

García Formoso N., Ballester Diego R., Varea Malo R., Fernández Guzmán E., Alonso Mediavilla E., Calleja Hermosa P., Herrero Blanco E., Velilla Díez G., Truán Cacho D., Zubillaga Guerrero S., Domínguez Esteban M., Gutiérrez Ramos J.L.

Marqués de Valdecilla University Hospital, Dept. of Urology, Santander, Spain

Introduction & Objectives: Nephron-sparing surgery has become the standard of care for patients with T1 renal tumors. The objective of the video is to show the technique of a robotic partial nephrectomy (RPN) using retroperitoneoscopy as a therapeutic approach for posterior renal tumours, especially in patients with history of abdominal surgical procedures, discussing its indications, advantages and disadvantages.

Materials & Methods: In this video, a robotic retroperitoneal parcial nephrectomy (RRPN) is performed in a 68 year-old woman with the following medical records: hysterectomy, retinal detachment, cystocele and horseshoe kidney. Imaging tests, pathological results and critical steps of the surgical procedure are analyzed, as well as the benefits and disadvantages of the RRPN.

Results: Surgical position, robot docking and operative steps of the surgery, including the ultrasound identification of the tumor, are shown. Quick identification of the renal artery (3min 16s) and the tumour are shown. Tumour excision is completed with a total ischemic time of 18 minutes. Internal and external renorrhaphy are performed with the sliding-clip technique. The surgery is completed after Floseal application and perinephric fat closure. Surgical specimen is extracted using a bag and a drain is left in the surgical bed. Favourable postoperative results are shown.

Conclusions: Retroperitoneoscopy is a good approach for posterior renal masses, especially in patients with history of abdominal surgery, while robotic surgery improves the surgeon's conditions compared with laparoscopic surgery, adding precision, improved vision and a wider range of movements. When performed by an expertised surgeon, RRPN may suppose a shorter operative time with the same oncological and postoperative results.