

Procedure Overview

Partial Nephrectomy

with ENDOEYE FLEX 3D





Partial Nephrectomy

Disclaimer

This procedure overview demonstrates the technique utilized by Dr. Lluís Peri Cusi, MD, of the urology department at the Hospital Clínic Barcelona (Spain).

The procedure guide is a voluntary service of Olympus, compiled with the greatest possible care. The guide is not meant to replace the instructions for use. Any user of this product must at all times observe all mandatory information for the product, found, in particular, on the labels and the instructions for use. This guide merely contains guideline values which must be verified by the HCP for their applicability in individual cases and does not represent medical advice or recommendations. Depending on the individual circumstances, it may be necessary to deviate from the generic information provided in this guide.



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Partial Nephrectomy

About the Procedure

General Information

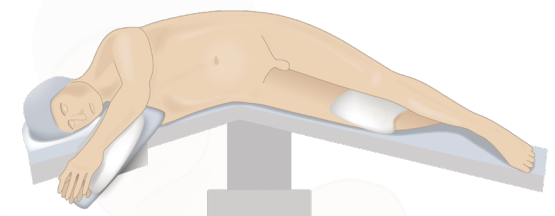
Partial nephrectomy is the treatment of choice for stage pT1 renal cell carcinoma. Compared to radical nephrectomy, it better preserves the kidney function and potentially limits the incidence of cardiovascular diseases in the long term. The surgery can be performed using an open or laparoscopic approach with the same oncological results.^{1,2}

Indications

Main indications: pT1 renal cell carcinoma
Other indications: infection, lithiasis, etc.

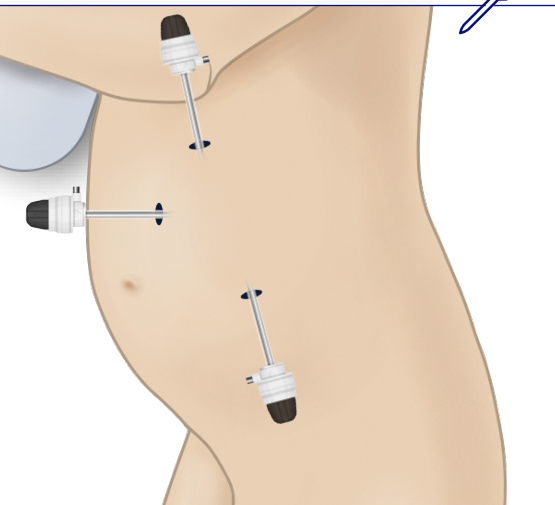
Patient Positioning

Placement in lateral decubitus, with a slight lateral flexion in order to improve the access to the renal bed. The patient's position is secured using an arm holder. The pelvis is surrounded using a drape that will attach the patient to the operating table.



Trocar Positioning

- the camera port is placed on the pararectal line, slightly above the umbilicus. Then the pneumoperitoneum is created.
- The two other ports are placed on each side of the first.





Partial Nephrectomy

Procedure Steps

Advantages of ENDOEYE FLEX 3D

The **flexible tip** of the ENDOEYE FLEX 3D[®] enables the surgeon to observe hidden areas in the anatomy more easily with a greater depth and prevents instruments clashing as the scope can be kept away from the surgeon's working area.

1. Trocar Placement



- ENDOEYE FLEX 3D facilitates trocar placement since the camera will adapt to the morphology of the patient.

2. Colon Release to Liberate Anterior Aspect of Kidney and Ureter



- Improved orientation and dissection with continuous vertical orientation of the view.

3. Identification of the Gonadal Vein and Ureter



- Easier ureter identification due to ability to see rear aspects of any structure without mobilizing it.

4. Lower Pole Lift



- Identification of vascular structures thanks to depth perception.

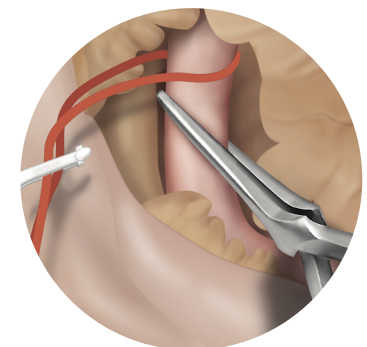
5. Dissection of the Vascular Pedicle



- ENDOEYE FLEX 3D enables the posterior aspect of the vascular pedicle to be easily checked.



- The device facilitates delicate and precise movements, allowing the artery to be easily located and freed.
- Sense of depth enables increased precision.



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6. Identification of the Tumor



- Better vision of posterior aspect of the kidney facilitating tumor localization.



Partial Nephrectomy

Procedure Steps

Advantages of 3D Imaging

The **visual performance** of 3D imaging enables the surgeon to profit from the unbeatable depth perception. This sense of depth leads to better spatial orientation as well as greater speed and enhanced hand-to-eye coordination.

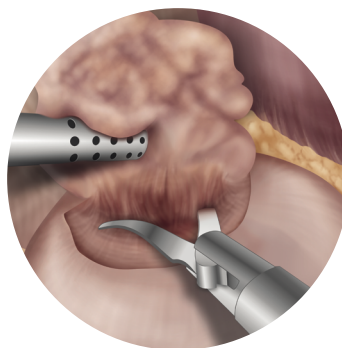
7. Tumor Resection



- Flexible tip enabling change of camera position without changing operating view to avoid instruments clashing.
- Flexibility of camera position supports better understanding of tumor shape and ensures adequate resection of rear end of the tumor.



- Optimal visualization of normal parenchyma and tumor shape.
- Decreased ischemia time because the surgical maneuvers are more precise, allowing faster resection.



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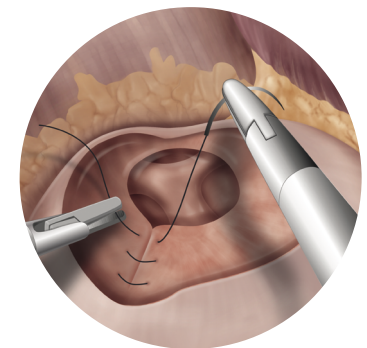
8. Hemostasis and Suture



- Decreased space conflict between instruments and camera leading to improved suction and hemostasis during bleeding.
- Consequently, warm ischemia time is reduced.



- Easier suturing, allowing faster and more precise placement of stitches.
- Direct impact in reducing warm ischemia time.



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9. Tumor Extraction and Closure



- A zenithal view supports the proper inclusion of the specimen into the bag.

Partial Nephrectomy

ENDOEYE FLEX 3D — Deflectable Videoscope in HD 3D

Joystick Handle

- Intuitive and smooth angulation.
- Ergonomic design enables stable and customized handling with both hands or one hand.

Shortened Tip Length

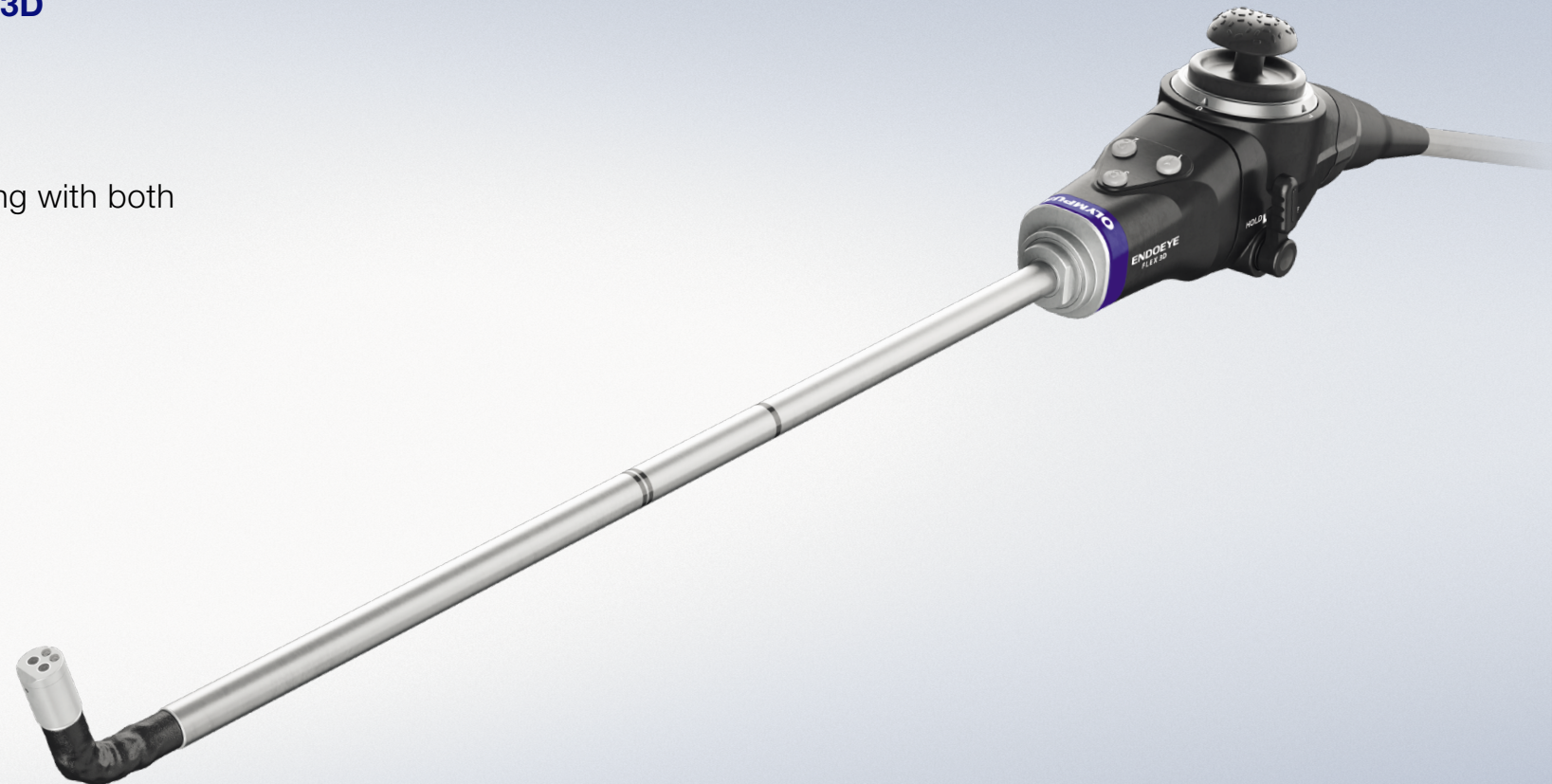
- Better approachability inside narrow cavities.

New Hold-Lever Design

- Comfortable and smooth handling.

Focus-Free

- Greater depth of field.
- The need for manual focusing is eliminated.



References

¹ Al-Aown, A. et al. Laparoscopic radical and partial nephrectomy: The clinical efficacy and acceptance of the techniques. Urol Ann. 2014 Apr-Jun; 6(2): 101-106

² Eskicorapci, S.Y. et al. Laparoscopic radical nephrectomy: The new gold standard surgical treatment for localized renal cell carcinoma. ScientificWorldJournal 2007; 7: 825-836

³ ENDOEYE FLEX 3D (LTF-S300-10-3D Articlenunder: N5781330)

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As medical knowledge is constantly growing, technical modifications or changes of the product design, product specifications, accessories and service offerings may be required.

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