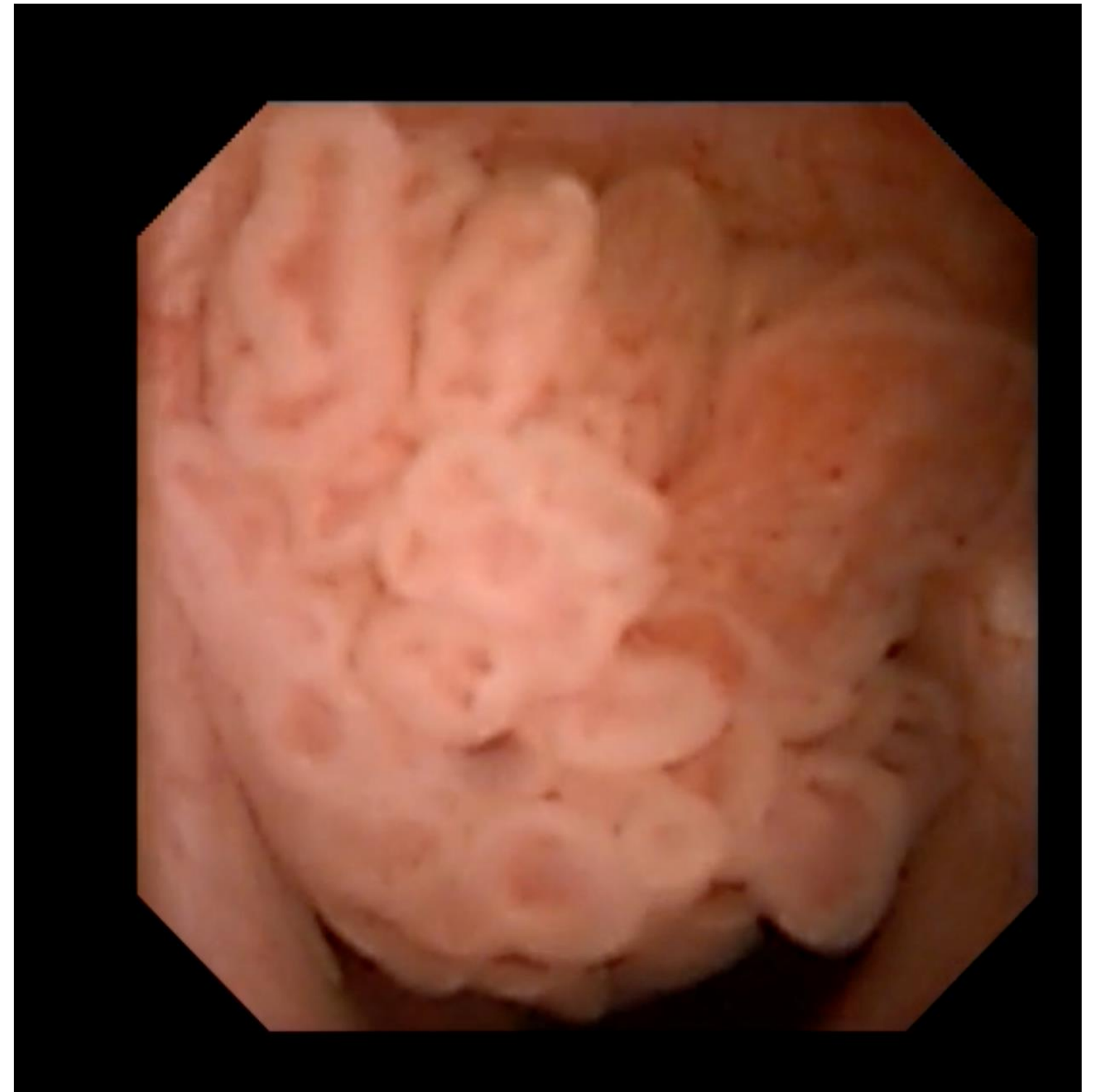


# Tratamiento conservador de tumores de tracto superior ¿dónde estamos?

Alberto Rivero Cárdenes  
H. U. San Roque M.  
H. U. de Burgos



# Introducción

El carcinoma urotelial del tracto superior (**UTUC**) es una enfermedad rara que cuenta con el **5%** de los cánceres uroteliales. (**2/100,000 habitantes**)

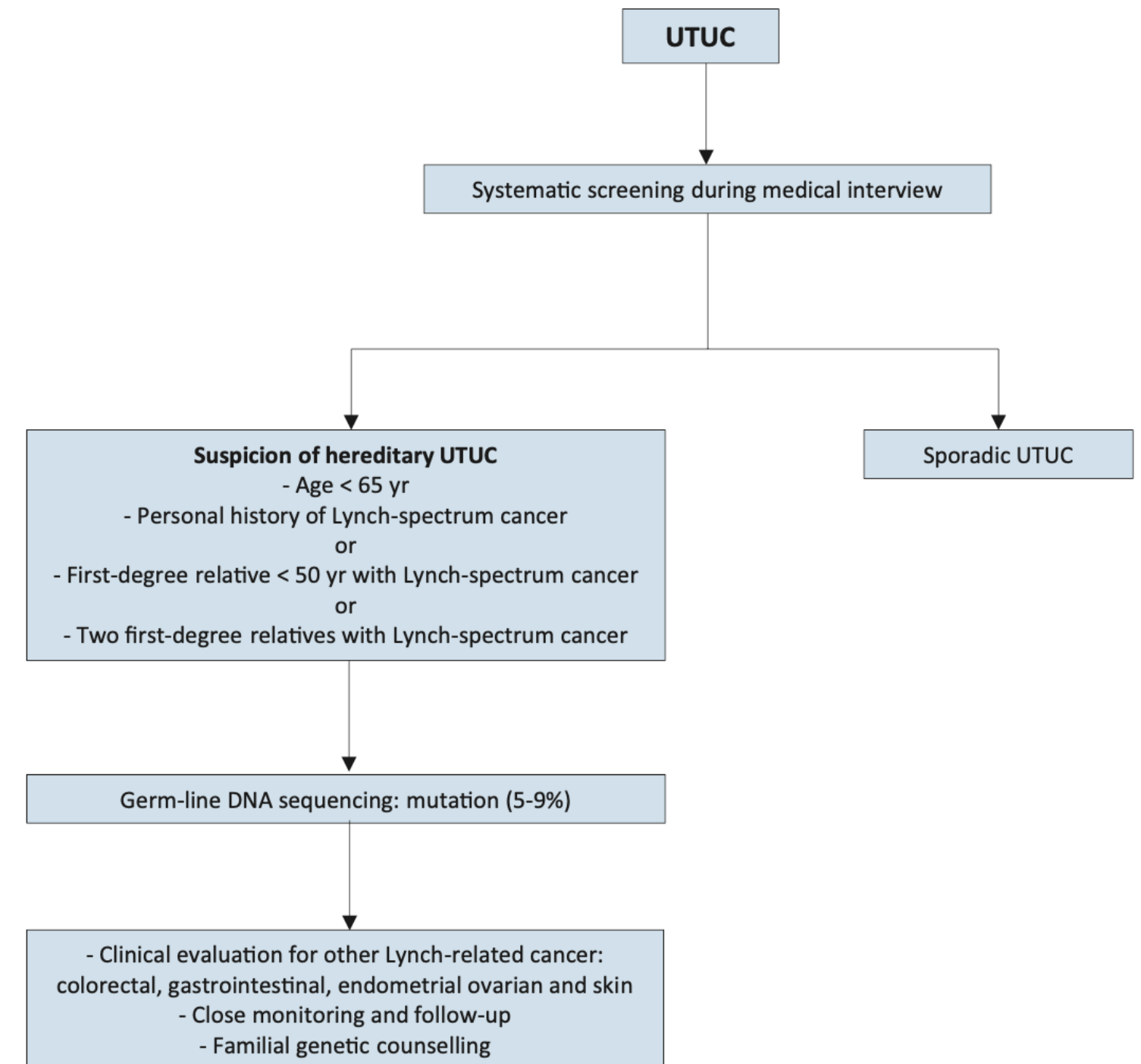
30% UTUC de bajo grado (LG-UTUC) con presentación papilar

17% de los casos se encuentra tumor vesical concurrente

The Amsterdam criteria (Lynch syndrome) - Germline mutations MMR in 9% of patients

Supervivencia específica del cáncer a 5 años <50% y <10% en los estadios pT2-3 y pT4 respectivamente.

Figure 3.1: Selection of patients with UTUC for Lynch syndrome screening during the first medical interview



UTUC = upper urinary tract urothelial carcinoma.

# ¿Por donde empezar?



# Diagnóstico

**Citologías.**

**TAC- UIV**

**Ureteropielografía retrógrada**

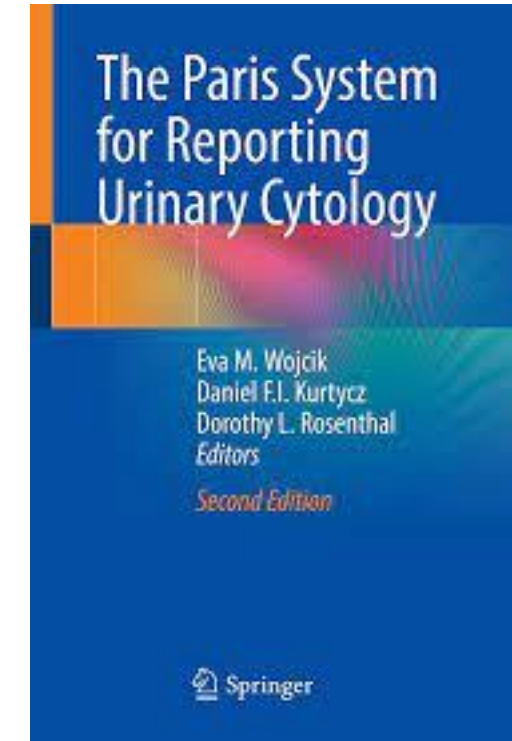
**Ureteroscopia diagnóstica**

# Diagnostico: Citologia



Urinary cytology has a poor performance for predicting invasive or high-grade upper-tract urothelial carcinoma

Jamie Messer, Shahrokh F. Shariat\*, James C. Brien, Michael P. Herman\*, Casey K. Ng\*, Douglas S. Scherr\*, Benjamin Scoll<sup>†</sup>, Robert G. Uzzo<sup>†</sup>, Mark Wille<sup>‡</sup>, Scott E. Eggener<sup>‡</sup>, Gary Steinberg<sup>‡</sup>, John D. Terrell<sup>§</sup>, Steven M. Lucas<sup>§</sup>, Yair Lotan<sup>§</sup>, Stephen A. Boorjian<sup>†</sup> and Jay D. Raman



311 pacientes

- **Citologia vesical**  
Sensibilidad 56% PPV 54%
- **Citologia selectiva**  
Sensibilidad 71% PPV 53%

	Source of urine cytology	
	Bladder plus Ureteral (n= 199), % (95% CI)	Selective ureteral (n= 112), % (95% CI)
High-grade disease		
Sensitivity	56 (53–61)	71 (67–77)
Positive predictive value	54 (51–59)	53 (50–58)
Muscle-invasive disease		
Sensitivity	62 (56–69)	78 (70–86)
Positive predictive value	44 (39–49)	46 (41–51)

# Diagnostico: TAC

Recommendations	Strength rating
Perform a urethrocytoscopy to rule out bladder tumour.	Strong
Perform a computed tomography (CT) urography for diagnosis and staging.	Strong
Use diagnostic ureteroscopy (preferably without biopsy) if imaging and/or voided urine cytology are not sufficient for the diagnosis and/or risk-stratification of patients suspected to have UTUC.	Strong
Magnetic resonance urography or <sup>18</sup> F-Fluorodeoxglucose positron emission tomography/CT (to assess [nodal] metastasis) may be used when CT is contra-indicated.	Weak

# Diagnóstico

**1. Proyecciones.**

**2. Reconstrucción 3-D**

**3. UTUC pelvis renal**

**4. Procesos benignos**

Pólipo fibroepitelial

Pielouretiritis quística

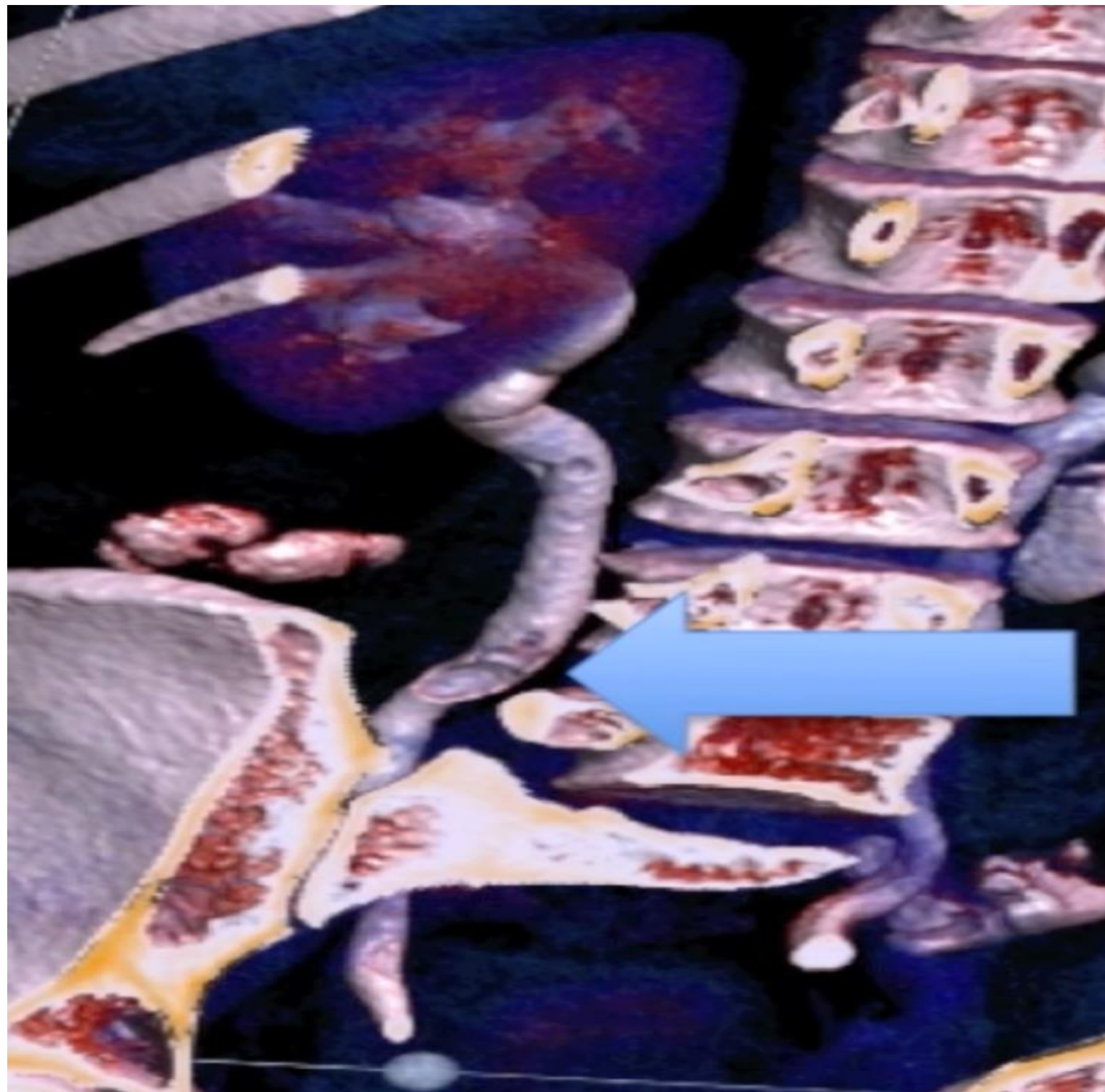
Papila hipertrofica

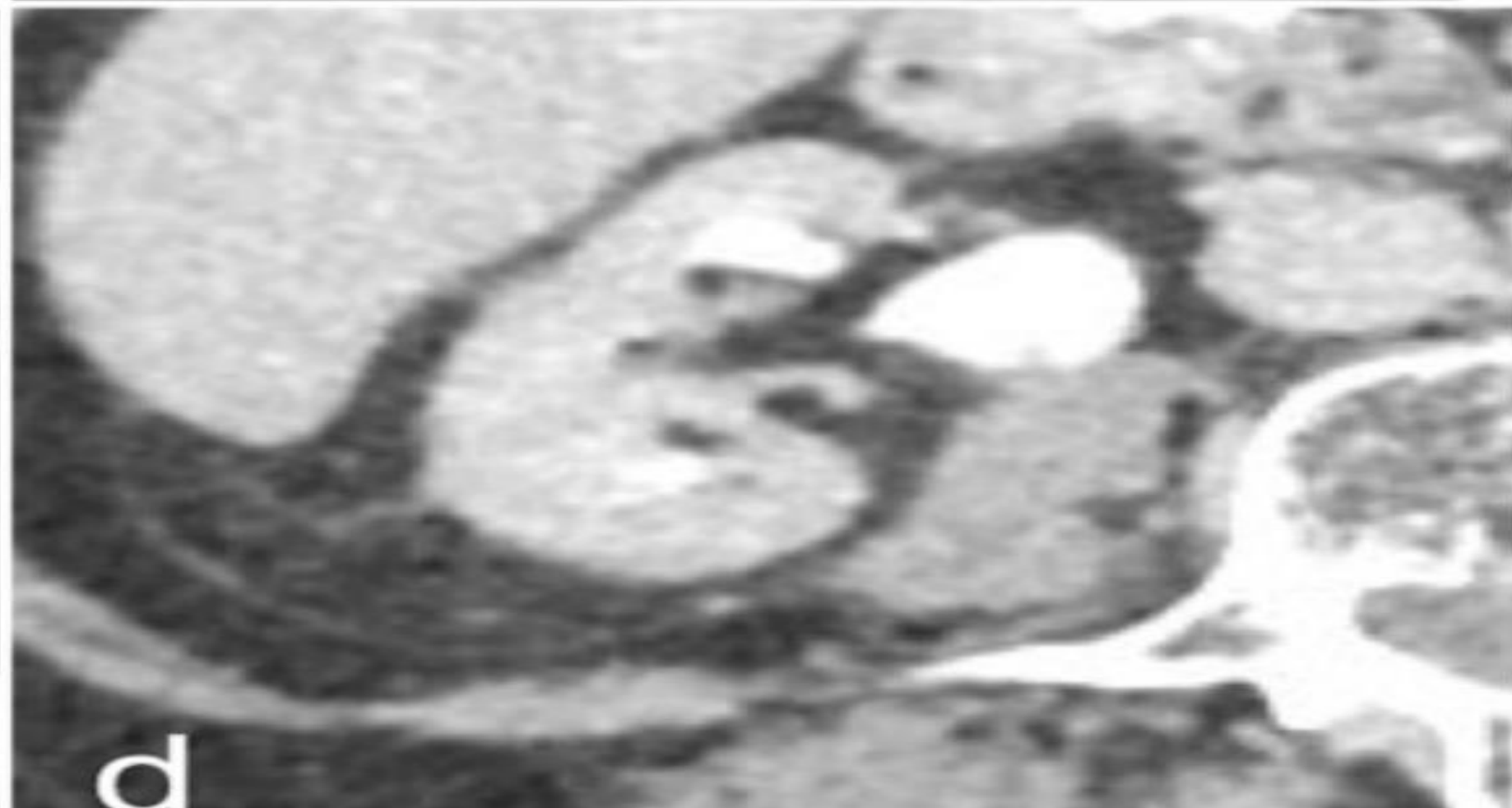
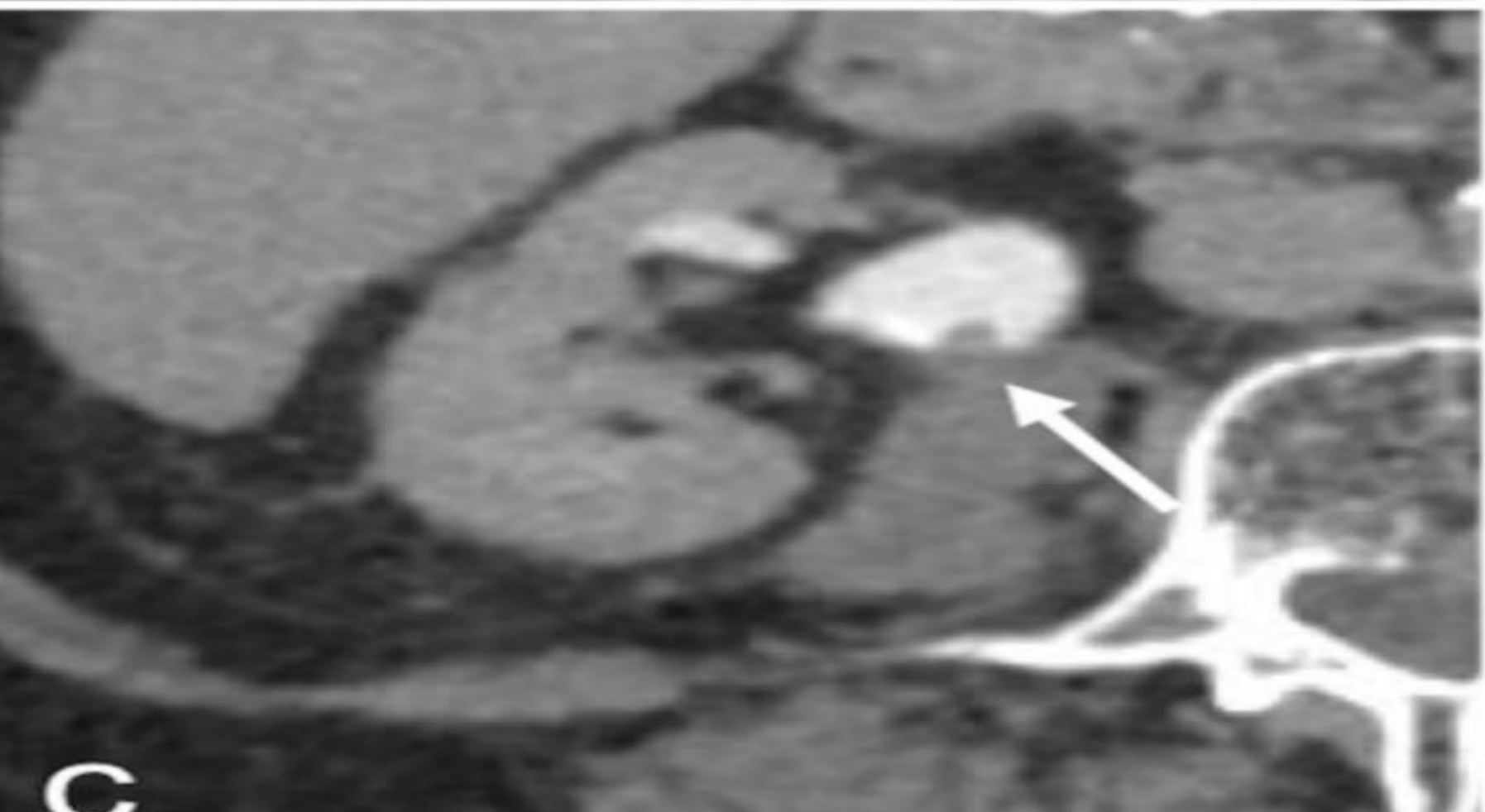
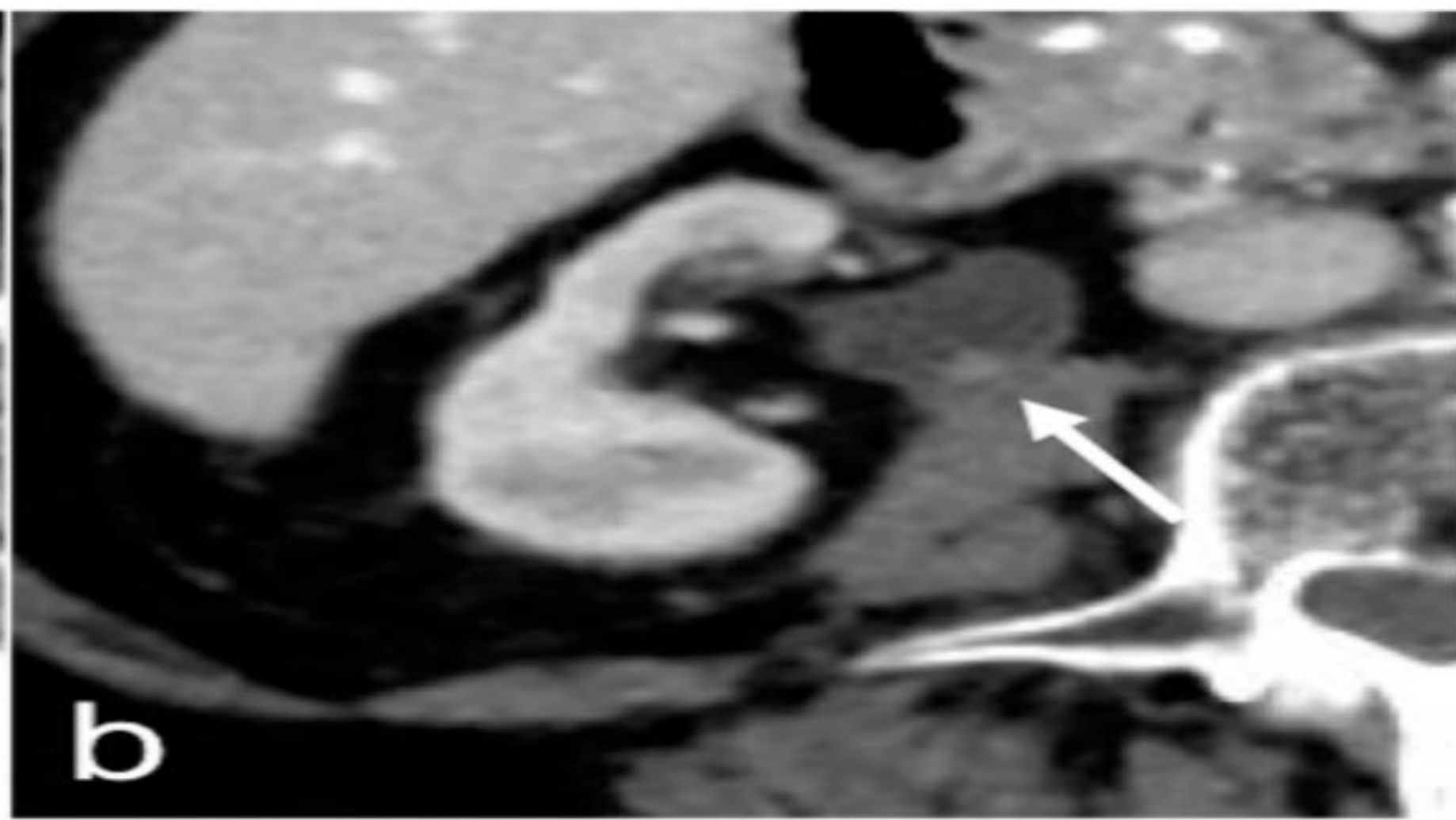
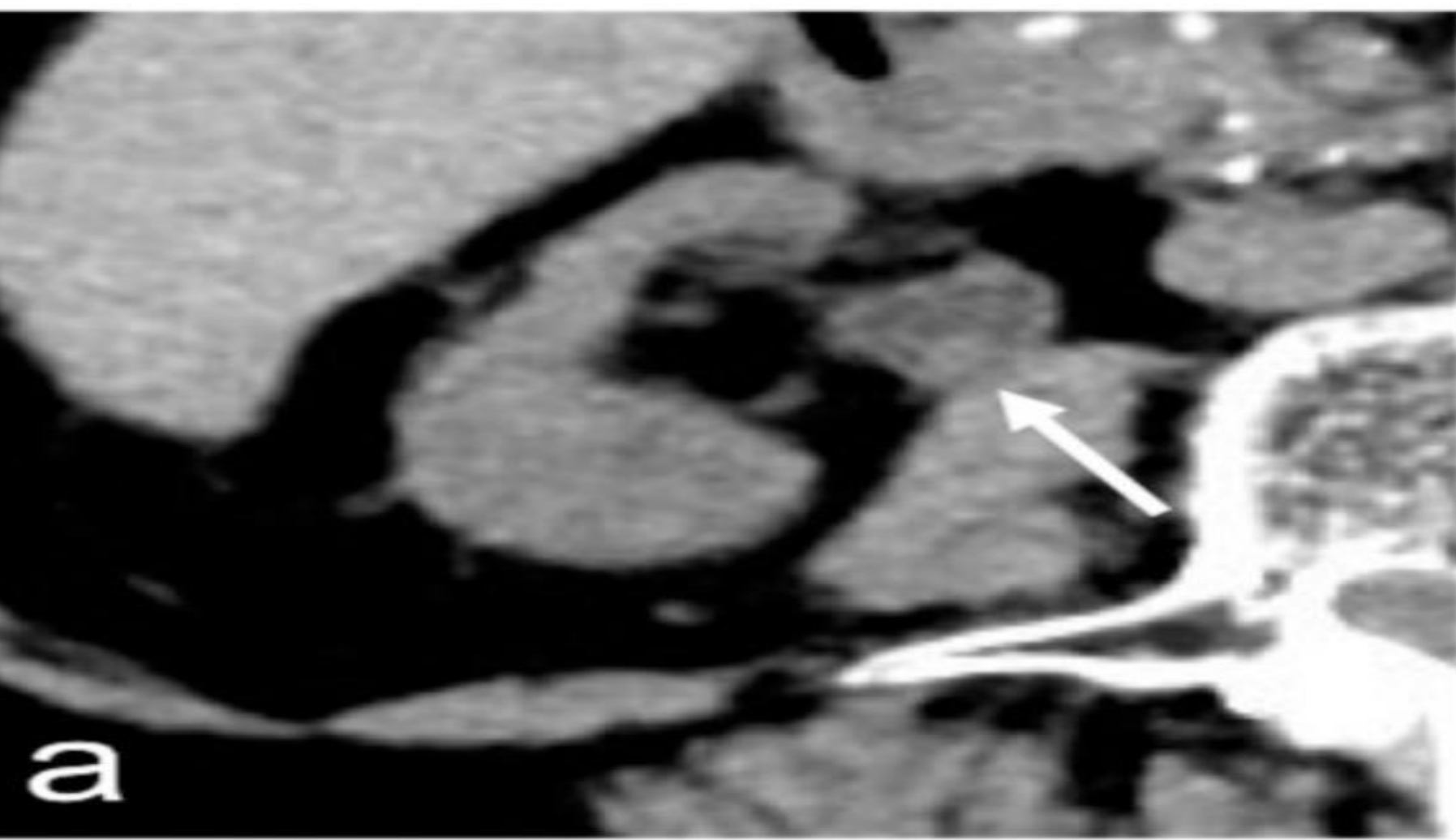
Coágulo

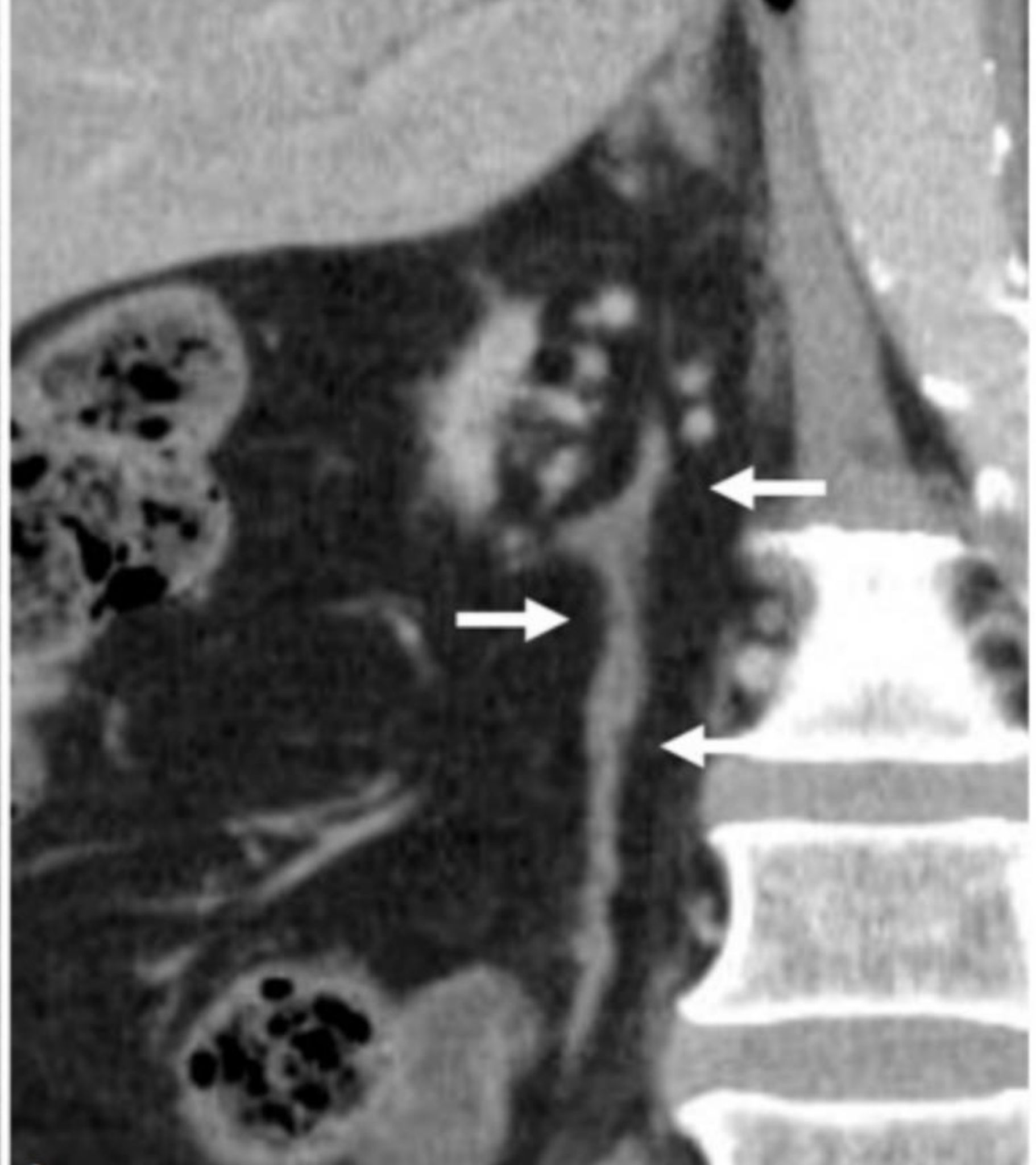
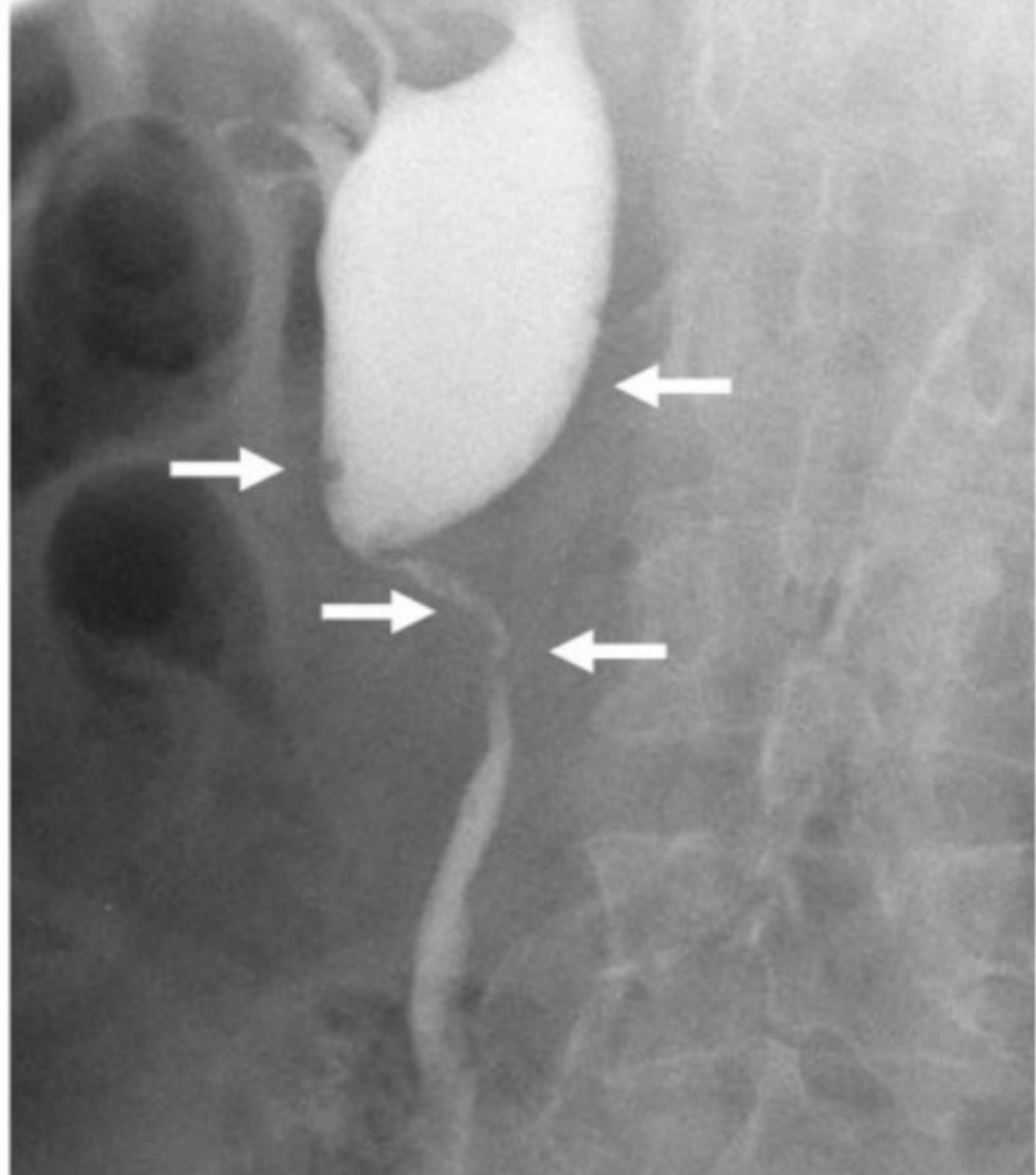


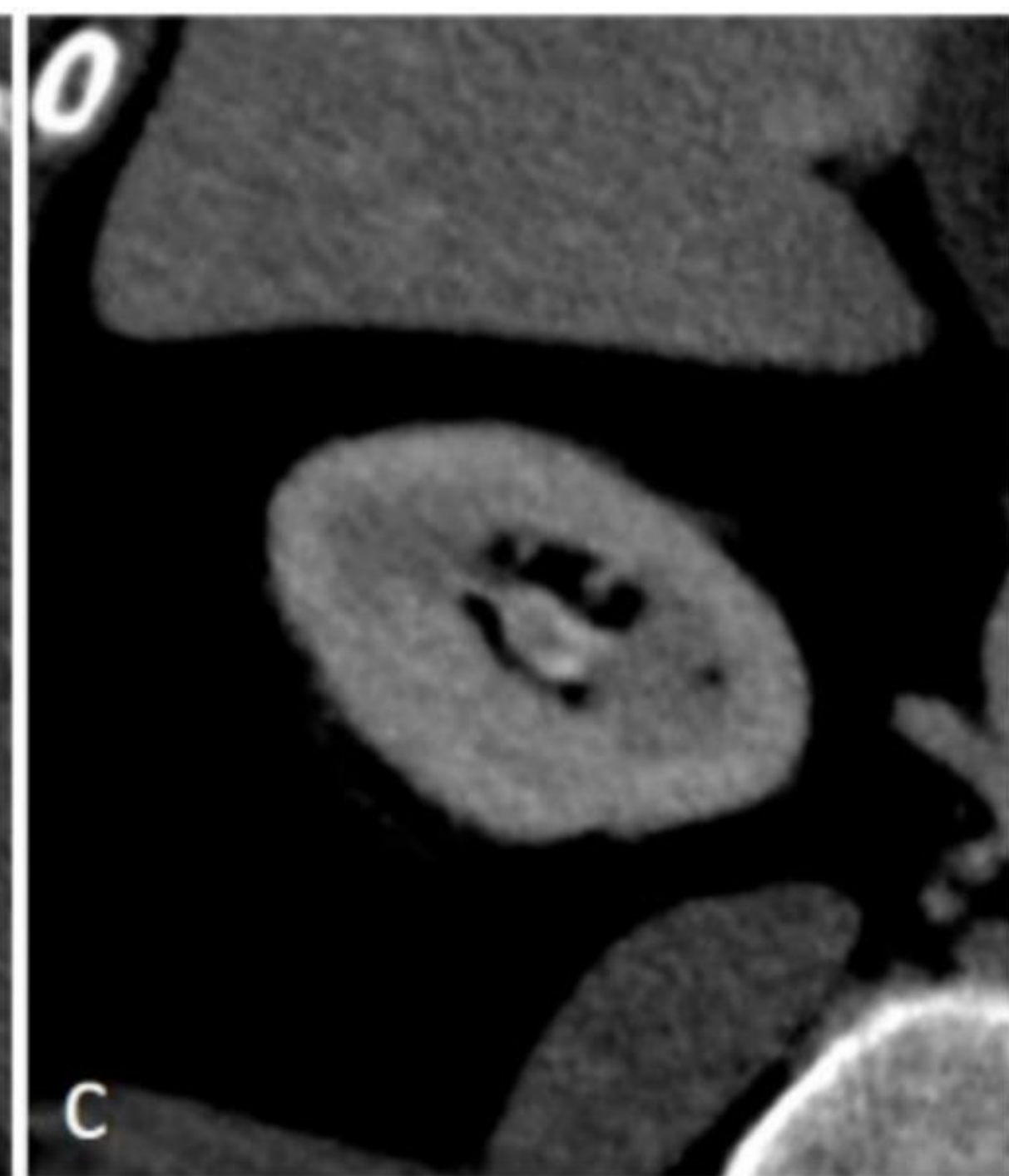
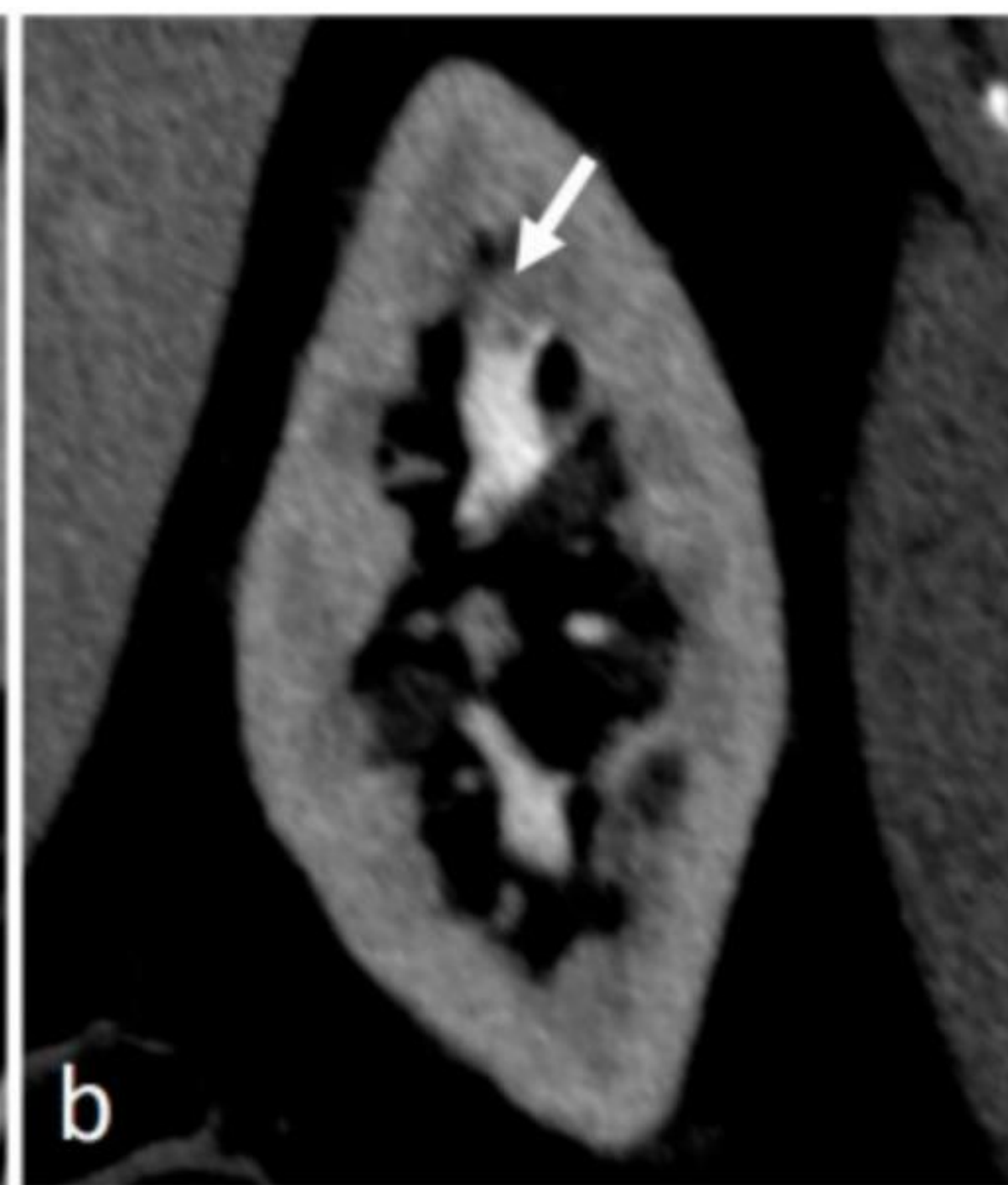


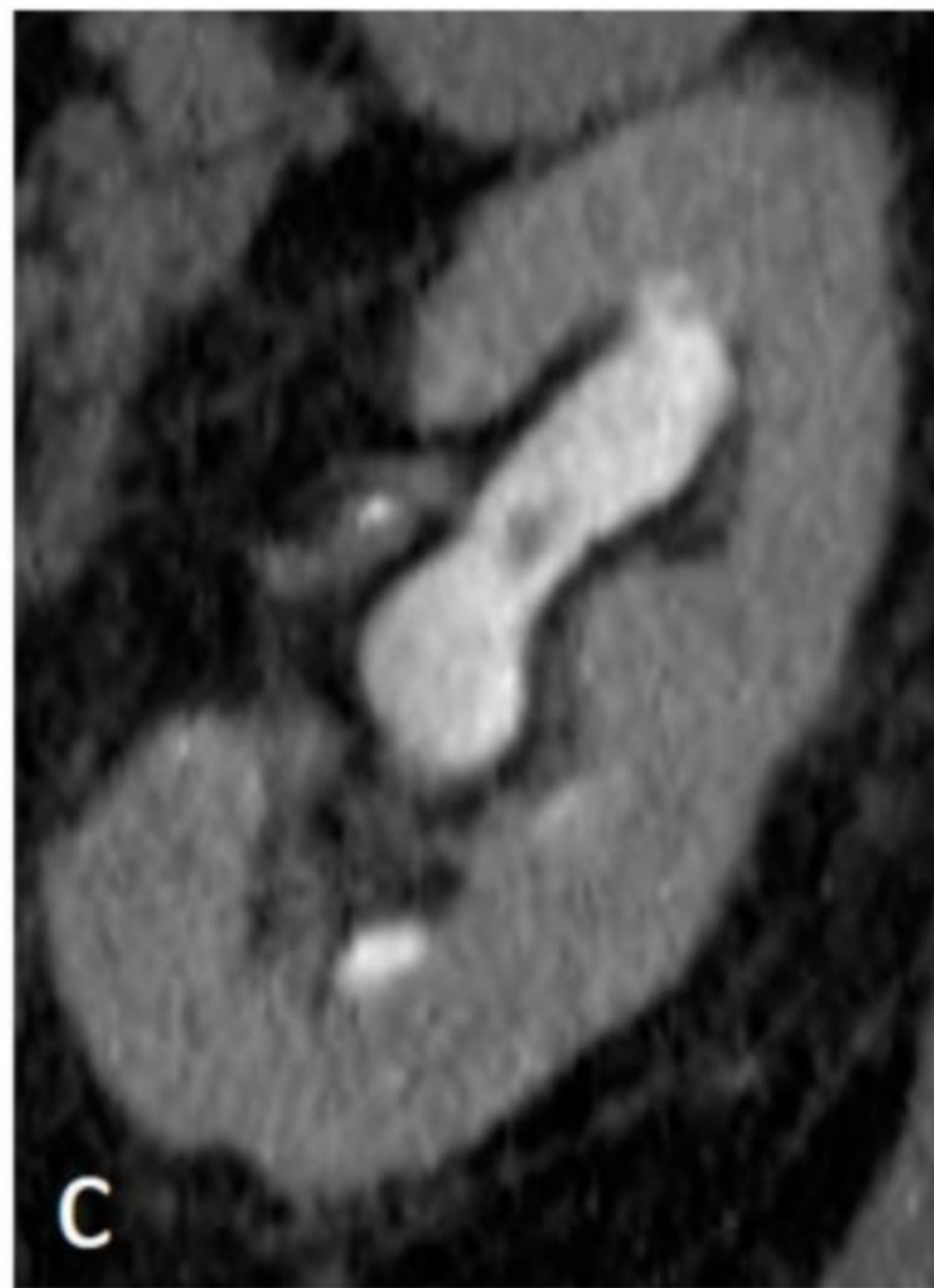
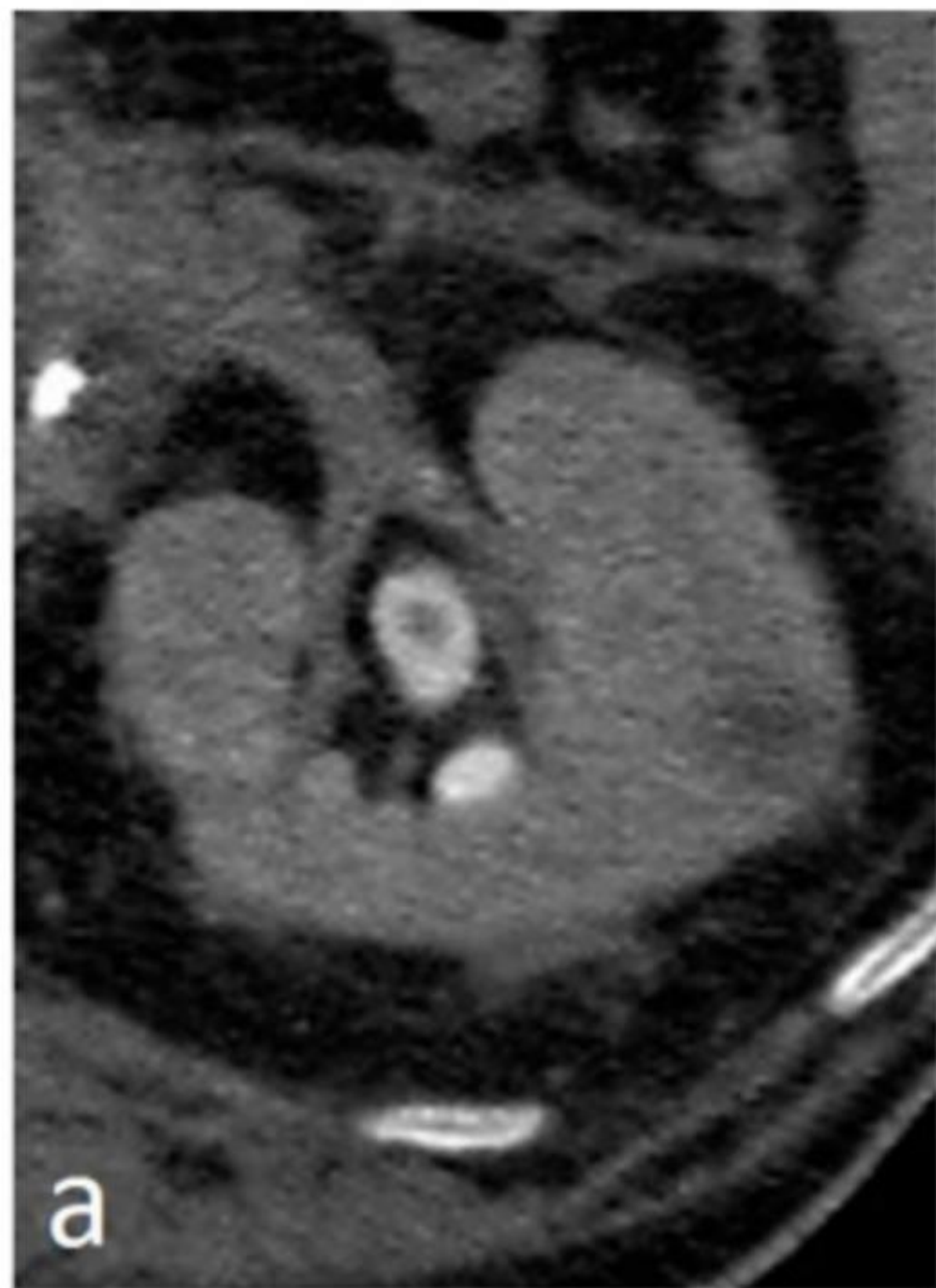


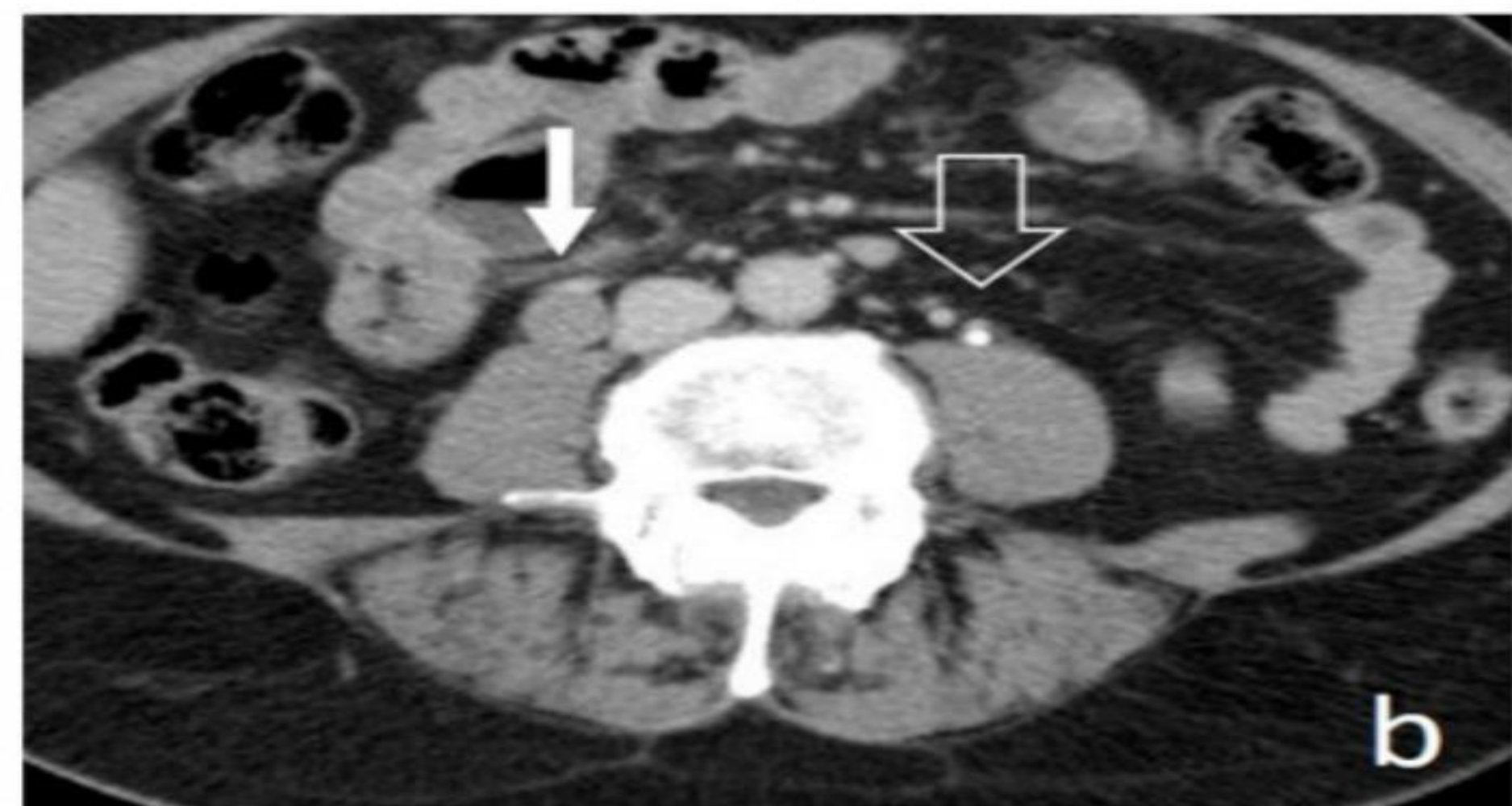














# Diagnostico: URS

Recommendations	Strength rating
Perform a urethroscopy to rule out bladder tumour.	Strong
Perform a computed tomography (CT) urography for diagnosis and staging.	Strong
Use diagnostic ureteroscopy (preferably without biopsy) if imaging and/or voided urine cytology are not sufficient for the diagnosis and/or risk-stratification of patients suspected to have UTUC.	Strong
Magnetic resonance urography or <sup>18</sup> F-Fluorodeoxyglucose positron emission tomography/CT (to assess [nodal] metastasis) may be used when CT is contra-indicated.	Weak

## **The Impact of Ureteroscopy following Computerized Tomography Urography in the Management of Upper Tract Urothelial Carcinoma**



# Diagnostico: URS

## The Impact of Ureteroscopy following Computerized Tomography Urography in the Management of Upper Tract Urothelial Carcinoma

[Andrea Gallioli](#) ✉, [Angelo Territo](#), [Asier Mercadé](#), [Matteo Fontana](#), [Romain Boissier](#), [Josep Maria Gaya](#), [Esteban Emiliani](#), [Antoni Sánchez-Puy](#), [Maria José Martínez](#), [Joan Palou](#), and [Alberto Breda](#)

If an indication was given on the basis of positive/negative CT without performing a URS, it would have lead us to do:

- **28/76 (37%) unnecessary nephroureterectomy**
- **20/87 (23%) patients would have not be submitted to nephroureterectomy/ureterectomy**

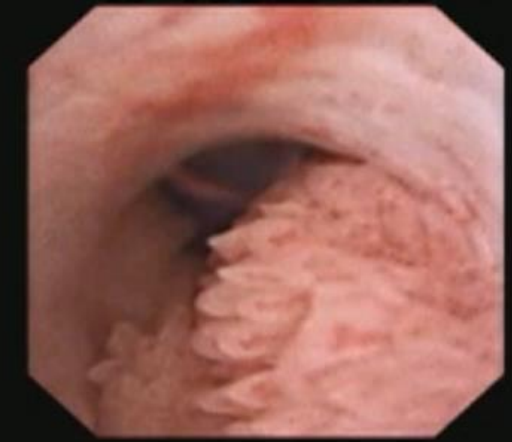


**URF-V**  
Flexible Video  
Ureteroscope



Image1S by  
**STORZ**  
KARL STORZ—ENDOSKOPE

NBI imaging by



ispies  
CLARA-DROMA

# Microscopio Confocal



Urothelial Cancer

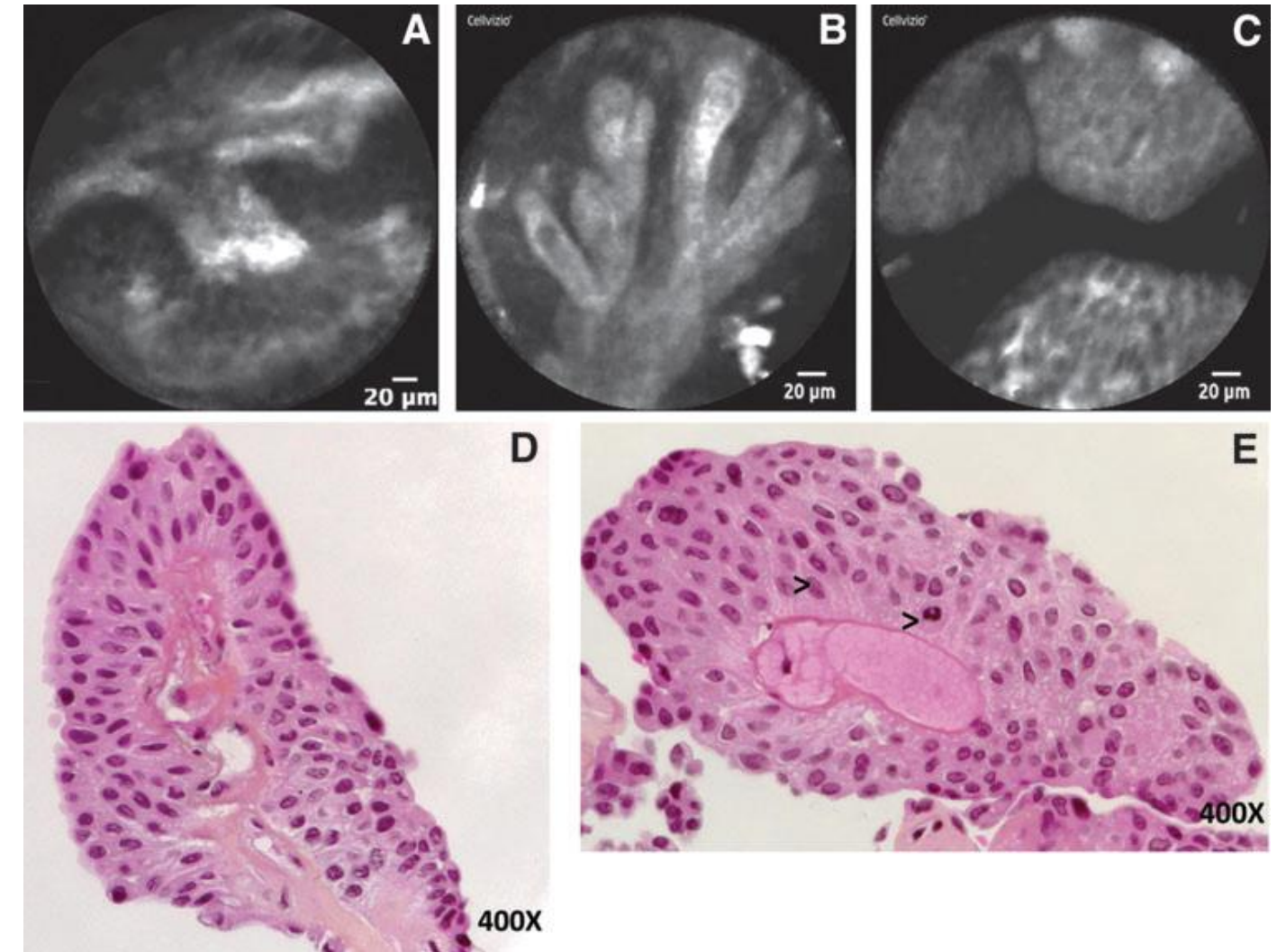
## Correlation Between Confocal Laser Endomicroscopy (Cellvizio®) and Histological Grading of Upper Tract Urothelial Carcinoma: A Step Forward for a Better Selection of Patients Suitable for Conservative Management

Alberto Breda<sup>a,\*</sup>, Angelo Territo<sup>a</sup>, Andrea Guttilla<sup>a,b</sup>, Francesco Sanguedolce<sup>a</sup>,  
Martina Manfredi<sup>a,c</sup>, Luigi Quaresima<sup>a</sup>, Jose M. Gaya<sup>a</sup>, Ferran Algaba<sup>d</sup>, Joan Palou<sup>a</sup>,  
Humberto Villavicencio<sup>a</sup>

CLE aplicado en 14 pacientes  
con diferente anatomía y localización de la lesión

**85% concordancia** con la patología final

**Conclusiones:** CLE puede seleccionar mejor a los pacientes para someterse a un tratamiento conservador frente a un tratamiento radical



# Tratamiento

Manejo Endoscopico (múltiples técnicas)

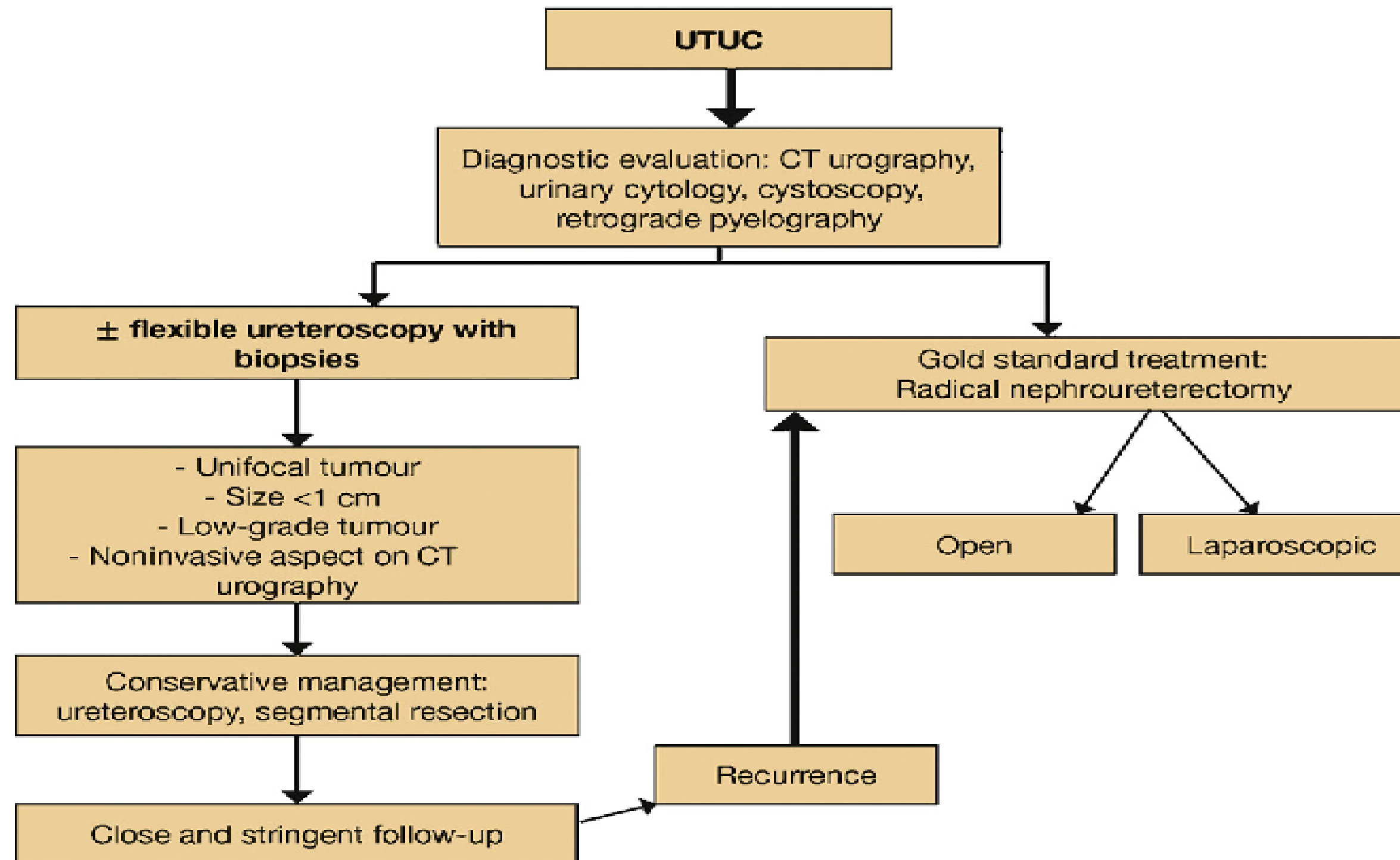


Nefroureterectomía Radical (NFU)

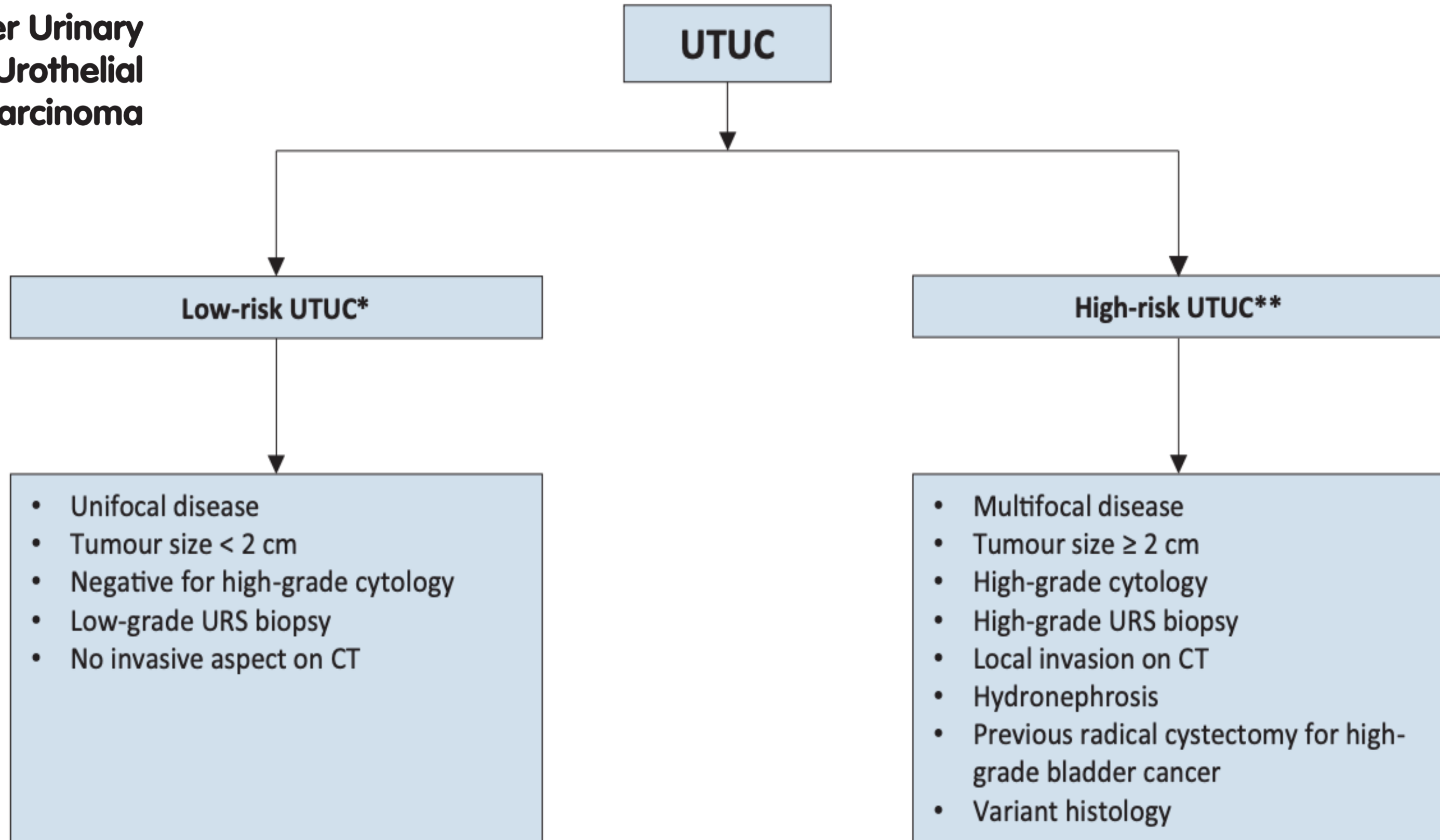


# Tratamiento

## Manejo conservador



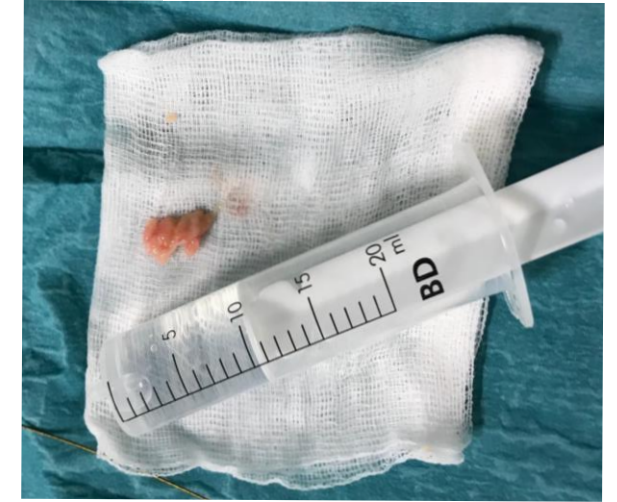
**EAU Guidelines on  
Upper Urinary  
Tract Urothelial  
Carcinoma**



¿Podemos hacer algo más?



# Estadíaje/biopsia



El TNM preoperatorio también es importante

Grado histológico fuertemente asociado con el estadio patológico.

**Obtener una biopsia que permita con ciertas garantías diferenciar la invasión o no de capas superficiales (Ta-T1)**

Una **correcta biopsia** también permite descartar de formaciones benignas o inflamatorias.

~~Fulguración de grandes tumoraciones.~~



# Objetivos



- **Diagnostico adecuado** (citologías, pruebas de imagen, rentabilidad de las maniobras en quirófano)
- **Selección** casos para manejo conservador.
- **Técnica y formación adecuada** que no desvirtúe dicho manejo.
- Evitar y prevenir las **recidivas**.
- **Seguimiento** adecuado.

Alta tasa de recurrencia de UTUC manejado endoscópicamente.

Preservación renal alta (20 % de los pacientes pasan a RNU).

Para enfermedades de grado bajo, correctamente seleccionadas y manejadas, la supervivencia equivalente a RNU.

Se desaconseja manejo conservador en alto grado.

# ¿Que herramientas tenemos?



# Conocer el instrumental y el abordaje

## Ureter

Ureteroscopia retrógrada o anterógrada: Láser, cestilla, pinza de biopsia.

Resección segmentaria. Tumores circunferenciales, riesgo de desinserción, estenosis postoperatoria.

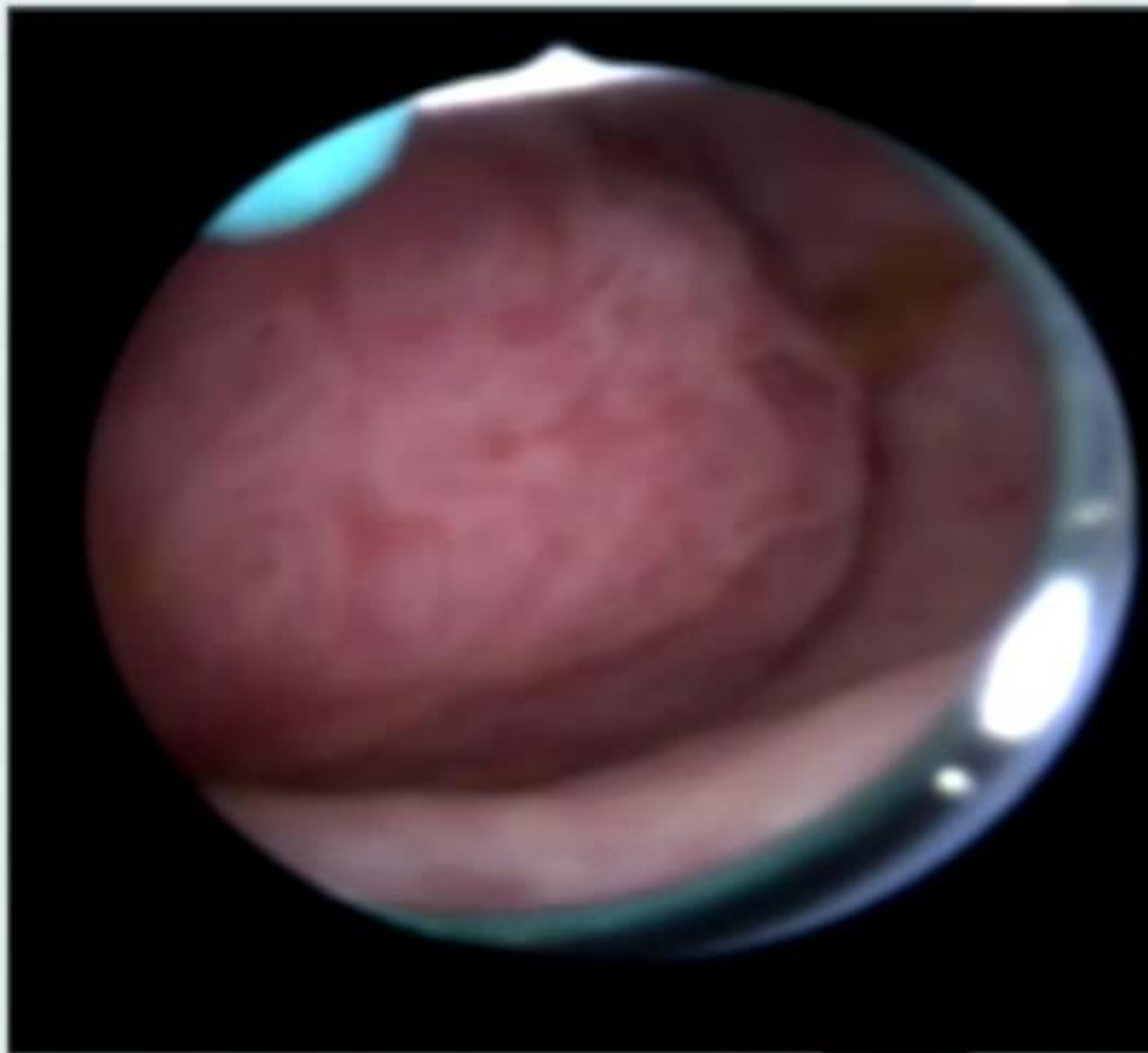
## Riñón

Ureteroscopia flexible (láser, cestillas) tumores menor tamaño, papilares, múltiples.

Acceso percutaneo: Mayor tamaño, mayor pieza de biopsia, menor recidiva vesical?







¿Riesgo de diseminación  
percutánea?



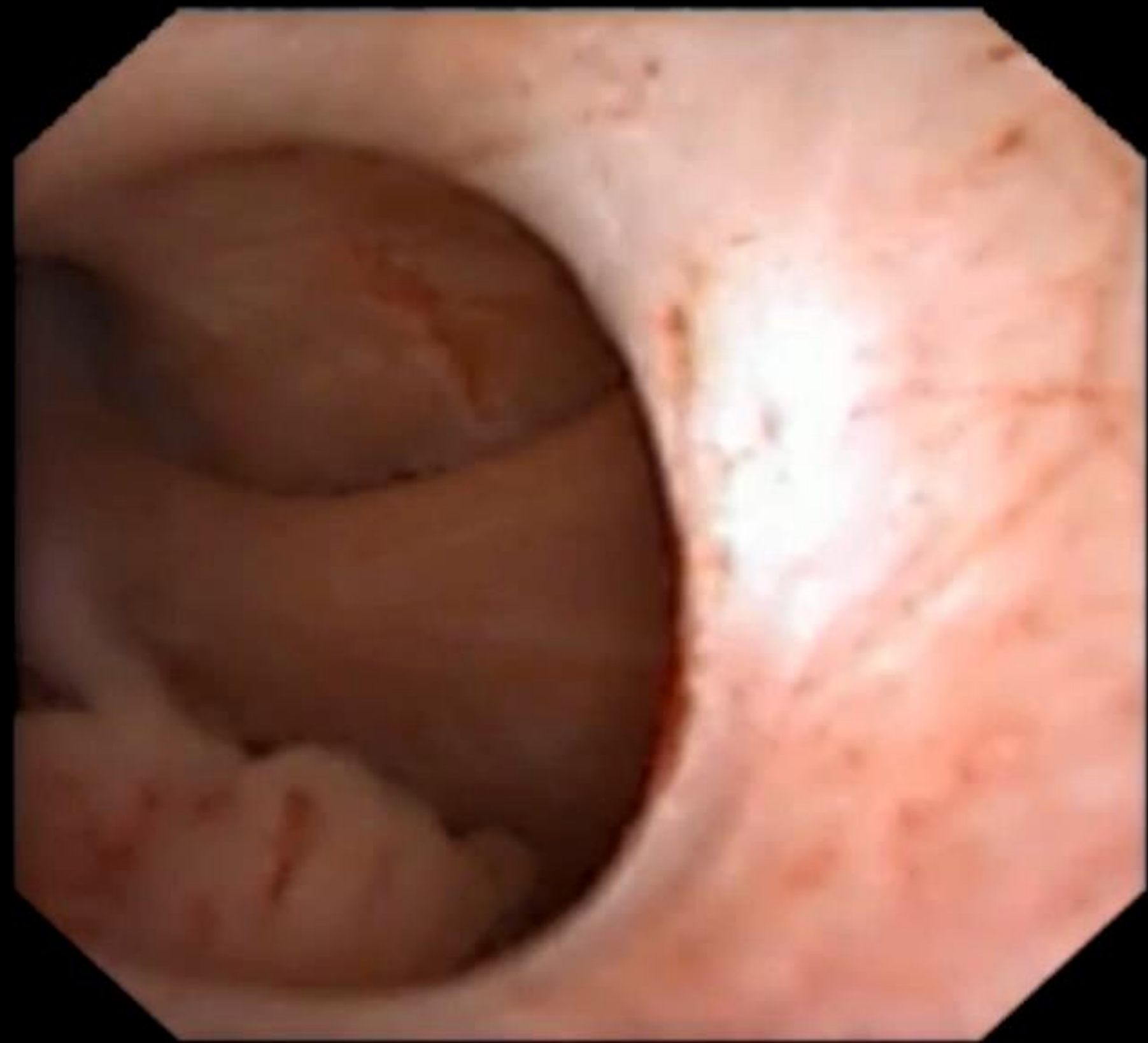
# Abordaje percutaneo

La **diseminación** tumoral: circulación **sanguínea** o **linfática**, o del **implante** de células tumorales.

**Muy baja incidencia de diseminación tumoral tras la resección endoscópica por vía percutánea.**



Se recomienda la instilación anterógrada de BCG o MMC en el tracto superior después del tratamiento endoscópico

**Ensayo OLYMPUS 4** (fase 3), eficacia, seguridad y tolerabilidad de UGN-101 (un gel térmico inverso que contiene mitomicina) en pacientes de bajo grado.



# Resultados



- 10 años
- 54 casos  23 Conservadora
- 4 Progresión/infraestadiaje/alta carga tumoral (NFU)
- Seguimiento 3 - 6 -12 meses
- Recidivas  30% tras mitomicin intraoperatorio

# Controversias

Recurrencias

Secuelas

Seguimiento...

# Recurencia post-URS

## Impact of diagnostic ureteroscopy on intravesical recurrence in patients undergoing radical nephroureterectomy for upper tract urothelial cancer: a systematic review and meta-analysis<sup>1</sup>

Michele Marchioni\*, Giulia Primiceri\*, Luca Cindolo<sup>†</sup>, Lance J. Hampton<sup>‡§</sup>, Mayer B. Grob<sup>‡§</sup>, Georgi Guruli<sup>‡§</sup>, Luigi Schips<sup>†</sup>, Shahrokh F. Shariat<sup>¶</sup> and Riccardo Autorino<sup>‡§</sup>

*\*Department of Urology, SS Annunziata Hospital, 'G. D'Annunzio' University of Chieti, Chieti, Italy, <sup>†</sup>Department of Urology, ASL Abruzzo 2, Chieti, Italy, <sup>‡</sup>Division of Urology, Virginia Commonwealth University, Richmond, VA, USA, <sup>§</sup>Division of Urology, McGuire Veterans Affairs Hospital, Richmond, VA, USA, and <sup>¶</sup>Department of Urology, Comprehensive Cancer Centre, Medical University of Vienna, Vienna, Austria*

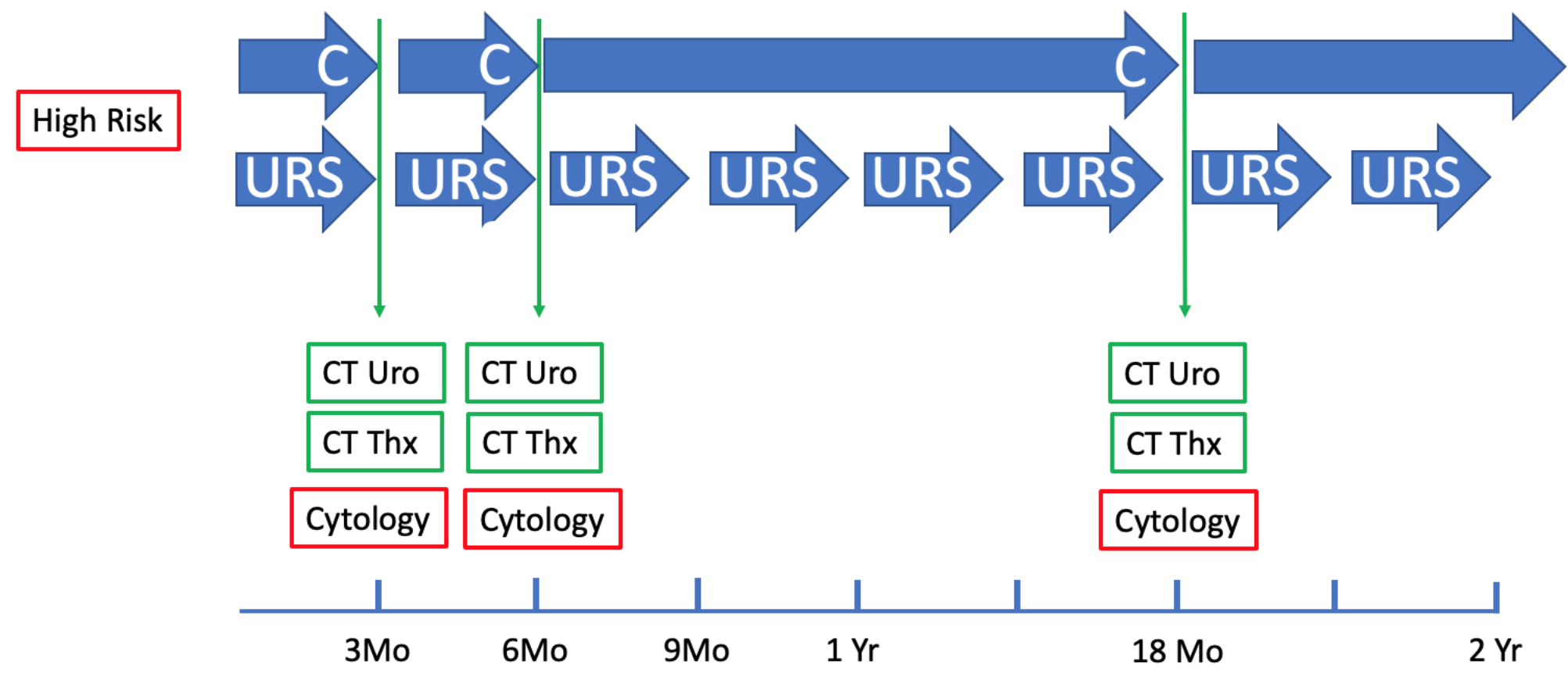
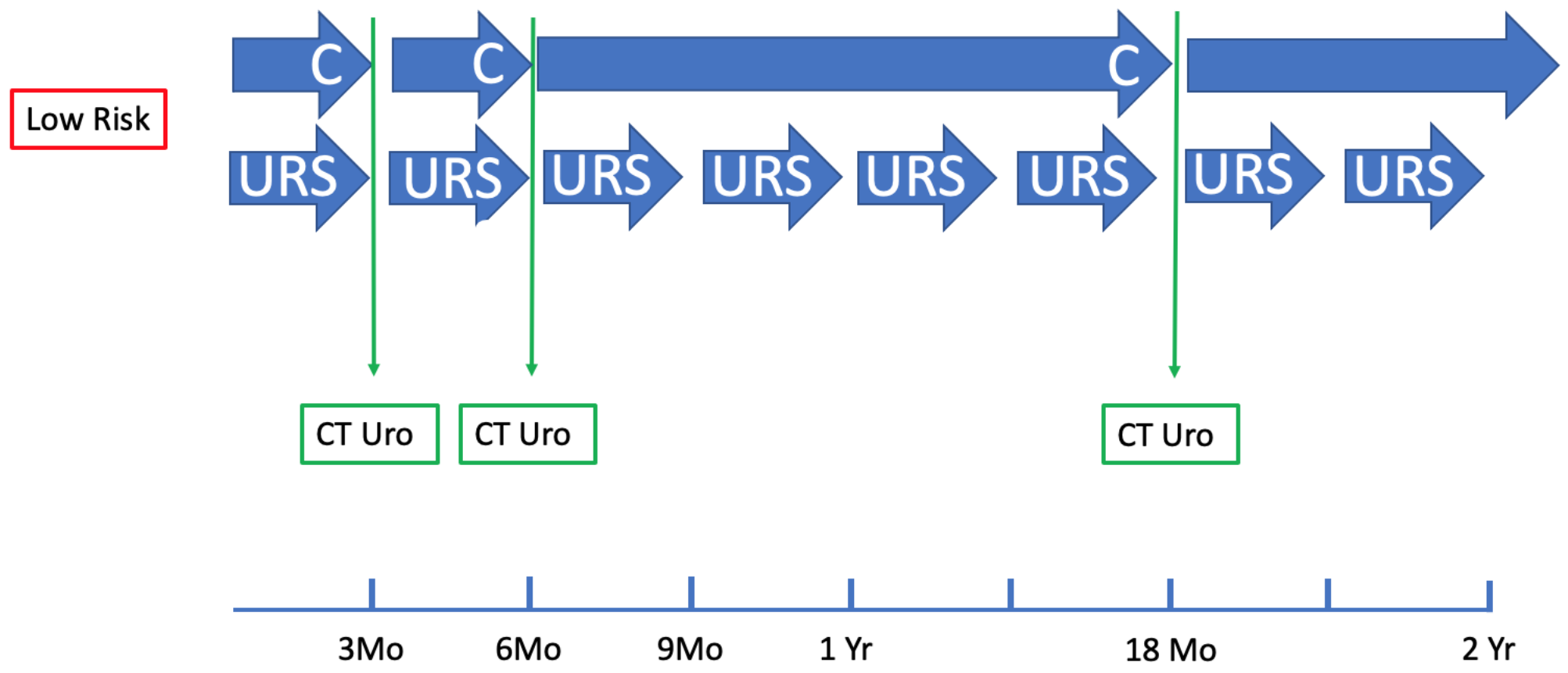
- Systematic review on 7 studies
- 765 patients who underwent diagnostic URS prior to RNFU
- Bladder recurrence rate:
  - With diagnostic URS: **39.2% - 60.7%**
  - Without diagnostic URS **16.7% - 46%**



# Follow-Up

Compromiso del paciente, coste y morbilidad

## AFTER Conservative Management



# Mensajes para guardar



Técnica precisa. Optimización de biopsia.

Estrecho seguimiento.

Centros de referencia.

Aumentar evidencia científica (Estudios multicéntricos).

- Long-term endoscopic management of upper tract urothelial carcinoma: 20-year single-centre experience. Mark L Cutress<sup>1</sup>, Grant D Stewart, Paimaun Zakikhani, Simon Phipps, Ben G Thomas, David A Tolley
- Long-term endoscopic management of upper tract urothelial carcinoma: 20-year single-centre experience. Mark L Cutress<sup>1</sup>, Grant D Stewart, Paimaun Zakikhani, Simon Phipps, Ben G Thomas, David A Tolley
- Ureteroscopic and percutaneous management of upper tract urothelial carcinoma (UTUC): systematic review. Mark L Cutress<sup>1</sup>, Grant D Stewart, Paimaun Zakikhani, Simon Phipps, Ben G Thomas, David A Tolley
- <https://uroweb.org/guidelines/upper-urinary-tract-urothelial-cell-carcinoma/chapter/staging-and-classification-systems>
- CT Urography Findings of Upper Urinary Tract Carcinoma and Its Mimickers: A Pictorial Review. Paola Martingano<sup>1</sup>, Marco F M Cavallaro<sup>2</sup>, Alessandro M Bozzato<sup>3</sup>, Elisa Baratella<sup>3</sup>, Maria A Cova
- Upper urinary tract urothelial tumor. Antegrade percutaneous management] Pilar Pérez Sanz<sup>1</sup>, Ricardo García Navas, Enrique García Cuerpo, Francisco Lovaco Castellano
- A review of upper urinary tract cytology performance before and after the implementation of The Paris System. M. Lisa Zhang MD, Yurina Miki MBBS, Jen-Fan Hang MD, Manjiv Vohra MS, MBA, Stephen Peyton MBBS, Patrick J. McIntire MD, Christopher J. VandenBussche





Muchas Gracias