EDITORIAL "We got it all"

D. Robert Siemens, MD, FRCSC

Cite as: *Can Urol Assoc J* 2011;5(3):153; DOI:10.5489/cuaj.11099

Every urologist wants to be able to tell their patient they had negative margins after a prostatectomy, and every patient wants to hear it. However, as a quality of care indicator, surgical margin status represents a significant dilemma. The variation in rate of margin positivity in different surgical series is remarkable, most obviously if it reflects surgeon experience from a centre of excellence or from a population-based study.[1] Furthermore, using margin status as an indicator of quality is confusing as it is often as much a reflection of case mix or pathological expertise as it is surgical technique. Most of us would accept that a positive margin has a negative impact on disease outcomes after radical prostatectomy. The strength of its prognostic value, however, may vary depending on postoperative risk status and is uncommonly demonstrated to be predictive of clinical progression, cancer-specific or overall mortality.[2,3] Still, the psychological burden of a positive margin should assure our individual commitment to improving this outcome.

Yet how should we use margin status to measure quality of care in the population? Quality of care research evaluates the "degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."[4] Efforts to better understand, measure and influence surgical quality are often impeded by a lack of reliable and valid measurements and a failure to control for patient characteristics.[5] Expert panels organized by the RAND group and by Cancer Care Ontario have recommended several different quality indicators for prostate cancer surgery.[6,7] However, there is very little evidence of their feasibility, reliability and validity, undermining their application to the quality of care process.

Lawrentschuk and colleagues present a contemporary population-based cohort in Ontario showing a worrisome positive margin rate in organ-confined disease of 33%.[8] However, the authors were unable to demonstrate convergent construct validity with surgical volume, a fairly well-described and often used indicator of prostate cancer outcomes. This is not the first report that has failed to demonstrate an association of margin status with other indicators of surgical care in a population study. Chan and colleagues previously reported a lack of construct validity for surgical margin status in an earlier Canadian cohort, whereas other indicators, such as length of stay and transfusion rates, were more informative.[1] There are likely many reasons for the poor performance of surgical margins as a quality indicator in such studies, most especially the lack of central pathology review.

So what do we do with this information? Very appropriate consensus statements on optimal surgical and pathologic performance and quality initiatives have been instituted. Ultimately, the goal of the entire quality of care process is to improve patient outcomes through feedback to surgeons, institutions and quality councils. However, we need to proceed with caution if we are to use any such indicators to inform structure and process of care decisions until we have more fully established their reliability and validity.

References

1. Chan EO, Groome PA, Siemens DR. Validation of quality indicators for radical prostatectomy. *Int J Cancer* 2008;123:2651-7.
2. Alkhateeb S, Alibhai S, Fleshner N, et al. Impact of Positive Surgical Margins After Radical Prostatectomy Differs by Disease Risk Group. *J Urol* 2010;183:145-50.
3. Vis AN, Schroder FH, van der Kwast TH. The actual value of the surgical margin status as a predictor of disease progression in men with early prostate cancer. *Eur Urol* 2006;50:258-65.
4. Spencer BA, Steinberg M, Malin J, et al. Quality-of-care indicators for early-stage prostate cancer. *J Clin Oncol* 2003;21:1928-36.
5. Miller DC, Montie JE, Wei JT. Measuring the quality of care for localized prostate cancer. *J Urol* 2005;174:425-31.
6. Gagliardi AR, Fleshner N, Langer B, et al. Development of prostate cancer quality indicators: a modified Delphi approach. *Can J Urol* 2005;12:2808-15.
7. Litwin MS, Steinberg M, Malin J, et al. *Prostate Cancer Patient Outcomes and Choice of Providers: Development of an Infrastructure for Quality Assessment.* Santa Monica, CA: RAND; 2000.
8. Lawrentschuk N, Evans A, Srigley J, et al. Surgical margin status among men with organ-confined (pT2) prostate cancer: a population-based study. *Can Urol Assoc J* 2011;5:161-6; DOI:10.5489/cuaj.10085.