EDITORIAL

Robotic radical prostatectomy: Fools rush in, or the early bird gets the worm?

Laurence Klotz

Editor-in-Chief
CUAJ

Robotic prostatectomy seems to be here to stay. Currently, over 50% of radical prostatectomies (RPs) in the United States are done robotically. The article by Dr. Chin and colleagues[1] provides a perspective on this trend. Robotic technology represents a challenge to our Canadian system, yet it has rapidly spread throughout the US (where there are over 350 robots).

With the da Vinci, the advantages of magnification and binocular vision, 6 or more degrees of freedom, and reduced fatigue (surgeons sit during the procedure) are apparent. Demonstrating an improved outcome should only be a matter of time, one would think.

Yet, compared with open surgery, the data so far show no clear evidence of improved oncologic outcome or side effect profile, despite the decreased blood loss and reduced transfusion requirements of robotic surgery (compared with open surgery, not conventional laparoscopic surgery). However, the duration of hospital stay, analgesic requirements, time off work and recovery seem relatively similar. The robotic approach, however, needs more advantages to justify the cost. Improved outcome may be difficult to demonstrate. Variation in outcome with respect to PSA recurrence, potency sparing and incontinence varies a great deal, even among high-volume surgeons. These variations seem to be more dependent on the surgeons, as opposed to the different techniques of accessing the prostate.[2]

The experience reported by Chin and colleagues supports this observation. The results are acceptable, but not stellar: a positive margin rate of 30%, 10% of patients with moderate and 20% with mild stress incontinence, an average hospital stay of 3.5 days and an average of 12 days with an indwelling catheter. These results will likely improve over time, but the results of an experienced surgeon doing open radical prostatectomy are a high bar. Another difficult issue in the rush toward robotic prostatectomy is the volume-quality outcome relation. The outcome is best when the surgeon's annual volume is 50 cases or more. Given the cost of the da Vinci and the length of the learning curve,[3] it makes sense that robotic prostatectomy would be performed in high volumes by a few surgeons at centres of excellence.

In attempting to maintain market share, every hospital in the US, large or small, is motivated to acquire the device. Nonetheless, 90% of US urologists who do RP perform fewer than 10 annually. Additionally, once these units are acquired, they take on their own mandate: "Use Me," resulting in the unseemly marketing of robotic prostatectomy as a minimally invasive procedure with no morbidity. Horsefeathers. Minimal access does not mean minimally invasive, and the morbidity reported to date is comparable to the open approach.

One hopes that in Canada we will demonstrate some maturity in our approach to this expensive device. A few robots (perhaps 5–10) should be purchased by acknowledged centres of excellence across the country, where a limited number of surgeons would maintain a high volume of cases and quickly develop expertise. Further dispersion of the robot beyond these centres should await solid data showing improvement in clinically significant oncologic and quality of life related outcomes.

CUAJ welcomes members to the 62nd annual meeting of the CUA. We are delighted to present the abstracts for the meeting in this second issue. Our journal is on the road to success, and we are confident that indexation (retroactive to the first issue) will be acquired quickly. We strongly encourage those presenting at this meeting to submit their manuscripts to CUAJ for publication. CUAJ is truly your journal, and its success is in your hands.

References

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3. Zorn KC, Orvieto MA, Gong EM, et al. Robotic radical prostatectomy learning curve of a fellowship-trained laparoscopic surgeon. *J Endourol* 2007;21:441-7.