

Video can be found at <http://www.ceju.online/journal/10000/D-Lap-radical-prostatectomy-locally-advanced-1845.php>

## 3-D transperitoneal laparoscopic radical prostatectomy in locally advanced high-risk prostate cancer: a prospective evaluation

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The management of locally advanced high-risk prostate cancer is challenging. The various guidelines have suggested radical prostatectomy as one of the options in a multimodality approach. We prospectively evaluated the feasibility, safety and efficacy of 3-D laparoscopic transperitoneal radical prostatectomy, as a multimodality approach, in locally advanced high-risk prostate cancer.

All consecutive patients undergoing 3-D laparoscopic transperitoneal radical prostatectomy in locally advanced high-risk prostate cancer, as a multimodality approach, by a single surgeon, between June 2012 and May 2017, at our institution were included. The various clinical data were recorded and analyzed. We are presenting the video of one such case.

Out of a total of 101 patients operated during this period, 31 patients were classified as locally advanced and high-risk. The mean age of patients was 61.3 years with mean serum prostate-specific antigen (PSA) of 21.1 ng/ml. The mean operating time and mean estimated blood loss were 195.3 min and 197.1 ml respectively. There were no open conversions. The intraoperative complications were seen in only 2 (6.4%) patients, and classified as Cla-

vien grade 1–2. The mean catheterization time was 9.7 days. The postoperative complications were seen as Clavien grade 1–2 in 6.4% patients and Clavien grade 3–4 in 3.2% patients respectively. In histopathology, 19.3%, 58.2% and 22.5% patients had pT2, pT3a and pT3b staging respectively. The Gleason scores 7, 8 and 9 were present in 9.67%, 61.3% and 29% patients respectively, in the final specimen. Positive surgical margins were present in only 1 (3.2%) patient. At mean follow-up of 37.3 months, the continence rate at 3 months and 12 months were 74.2% and 93.5% respectively. Adjuvant radiotherapy was given in 25.8% patients. Biochemical recurrence (BCR) was seen in 19.3% patients with mean time to BCR as 9 months. Early salvage radiotherapy and androgen deprivation therapy was required in only 19.3% patients and 25.8% patients respectively.

3-D laparoscopic radical prostatectomy in patients with locally advanced high-risk prostate cancer can be offered as a first intervention, followed by adjuvant treatment, as a multimodality approach. It is feasible, safe, with acceptable perioperative morbidity, along with excellent functional and oncological outcomes. A few patients can

avoid adjuvant treatment, while others can delay androgen deprivation therapy. However, this is a technically challenging procedure and should be done by surgeons with significant laparoscopic expertise.

**CONFLICTS OF INTEREST**

The authors declare no conflicts of interest.

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