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Only the most experienced surgeons should perform robot-assisted laparoscopic prostate repair

Because the learning curve for robotic-assisted laparoscopic radical prostatectomy operations is so protracted, the procedure should only be performed by surgeons who see large volumes of patients.

That was the main conclusion reached by New York investigators who undertook a retrospective analysis of the results of nearly 3800 procedures. They showed that it took more than 1600 prostate cancer surgeries for surgeons to become proficient at the robotic-assisted laparoscopic radical prostatectomy procedure and be able to remove the cancerous prostate consistently with its edges clear of cancer.

Robotic-assisted laparoscopic radical prostatectomy is a relatively new technology that has several advantages over typical laparoscopic surgery, which uses awkward 'chopstick-like' instruments. Robotic-assisted laparoscopic radical prostatectomy provides surgeons with three-dimensional vision, improved magnification, hand tremor filtering, and a range of motion similar to the human wrist.

'The robotic platform has been shown to take less training time to learn to safely perform prostate cancer surgery compared to its open and laparoscopic surgery counterparts, but we see that becoming expert at the robotic operation takes much longer than just simply developing a base level of competence,' said lead author Dr Prasanna Sooriakumaran, Visiting Fellow in Urology, Weill Cornell Medical College, New York. He commented: 'This research shows that optimising patient outcomes in terms of positive margin rates takes much more experience. In this regard the operation is more difficult than previously thought.'

He and his colleagues reviewed the surgical results of 3794 patients who underwent robotic-assisted laparoscopic radical prostatectomy over a 6-year period between 2003 and 2009 in procedures performed by three surgeons from the University of Pennsylvania, Karolinska Institute and Cornell University.

The researchers determined mean overall positive surgical margin rates and operation lengths for each surgeon at intervals of every 50 operations. The investigators found that the positive surgical margin rates for all patients continued to improve with increasing surgeon experience. It took more than 1600 cases to achieve a positive surgical margin rate of less than 10%, which is a standard goal for such surgeries.

'Even for those who do hundreds of cases per year, it takes a long time to get to the stage where they are getting the best possible cancer control results,' Dr Sooriakumaran said. 'Our results show that it is possible to get good cancer cure rates and low surgical margins with this operation, but it takes a significant amount of experience.'

Stephen Pinn

Intermittent *vs* continuous androgen suppression after radical therapy: survival just as good, quality of life may be better

New data suggest that intermittent androgen suppression is equivalent to continuous androgen deprivation in terms of overall survival in men with prostate-specific antigen recurrence after radical radiotherapy – raising the hope that intermittent androgen suppression will offer a new therapeutic option with improved quality of life.

Details of this Intergroup randomized phase III trial, which included many patients from the UK, were presented by Dr Laurence Klotz of Sunnybrook Medical Sciences Centre, Toronto, Canada.

Eligible men had rising prostate-specific antigen >3.0 ng/ml >1 year post radical radiotherapy for localized prostate cancer. Intermittent androgen suppression was delivered for 8 months in each cycle, restarting when prostate-specific antigen reached >10 ng/ml off treatment.

An independent adjudicator recommended halting the trial after a planned interim analysis demonstrated that a prespecified threshold for non-inferiority was reached.

A total of 1386 patients were randomized to intermittent androgen suppression or continuous androgen deprivation arms, with a median follow-up of 6.9 years. Intermittent androgen suppression patients completed a median of two 8-month cycles.

A total of 524 deaths were recorded (268 on intermittent androgen suppression *vs* 256 on continuous androgen deprivation). The intermittent androgen suppression arm had more disease-related (122 *vs* 97) and fewer unrelated (134 *vs* 146) deaths.

Median overall survival was 8.8 *vs* 9.1 years on intermittent androgen suppression and continuous androgen deprivation arms respectively (hazard ratio=1.02, P=0.009). Time to hazard ratio was statistically significantly improved in the intermittent androgen suppression arm (hazard ratio=0.80, P=0.024).

Patients who had received intermittent androgen suppression had reduced hot flashes, but otherwise there was no evidence of differences in adverse events, including myocardial events or osteoporotic fractures.

Stephen Pinn