These tools are either lacking or are too cumbersome for reliable clinician use. Accordingly, surgical decision-making in these patients is overly subjective, wrought with physician and patient biases that unduly guide treatment decisions. Though all octogenarians are octogenarians, not all octogenarians are created equal, and more refined risk stratification in this complex group of patients is needed. Recently, the concept of frailty⁶ has been introduced and has been prospectively studied in many surgical populations, including cystectomy patients. Although preliminary, frailty may serve as a better indicator of vulnerable patients likely to experience a poor postoperative outcome. Conversely, this preoperative risk assessment tool can potentially also identify the majority of patients who will recover well from this surgery. Further prospective studies are underway and will hopefully validate this measure as a more refined risk assessment tool. □

References

1. Berneking Ad, Rosevear HM, Askeland EJ et al Morbidity and mortality of octogenarians following open radical cystectomy using a standardized reporting system. *Can J Urol* 2013;20(4):6826-6831.
2. Novotny V, Hakenberg OW, Froehner M et al. Systematic assessment of complications and outcome of radical cystectomy undertaken with curative intent in patients with comorbidity and over 75 years of age. *Urol Int* 2013;90(2):195-201.
3. Liberman D, Lughezzani G, Sun M et al. Perioperative mortality is significantly greater in septuagenarian and octogenarian patients treated with radical cystectomy for urothelial carcinoma of the bladder. *Urology* 2011;77(3):660-666.
4. Morgan TM, Keegan KA, Barocas DA et al. Predicting the probability of 90-day survival of elderly patients with bladder cancer treated with radical cystectomy. *J Urol* 2011;186(3):829-834.
5. Guzzo TJ, Magheli A, Bivalacqua TJ et al. Pathological upstaging during radical cystectomy is associated with worse recurrence-free survival in patients with bacillus Calmette-Guerin-refractory bladder cancer. *Urology* 2009;74(6):1276-1280.
6. Fried LP, Tangen CM, Walston J et al. Frailty in older adults: evidence for a phenotype. *J Gerontol A Biol Sci Med Sci* 2001;56(3):M146-M156.

Address correspondence to Dr. Daniel J. Canter, Einstein Health Network, 60 E. Township Line Road, Elkins Park, PA 19027 USA