



# Simultaneous laparoscopic nephroureterectomy and robot-assisted anterior pelvic exenteration with intracorporeal ileal conduit urinary diversion: step-by-step video-illustrated technique

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## ABSTRACT

**Introduction:** One of the most remarkable characteristics of urothelial carcinomas is multifocality. However, occurrence of synchronous bladder cancer and upper urinary tract urothelial cancer (UTUC) is exceptional. Minimally invasive approach for these synchronous tumors was just occasionally reported (1-4). The aim of this video article is to describe step-by-step the technique for simultaneous laparoscopic nephroureterectomy and robot-assisted anterior pelvic exenteration with intracorporeal ileal conduit urinary diversion (ICUD). **Patients and methods:** A 66-year-old female presented with synchronous BCG refractory non-muscle invasive bladder cancer and a right-side UTUC. She was a former smoker and had previously been submitted to multiple transurethral resections of bladder tumor, BCG and right distal ureterectomy with ureteral reimplant. We performed a simultaneous laparoscopic right nephroureterectomy and robot-assisted anterior pelvic exenteration with totally intracorporeal ICUD. Combination of robot-assisted and pure laparoscopic approaches was proposed focusing on optimization of total operative time (TOT).

**Results:** Surgery was uneventful. TOT was of 330 minutes. Operative time for nephroureterectomy, anterior pelvic exenteration and ICUD were 48, 135, 87 minutes, respectively. Estimated blood loss was 150mL. Postoperative course was unremarkable and patient was discharged after 7 days.

Histopathological evaluation showed a pT1 high grade urothelial carcinoma plus carcinoma in situ both in proximal right ureter and bladder, with negative margins. Twelve lymph nodes were excised, all of them negative.

**Conclusion:** In our preliminary experience, totally minimally invasive simultaneous nephroureterectomy and cystectomy with intracorporeal ICUD is feasible. Pure laparoscopic approach to upper urinary tract may be a useful tactic to reduce total operative time.

## ABBREVIATIONS

ICUD = Ileal Conduit Urinary Diversion

UTUC = Upper urinary Tract Urothelial Carcinoma

TOT = Total Operative Time

## ACKNOWLEDGEMENTS

### Statement of ethics

Research was conducted ethically in accordance with Declaration of Helsinki. Informed consent was obtained from the patient.

## CONFLICT OF INTEREST

None declared.

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