

## VIDEO ABSTRACT

## VIDEOSURGERY

Video can be found at <http://ceju.online/journal/10000/robotic-cystectomy-urteric-duplication-management-1421.php>

## Robotic management of a duplicated ureter during intracorporeal urinary diversion following robotic cystectomy

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### Article history

Submitted: May 12, 2017

Accepted: Aug. 2, 2017

Published online: Aug. 3, 2017

**Citation:** Canda AE, Asil E, Koc E, Aldemir M, Ardicoglu A, Atmaca AF. Robotic management of a duplicated ureter during intracorporeal urinary diversion following robotic cystectomy. Cent European J Urol. 2017; 70: 321-322.

**Key Words:** management <> robotic cystectomy <> urteric duplication

Robotic radical cystectomy with intracorporeal urinary diversion is being performed more frequently as the minimally invasive surgical management of choice for invasive bladder cancer. We published our surgical technique before [Canda AE, Atmaca AF, Altinova S, Akbulut Z, Balbay MD. Robot-assisted nerve-sparing radical cystectomy with bilateral extended pelvic lymph node dissection (PLND) and intracorporeal urinary diversion for bladder cancer: initial experience in 27 cases. BJU Int. 2012; 110: 434-444]. One of the important steps of this procedure is the preparation of the ureters for a Wallace type anastomosis to be performed between the ureters and the chimney of the Studer pouch. For this purpose, the left ureter is passed to the right side under the sigmoid colon and the two ureters are lifted up by using the 4<sup>th</sup> arm at their tips. Thereafter, both ureters are spatulated by monopolar curved scissors. One of the ureters might be identified to have a duplication at this stage. Although preoperative radiologic evaluation might show the presence of a duplicated ureter, as is shown in this particular case, that is not necessarily true and thus it might be a surprise for the operating console surgeon to come across a duplicated ureter during the surgery. This particular video explains the surgical technique used in order

to perform a uretero-ureteral anastomosis (Wallace type anastomosis) in the presence of a duplicated ureter. Initially, the right ureter is spatulated and then the left ureter is also spatulated. Thereafter, the console surgeon realizes that the right ureter is duplicated. Therefore, a further spatulation of the duplicated right ureter is also performed. A 4/0 monocryl suture with 20 mm, ½ circle atraumatic needle is used in order to make an anastomosis between the left ureter and the left side of the duplicated right ureter. Thereafter, the same suture is used in order to join the plane between the duplicated right ureters. In this way, a single lumen is formed at the ends of the 3 ureters to be anastomosed to the chimney of the Studer pouch. Thereafter, 3 single J stents, 70 cm in length are inserted one by one through the abdomen and passed through the chimney of the Studer pouch and are introduced into the 3 ureters. Lastly, a double armed 3/0 barbed suture (Stratafix, 17 mm, ½ circle taper point 16x16 cm, Ethicon) is used in order to perform the anastomosis between the ureters and the chimney of the Studer pouch. Before completing this anastomosis the tips of the ureters are cut and sent for pathologic evaluation. We think that advantages of robotic surgery including three-dimensional optical

magnification, dexterity in motion, and the ability to perform tremor-free and delicate movements with three independent robotic arms in addition to the camera arm for the console surgeon significantly facilitates performing this procedure.

**CONFLICTS OF INTEREST**

The authors declare no conflicts of interest.

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