Radical prostatectomy provides long-term cancer control in patients with localized prostate cancer (1). Robot-assisted radical prostatectomy (RARP) has increasingly become a preferred treatment of choice both by patients and urologists since its introduction in 2001 (2). We previously published outcomes of our experience in performing RARP (3,4). Herein, bilateral double-J stenting before performing the urethro-vesical anastomosis on a patient with a median lobe who underwent RARP is explained.

**SUMMARY OF THE PATIENT WHO UNDERWENT RARP**

A 72-year old patient had a serum PSA of 15 ng/mL who underwent transrectal ultrasound guided prostate biopsy (TRUS-Bx) that revealed prostate adenocarcinoma, Gleason score 3+4 in 6 cores on the left side. Bone scan and abdominal computerized tomography confirmed non-metastatic disease. Patient requested surgical management and was referred for robotic surgery. Prostate was measured as 50 gr during preoperative evaluation.

**ABDOMINAL PORT PLACEMENT**

A total of 5 abdominal ports were placed, four 8 mm sized robotic trocars for robotic instruments and for 3D-HD camera and a 12 mm sized trocar for bedside assistance. Da Vinci Xi Surgical System (Intuitive Surgical, Sunnyvale, CA, USA) was used (Figure 2). Maryland bipolar forceps was used on the left side of the umbilicus. Whereas, monopolar curved scissors were used on the right side.

**ABSTRACT**

In the present video, bilateral double-J stenting before performing the urethro-vesical anastomosis on a patient with a median lobe who underwent robot-assisted radical prostatectomy (RARP) is presented. Following identification of the median lobe, a 3/0 vicryl suture was applied on the median lobe in order to lift up the prostate. It was recognized that both ureteral orifices were closely located to the base of the median lobe. Median lobe was dissected carefully and the plane between prostate and bladder neck was entered. Following completion of the prostatectomy, both ureteral orifices were identified to be very closely located to the bladder neck. Therefore, bilateral double-J stents were inserted before performing the urethro-vesical anastomosis in order to obtain a safe anastomosis.

**Key Words:** Robotic radical prostatectomy, Median lobe, Bilateral double-J stenting
(Hot Shears™) and Prograsp™ forceps were used on the right side of the umbilicus. In addition, a large needle driver was also used on the right side of the umbilicus. A 0° lens was used in most of the procedure.

**REMOVAL OF PERIPROSTATIC FAT TISSUE**

Removal of periprostatic fat tissue leads to a better exposure of the bladder neck and the junction between prostate and bladder neck. Therefore, the author suggest that the surgeon spends some time during surgery in order to excise and remove all the periprostatic fat which is one of the crucial steps of bladder neck preservation. When the periprostatic fat tissue is excised, the surgeon better identifies the anatomical structures.

A wide urethra suggests an underlying median lobe. Initially, urethra is cut close to the prostate in an attempt to preserve the bladder neck (Figure 3). However, when the median lobe is identified, urethra is cut more proximally (Figure 4).

**OPENING BLADDER NECK: PRESENCE OF A MEDIAN LOBE**

Bladder is retracted posteriorly with 4th-robotic arm holding the Prograsp forceps and this manoeuvre shows the intersection point of bladder neck and the prostate. Following opening the bladder neck, an anterior median lobe is identified. Thereafter, a 3/0 vicryl suture is introduced into the abdomen and was applied on the median lobe in order to lift up the prostate

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**Figure 1.** Patient position during RARP.

**Figure 2.** Abdominal port sites during RARP.

**Figure 3.** Initially, urethra is cut close to the prostate in an attempt to preserve the bladder neck.

**Figure 4.** However, when the median lobe is identified, urethra is cut more proximally.
with the 4th-arm (Figure 5). Following that, another median lobe at the base was identified and another 3/0 vicryl suture is introduced into the abdomen and was applied on the median lobe at the base in order to lift up the prostate with the 4th-arm (Figure 6). By this manoeuvre, the surgeon was able to dissect the bladder neck and the median lobe (Figure 7). Then, the plane between the prostate and the bladder neck was dissected and both seminal vesicles and vas deferences were identified. Following completion of the prostatectomy, the console surgeon identified the ureteral orifices before starting the anastomosis that were closely located to the cut edge of the bladder neck (Figure 8). In order to make a safe urethra-vesical anastomosis, bilateral double-J stents (4.8F, 26 cm) were inserted (Figure 9). Thereafter, a 3/0 vicryl suture was applied at 3 and 9 o’clock positions at the bladder neck in order to make a bladder neck reconstruction (Figure 10). Lastly, a 3/0 double armed PDS suture was used in order to make a urethra-vesical anastomosis (Figure 11). A watertight anastomosis was confirmed by distending the bladder by 120 cc isotonic solution (Figure 12).

Figure 5. A 3/0 vicryl suture is applied on the median lobe in order to lift up the prostate with the 4th-arm.

Figure 6. Another 3/0 vicryl suture is applied on the median lobe at the base in order to lift up the prostate with the 4th-arm.

Figure 7. Dissection of the plane between the bladder neck and the median lobe.

Figure 8. Identification of the ureteral orifices before starting the anastomosis that were closely located to the cut edge of the bladder neck.
Figure 9. Bilateral double-J stenting (4.8F, 26 cm).

Figure 10. Bladder neck reconstruction by using 3/0 vicryl suture applied at 3 and 9 o’clock positions at the bladder neck.

Figure 11. A 3/0 double armed PDS suture was used in order to make a urethra-vesical anastomosis.

Figure 12. A watertight anastomosis was confirmed by distending the bladder by 120 cc isotonic solution.

TAKE HOME MESSAGES

1. Ureteral orifices might be closely located to the cut edge of the bladder neck following division of the plane between bladder and prostate (median lobe).

2. In order to have a safe anastomosis, it might be useful to insert double-J stents before performing the urethra-vesical anastomosis in order to have a secure anastomosis.

REFERENCES


