PROSTATE CANCER

Poor quality of published evidence for superiority of RALP

Robot-assisted laparoscopic prostatectomy (RALP) is widely used as a treatment for clinically localized prostate cancer in the US, and is being increasingly performed worldwide. The widespread adoption of this approach is in part based on reported superior results compared with open or conventional laparoscopic surgery, in terms of reduced complication rates, and improved oncological and functional outcomes. However, a systematic review by Diana Kang and colleagues suggests that this transition is based on weak evidence, which mainly comprises low-quality observational studies.

The researchers' literature search—which included studies published up to December 2008—identified 75 relevant publications. Only two of these papers reported randomized controlled trials; 56 were case series, 11 reported retrospective cohort studies, and 6 detailed prospective cohorts. The two randomized trials compared different technical modifications of RALP, rather than comparing RALP with open or conventional laparoscopic approaches. Only 3 studies were multicenter in

nature, and 54 (72%) of the reports were cowritten by at least one of only 12 authors. The majority of studies were small, with only 29 (39%) including more than 200 patients, and only 12% having a sample size greater than 500 individuals. 57 (76%) studies specified methods of assessing functional outcomes, although only 28 (37%) used standardized tools for outcomes assessment.

The authors suggest that RALP has been widely adopted despite an absence of high-quality evidence for its superiority over conventional approaches. They also call into question the generalizability of the available published results. As randomized controlled trials of surgical interventions are difficult to achieve, observational studies of high methodological quality are important in this setting. In this regard, the authors criticize the “low reporting quality of observational studies, which represent the majority of evidence for RALP.” Many reports failed to provide information on missing data, completeness of follow-up, or inclusion and exclusion criteria.

Kang and colleagues conclude their paper by emphasizing the need to

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raise the methodological standards for assessing new surgical procedures and devices. Such concerns are particularly valid when considering the high cost of many new technologies, which might offer only minimal benefits for patients.

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