RESEARCH HIGHLIGHTS

BLADDER CANCER

Robotic cystectomy noninferior to open surgery

A randomized controlled trial has shown that short-term outcomes following robot-assisted radical cystectomy compare favorably with those of open surgery. To date, a lack of hard clinical evidence to support the claimed benefits of robotic cystectomy has compromised patient management. Senior author Jeff Nix has had to "counsel patients without the benefit of head-to-head comparisons of different treatment modalities. This leads to difficult discussions and confusing choices."

The researchers from the University of North Carolina operated on 41 patients, 21 using the robotic technique and 20 using the open approach. There was no significant difference in the primary end point of number of lymph nodes removed (19 and 18, respectively, when the same lymphadenectomy template was used in both groups).

As noted in previously published case series, robot-assisted cystectomy performed by an experienced surgeon (more than 75 procedures) was associated with less blood loss and need for analgesia, more rapid return of bowel function, and a trend towards

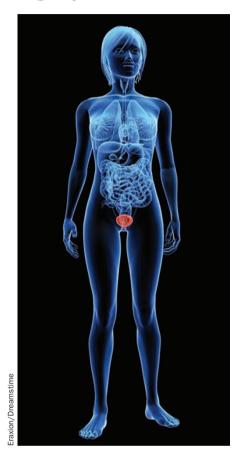
shorter hospitalization. The incidence of complications did not differ between the two groups. Operating time was, however, significantly longer in the robotic cohort (4.2 h versus 3.5 h).

The trialists concede that their study was constrained by its small sample size and single-institution design. More important was the lack of long-term follow up. "The ideal ... would be [to perform] a prospective randomized controlled trial comparing robotic versus open cystectomy in terms of long-term oncological outcomes ... in a multi-institutional cooperative fashion" says Nix.

The window of opportunity for performing such a high-quality study might be closing. According to Nix, the media attention and marketing machines that can drive patient preferences have not yet had a marked impact on robotics in bladder cancer. It is imperative that long-term data are collected before this occurs.

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Original article Nix, J. *et al.* Prospective randomized controlled trial of robotic versus open radical cystectomy for bladder cancer: perioperative and pathologic results. *Eur. Urol.* doi:10.1016/j.eururo.2009.10.024



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