Single-Port Robot-Assisted Radical Prostatectomy: First Clinical Experience Using The SP Surgical System

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OBJECTIVES
To describe the first clinical experience with the novel purpose-built single-port robotic platform after Food Drug Administration approval.

METHODS
Two male patients diagnosed with prostate cancer amenable of radical prostatectomy underwent single-port robot-assisted radical prostatectomy with bilateral pelvic lymph-nodes dissection performed by using the da Vinci SP Surgical System (Intuitive Surgical, Sunnyvale, CA). The surgeries were completed through a 2.5-cm periumbilical incision through which a GelPOINT Mini advanced access platform (Applied Medical, Rancho Santa Margarita, CA) and the dedicated 25-mm multichannel port accommodating a 12 × 10 mm oval articulating robotic camera, three 6-mm double-jointed articulating robotic instruments and a 6-mm accessory laparoscopic instrument were placed. One port for the assistant was placed at the level of the para-rectal line, at the planned final site for the drainage. The primary aim was to report, for the first time in the United States after Food Drug Administration approval of the system, the technical feasibility in the living human. The secondary aim was to report the perioperative outcomes.

RESULTS
The surgeries were successfully completed without conversion. In both cases, the total operative time was 140 minutes. Blood loss was negligible. No complications were recorded. Patients were discharged within 24 hours postoperation.

CONCLUSIONS
Herein, we documented the first clinical application of the SP surgical platform for single-port transumbilical robot-assisted radical prostatectomy in the United States. This approach will be further investigated regarding the surgical morbidity and the outcomes. UROLOGY 124: 309, 2019. © 2018 Elsevier Inc.

The video related to this article can be found online at: doi:10.1016/j.urology.2018.10.025.

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