



비뇨의학과 수술의 이해와 감염 감시

김 정 권

분당서울대학교병원 비뇨의학과

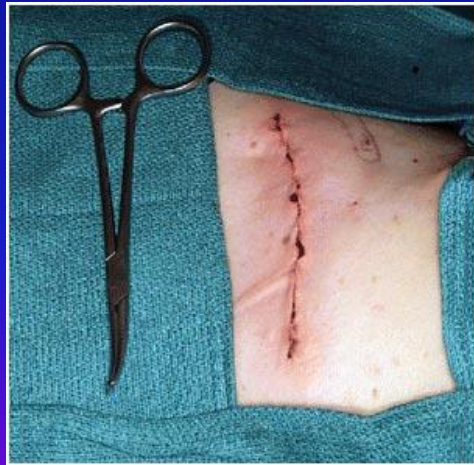
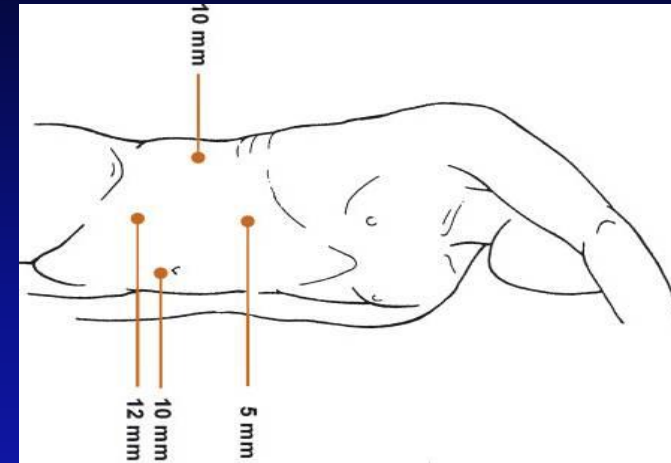
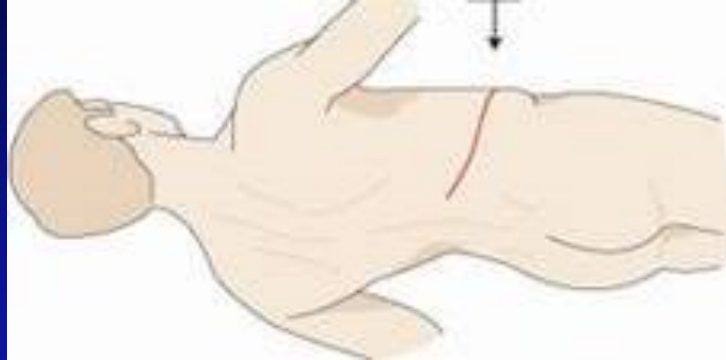


Contents

- Introduction of Robotic surgery
- Partial & Radical Nephrectomy
- Radical prostatectomy
- Radical cystectomy (ileal conduit & neobladder)
- Wound problems in current urologic surgery

Robotic surgery

- Surgery (Minimally invasive)



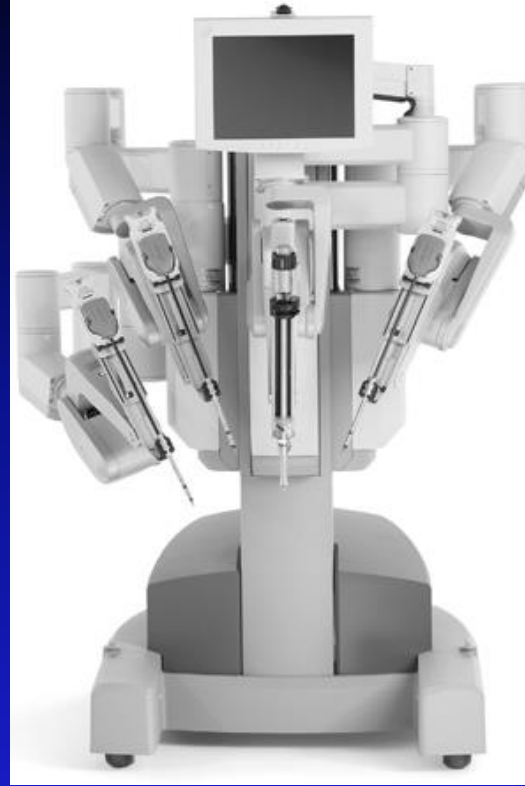
Open surgery

VS.



Laparoscopic & robotic

Robotic surgery

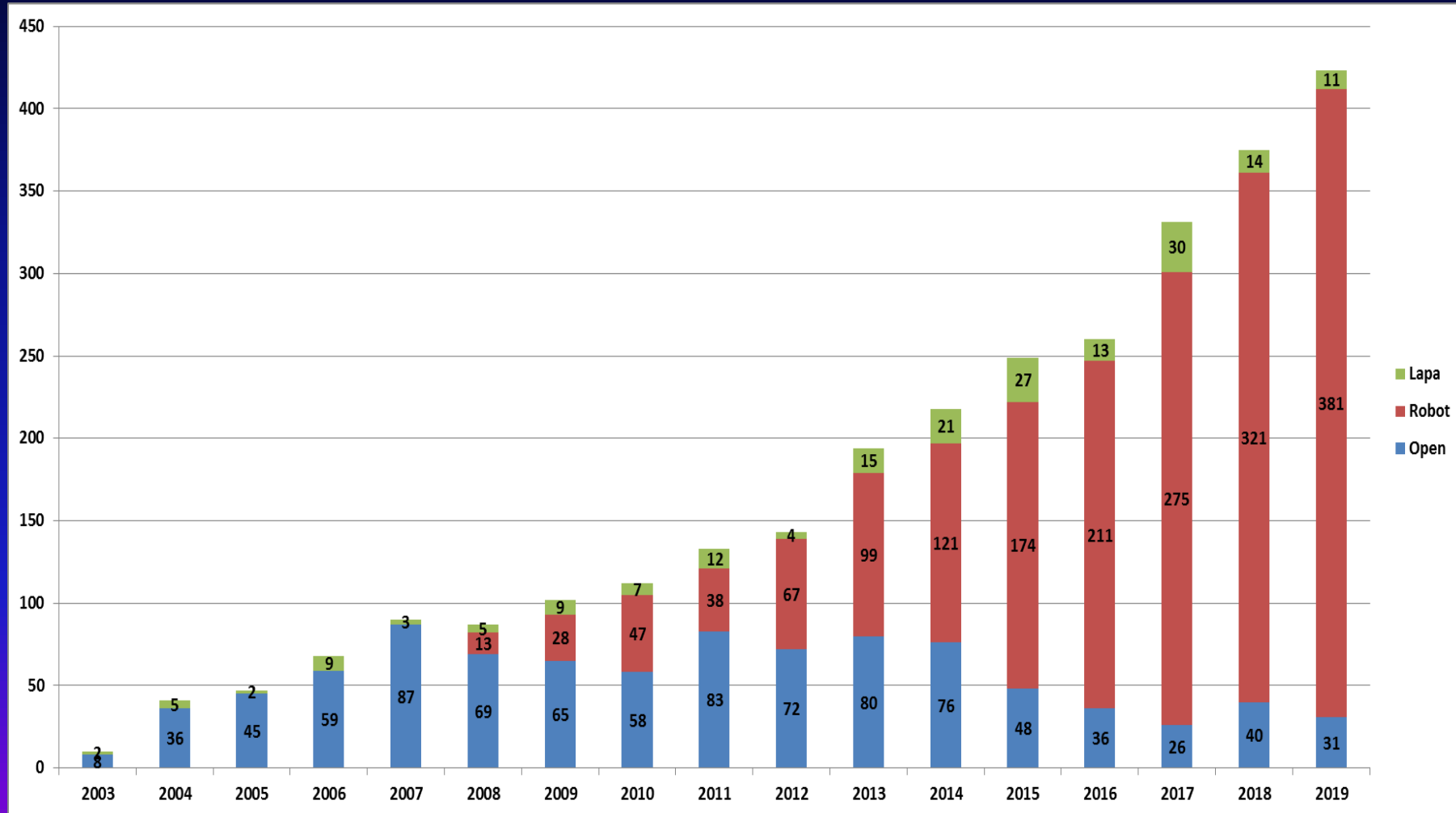


Robotic surgery

- *Wide angle and 3-dimensional view*
- *Free wrist motion*
- *Delicate procedure*
- *No tremoric movement*
- *More advantage for suturing*

Robotic Surgery in SNUBH

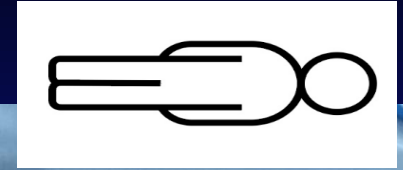
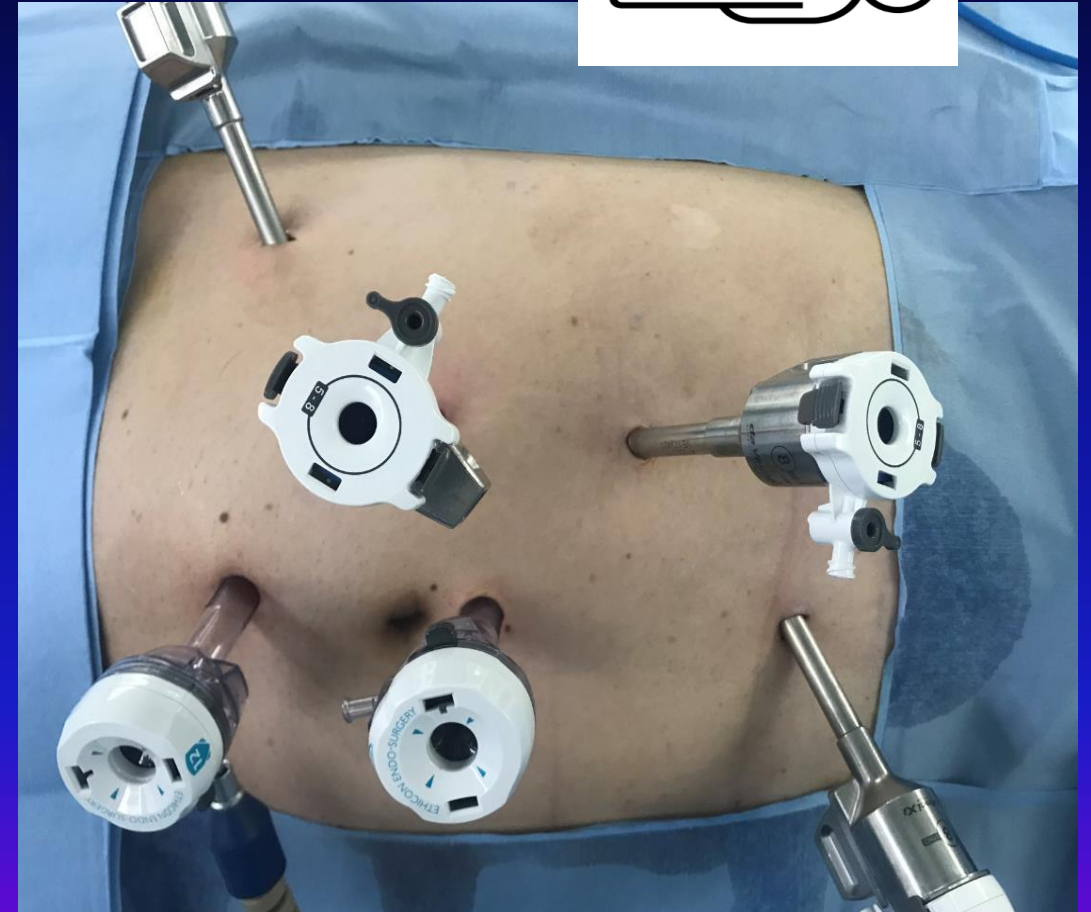
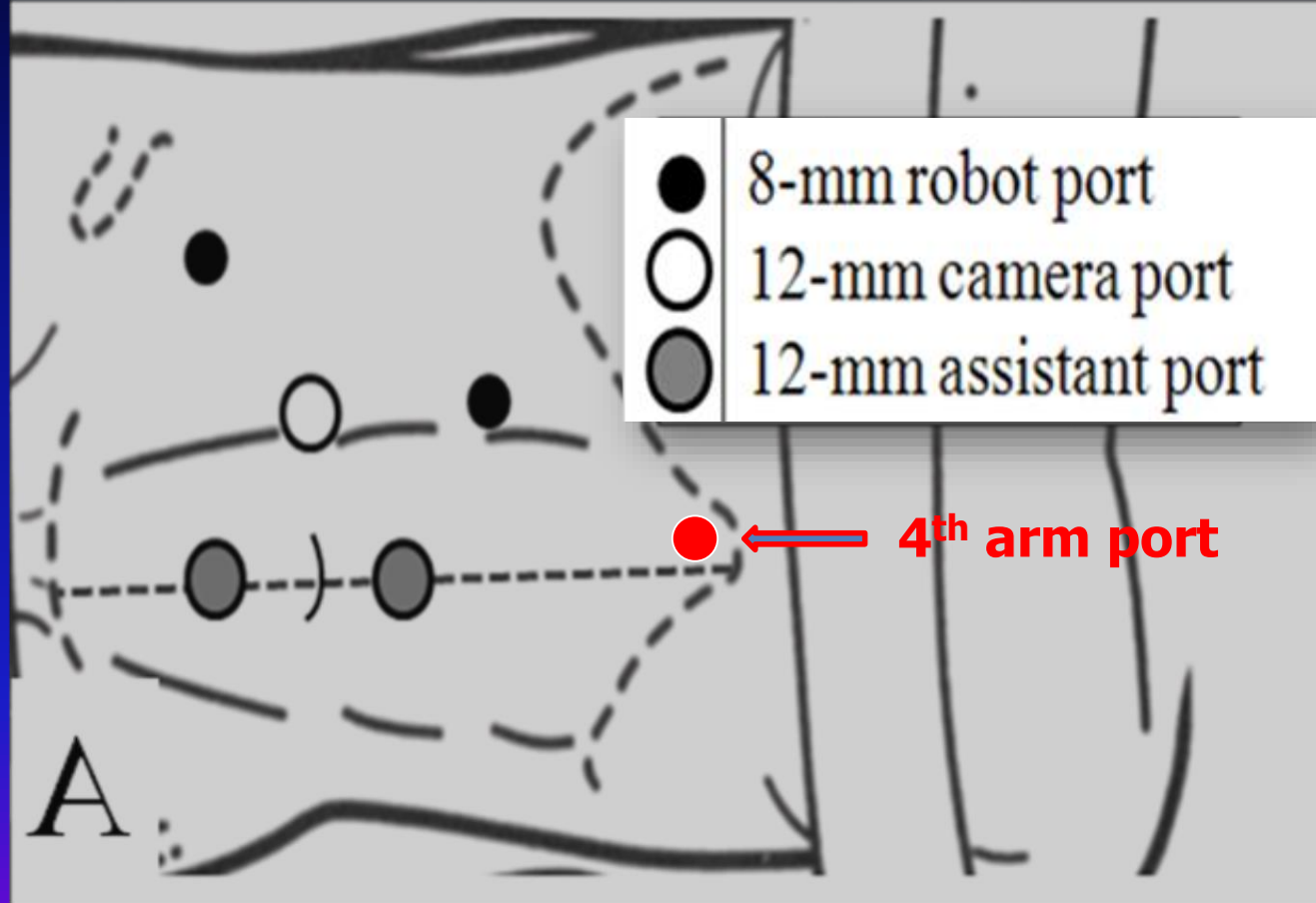
➤ Surgical modalities



Contents

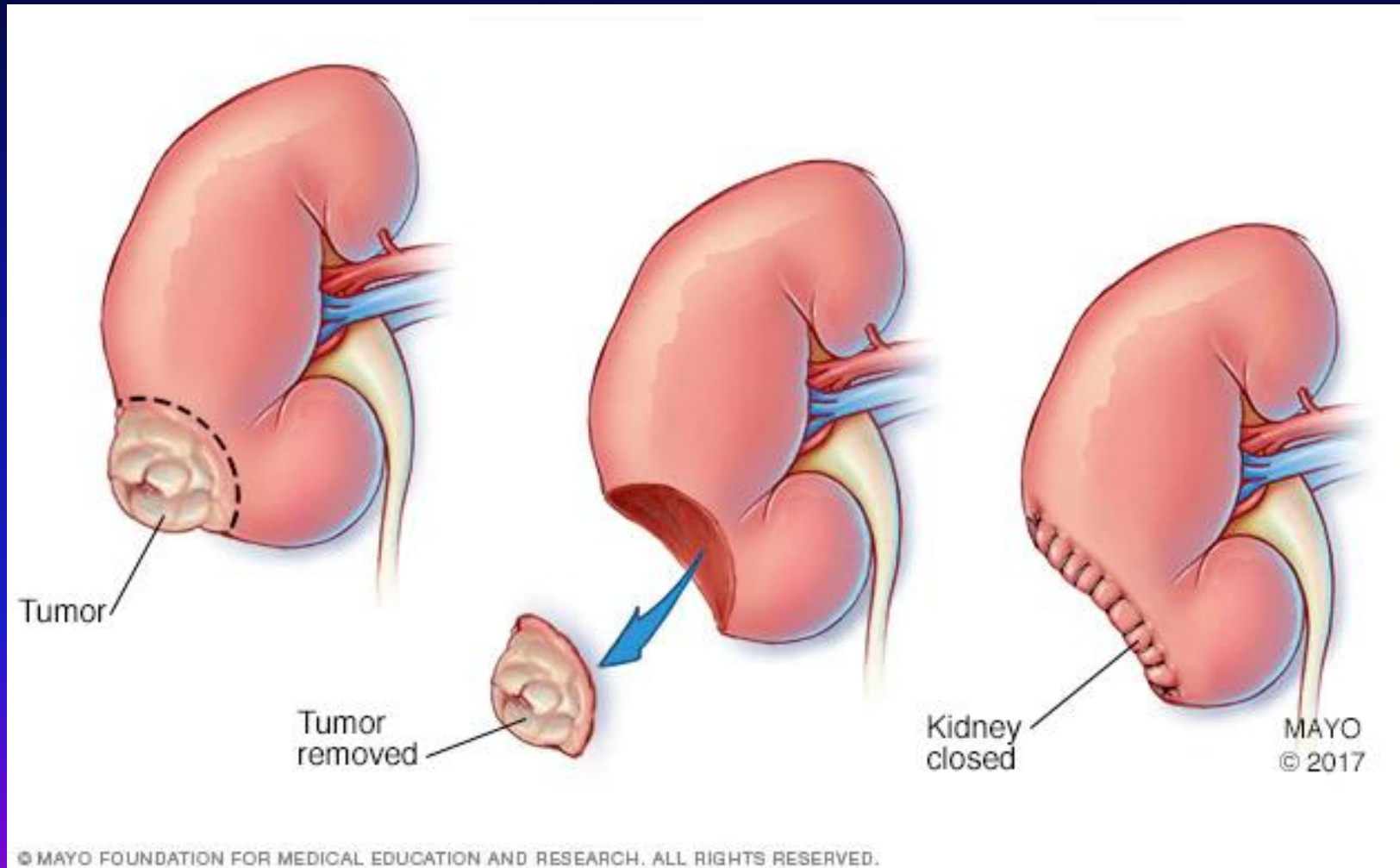
- Introduction of Robotic surgery
- **Partial & Radical Nephrectomy**
- Radical prostatectomy
- Radical cystectomy (ileal conduit & neobladder)
- Wound problems in current urologic surgery

Port placement (Rt.)

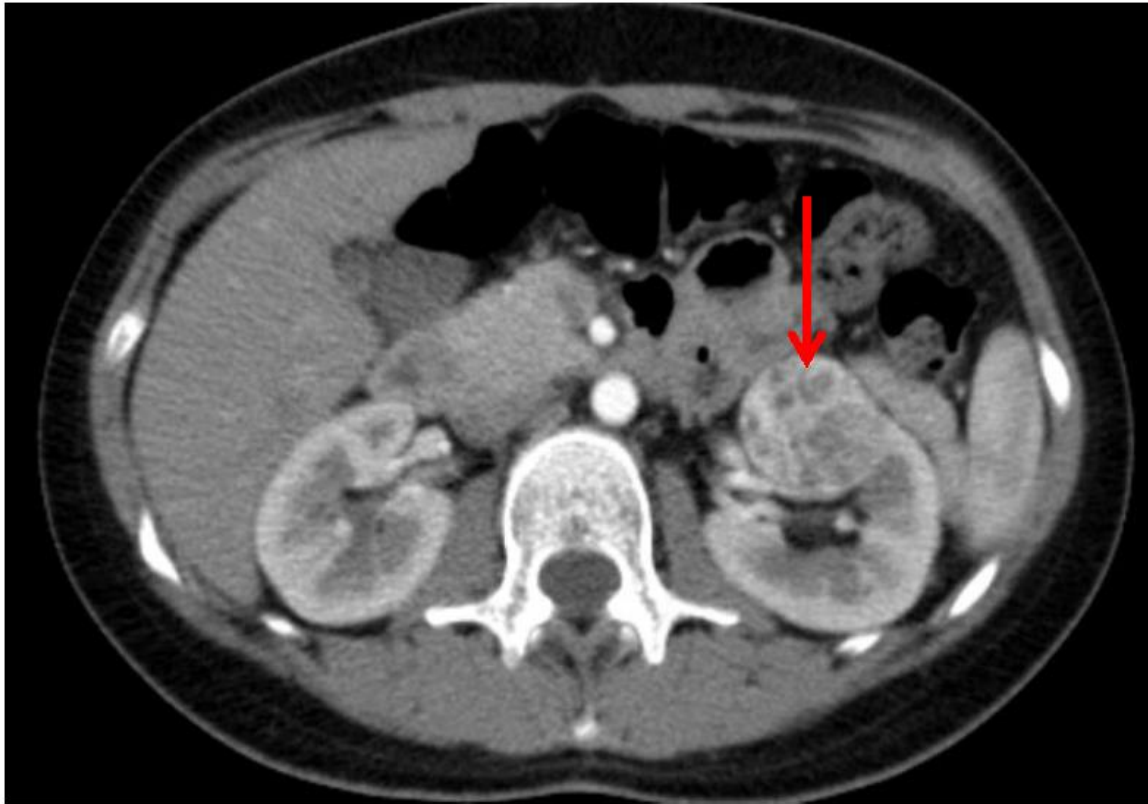


6 ports technique (4 robotic + 2 assistants)

Robotic partial nephrectomy procedures

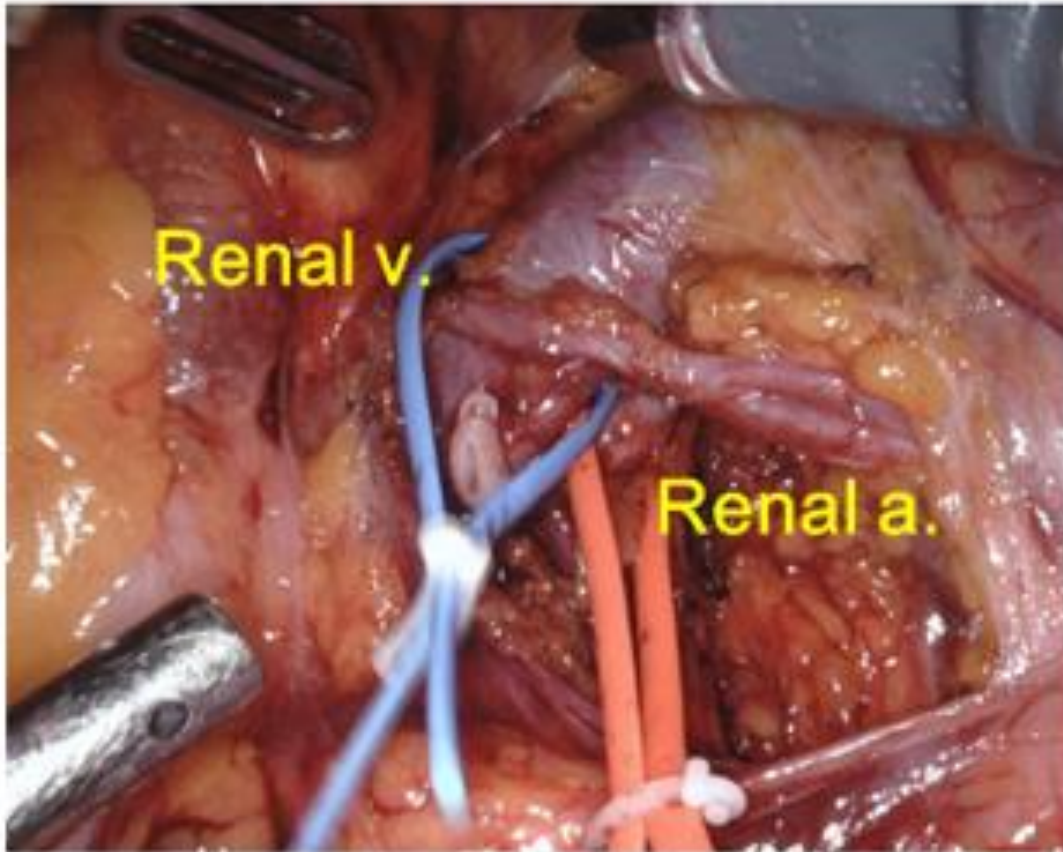


Robotic partial nephrectomy procedures

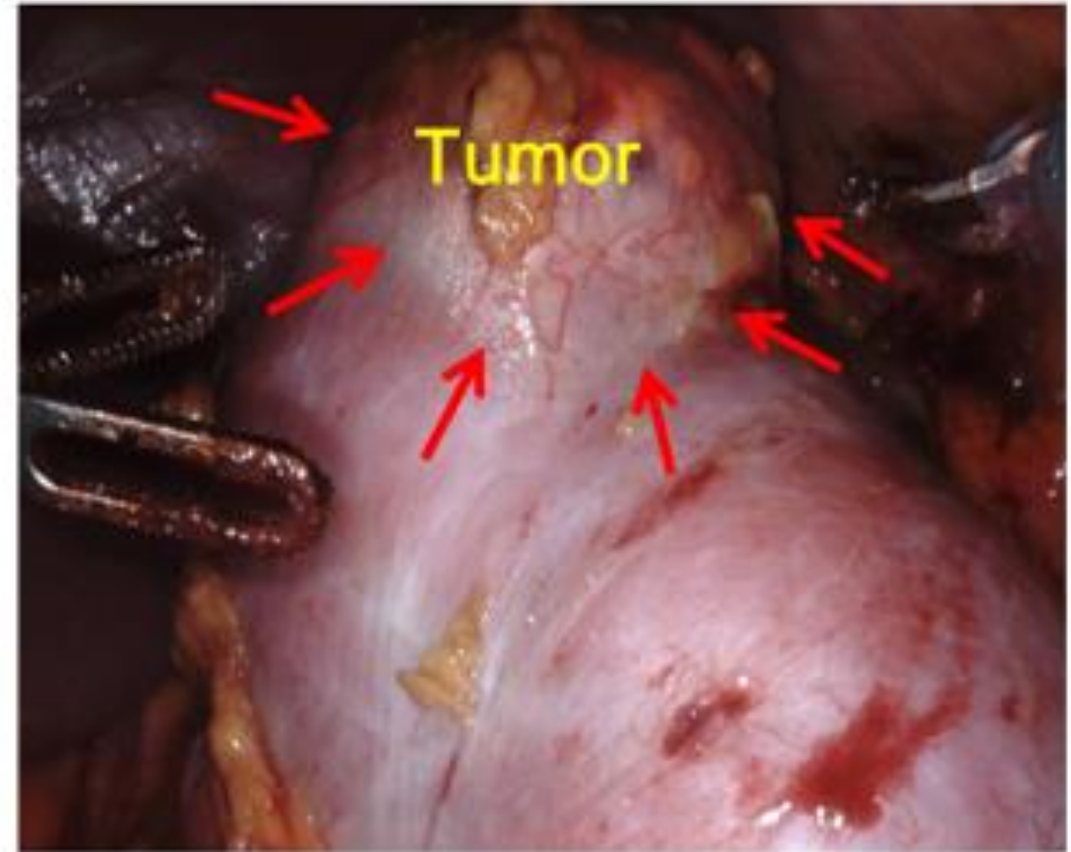


RNS	R	E	N	A	L	UML	A	V	Age	Sex	BMI
9	35	2	3	1	3	2	1	1	26	2	19.7

Robotic partial nephrectomy procedures

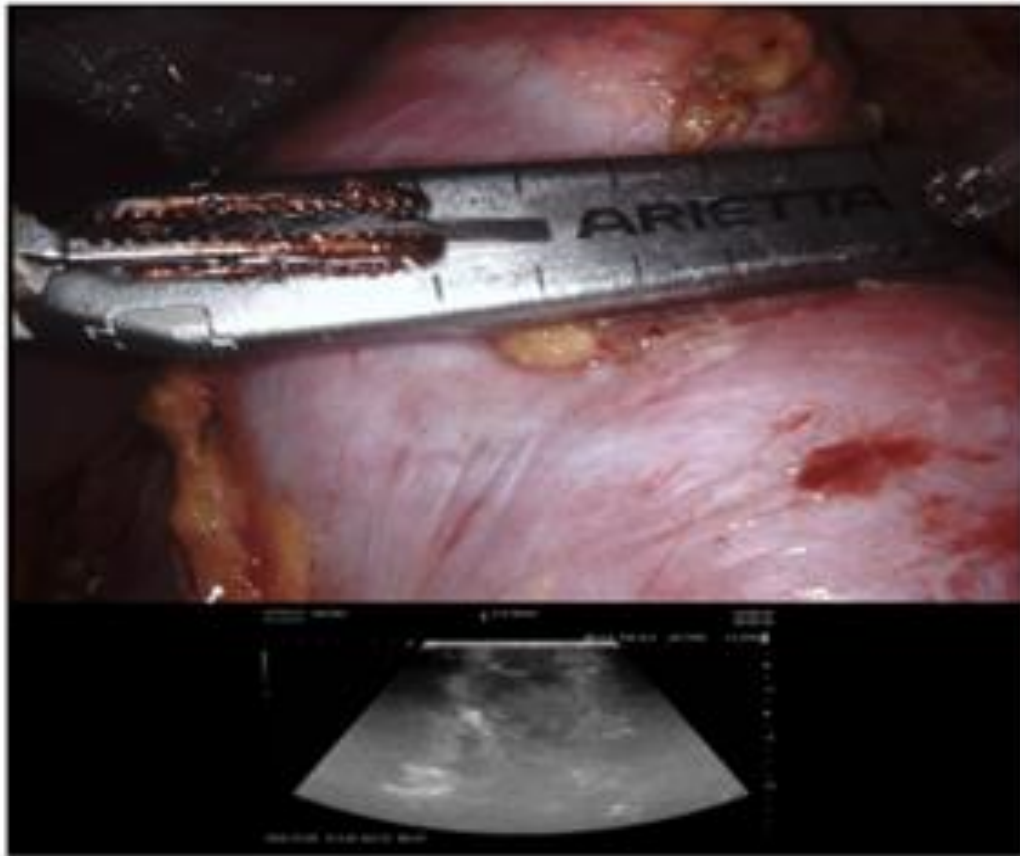


➤ Renal hilum preparation

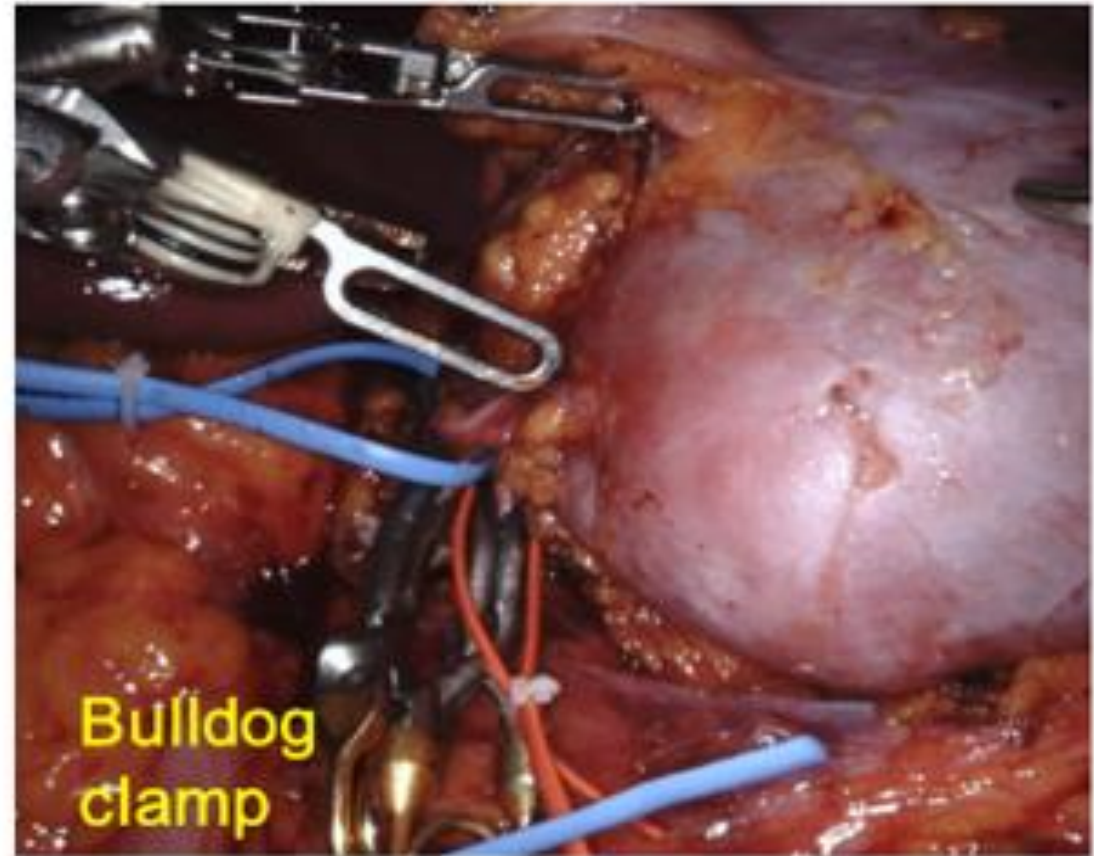


➤ Detection & Dissection

Robotic partial nephrectomy procedures

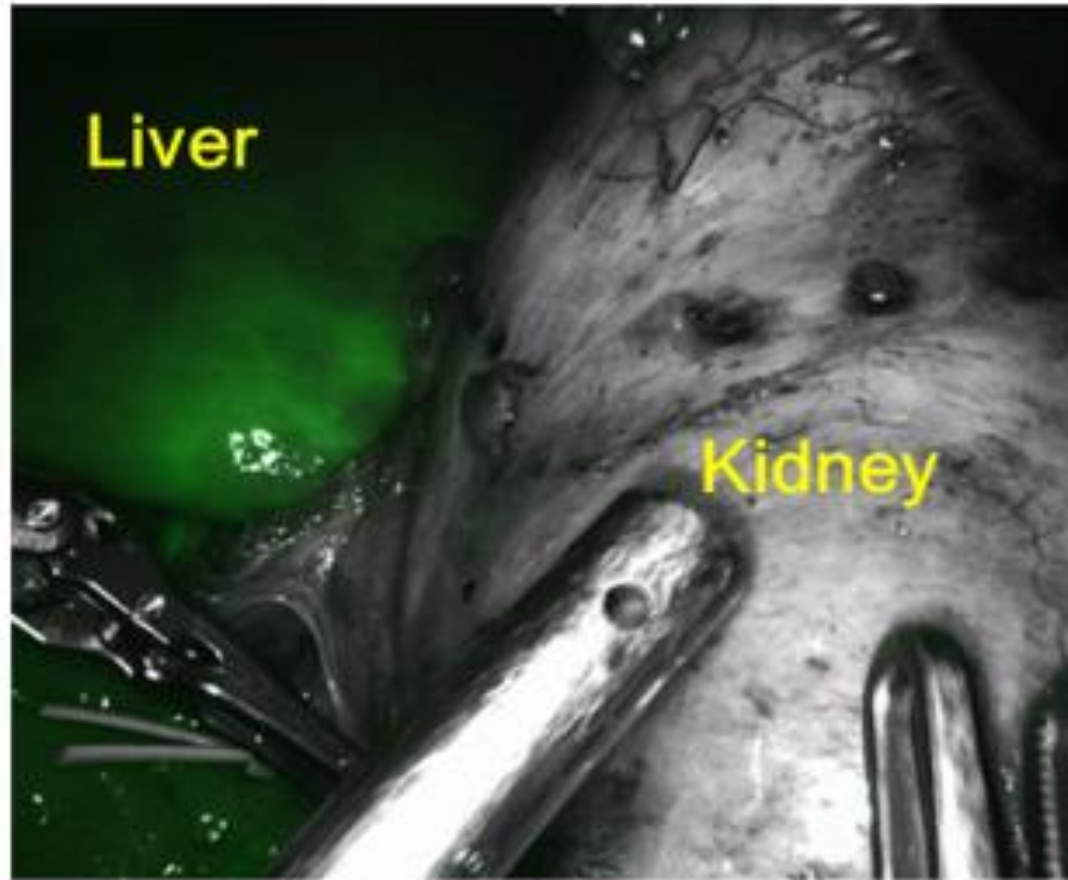


➤ Robotic USG



➤ Vessel clamping

Robotic partial nephrectomy procedures

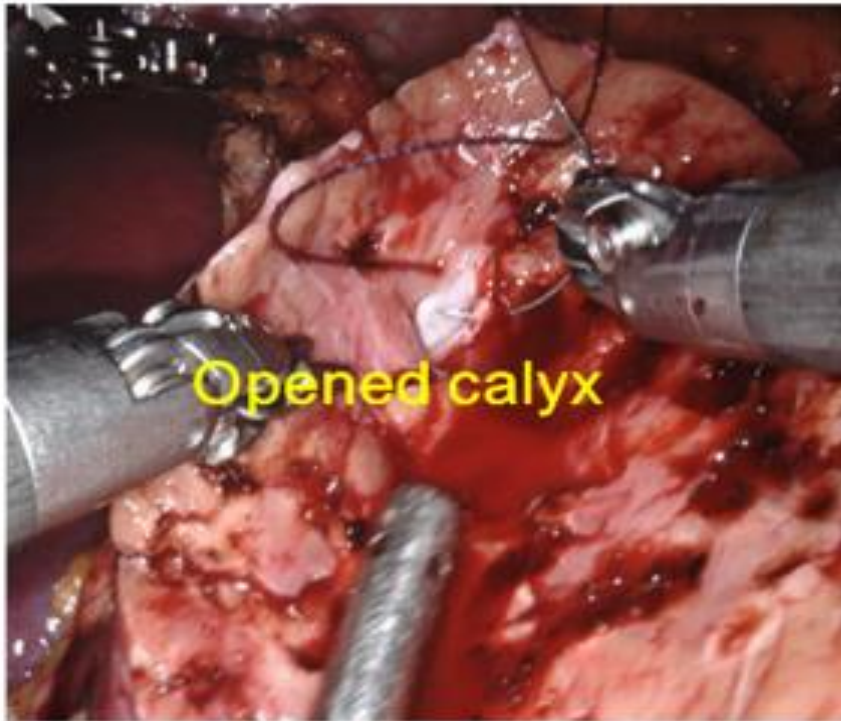


➤ FireFly fluorescence



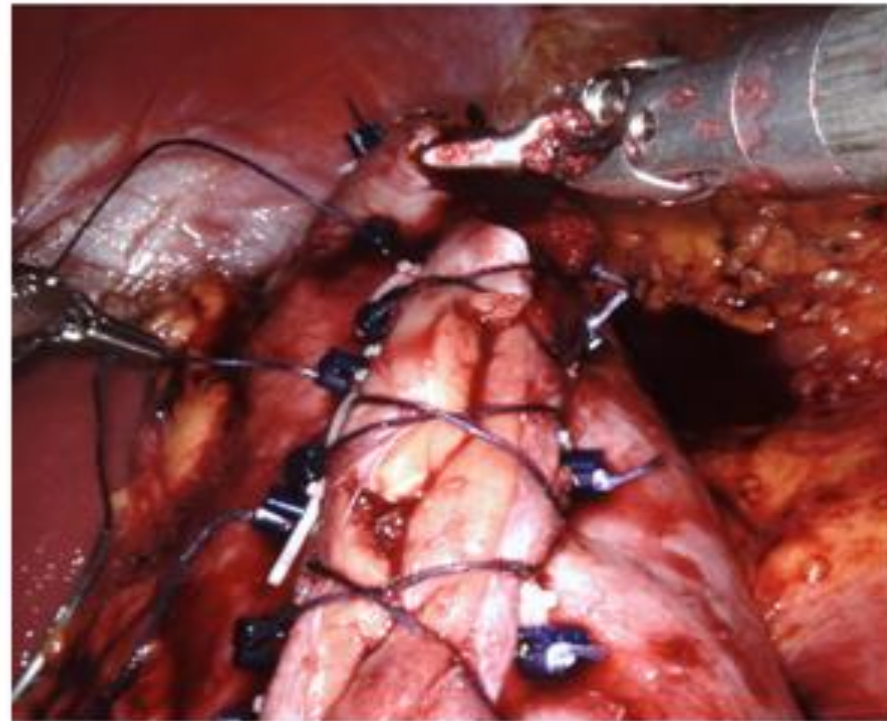
➤ Tumor resection

Robotic partial nephrectomy procedures



Opened calyx

➤ Calyx repair & hemostasis



➤ Renorrhaphy



Robotic radical nephrectomy for huge mass

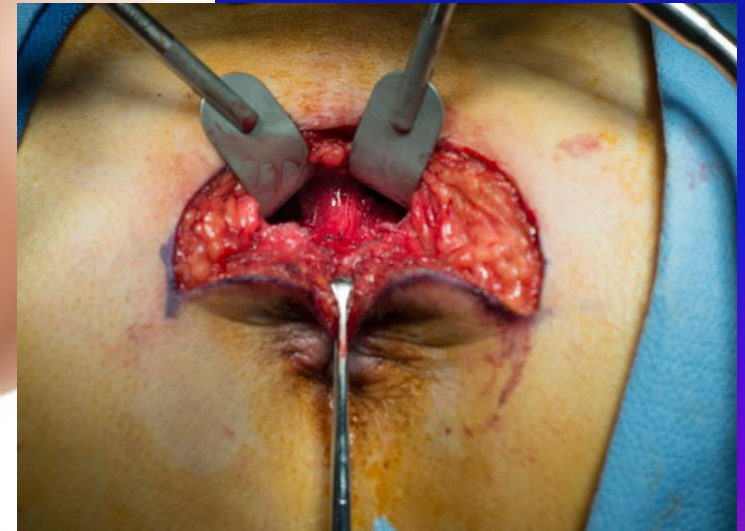
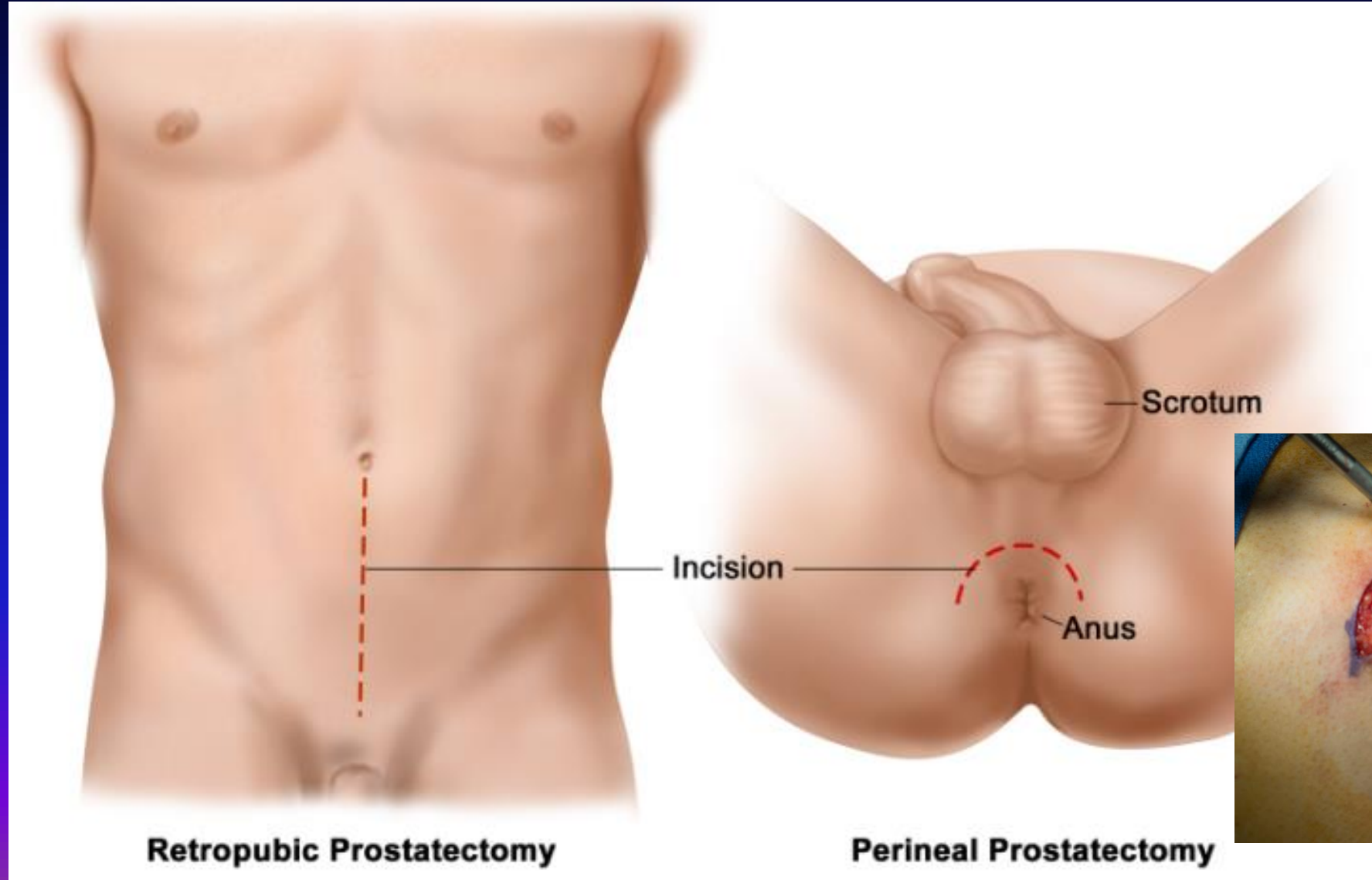
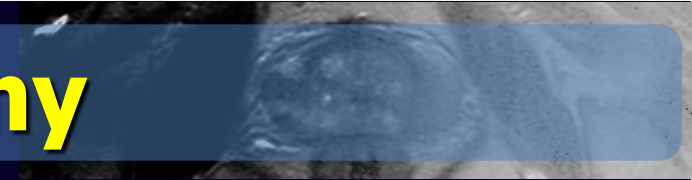
- F/42, R/O RCC, Lt. → robotic radical nephrectomy, Lt. (2021/06/22)



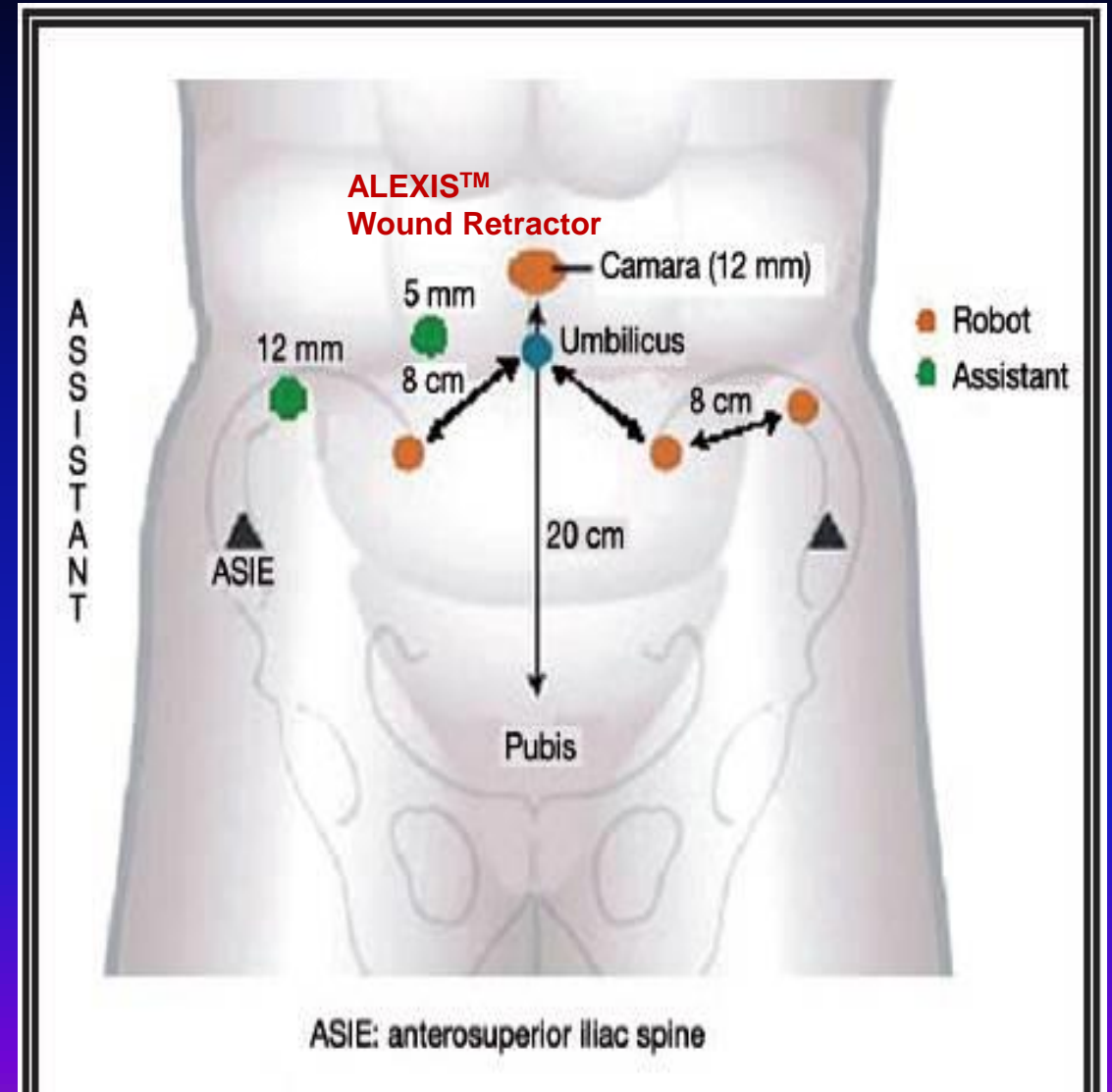
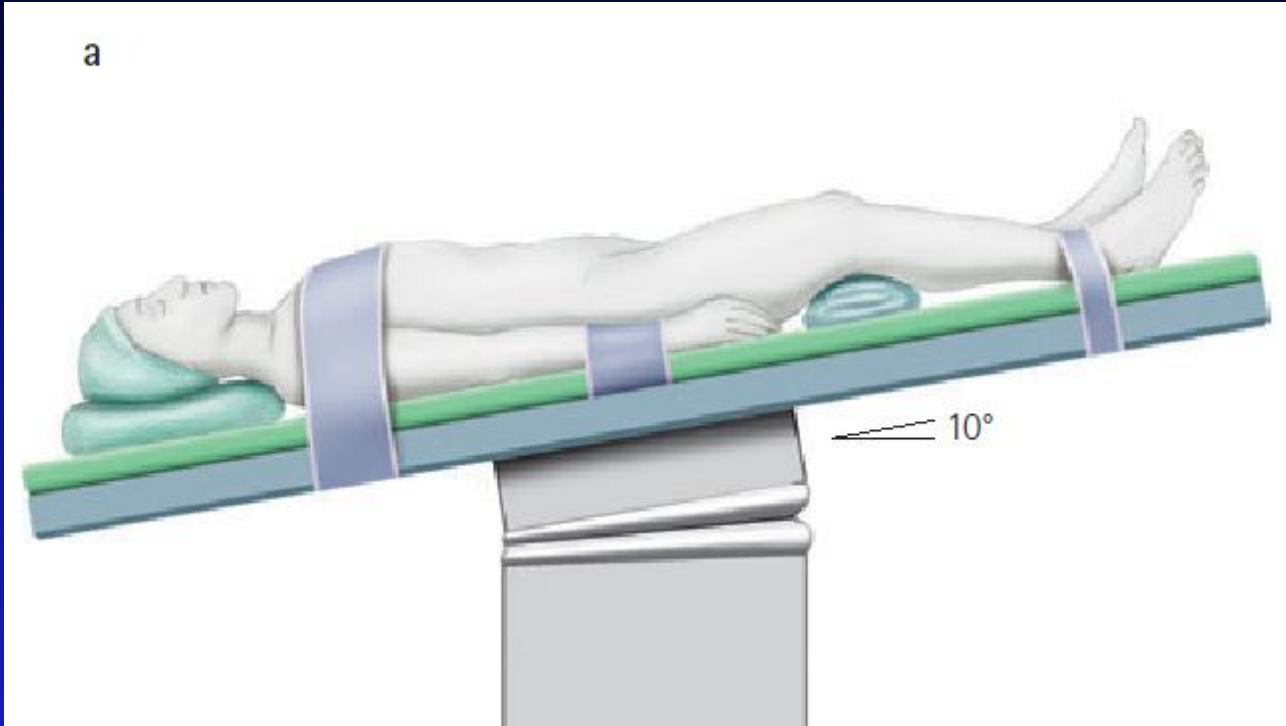
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- Radical cystectomy (ileal conduit & neobladder)
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Open radical prostatectomy



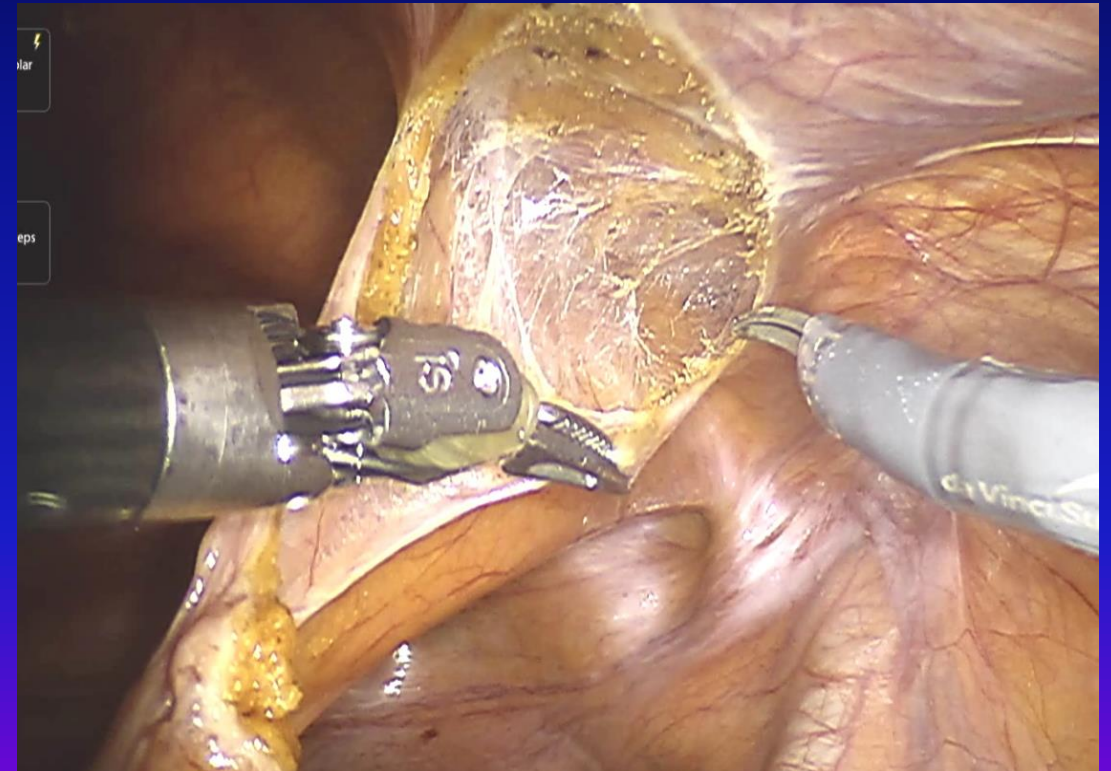
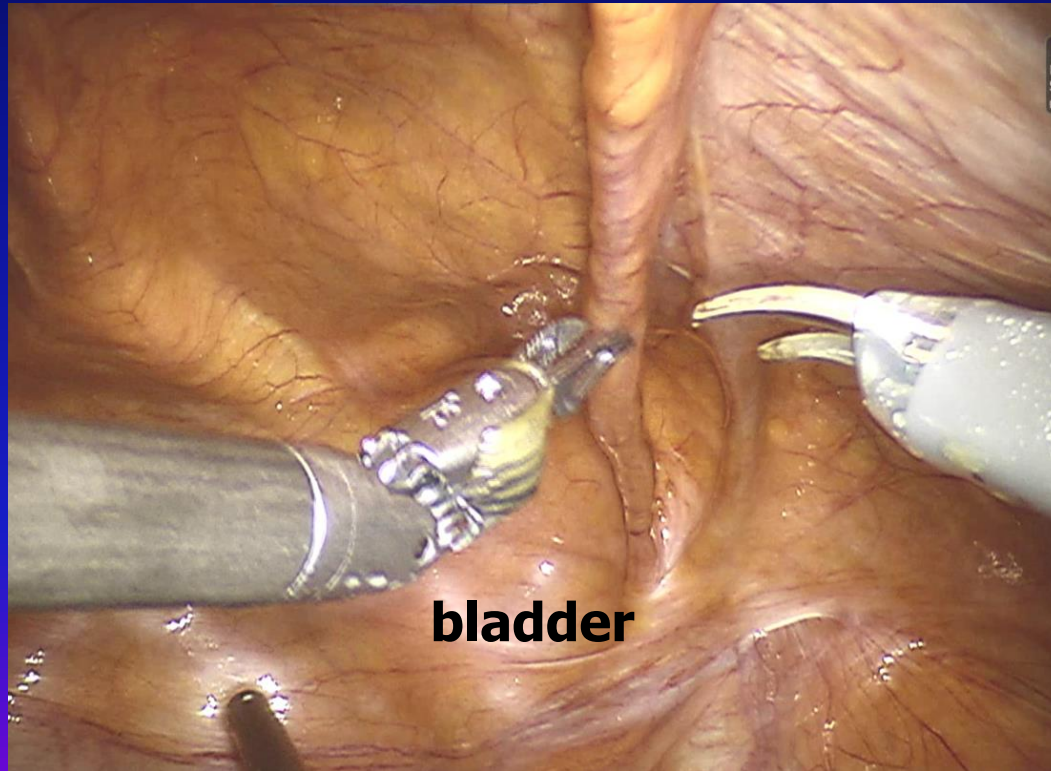
Robotic prostatectomy - Port placement



6 ports technique (4 robotic + 2 assistants)

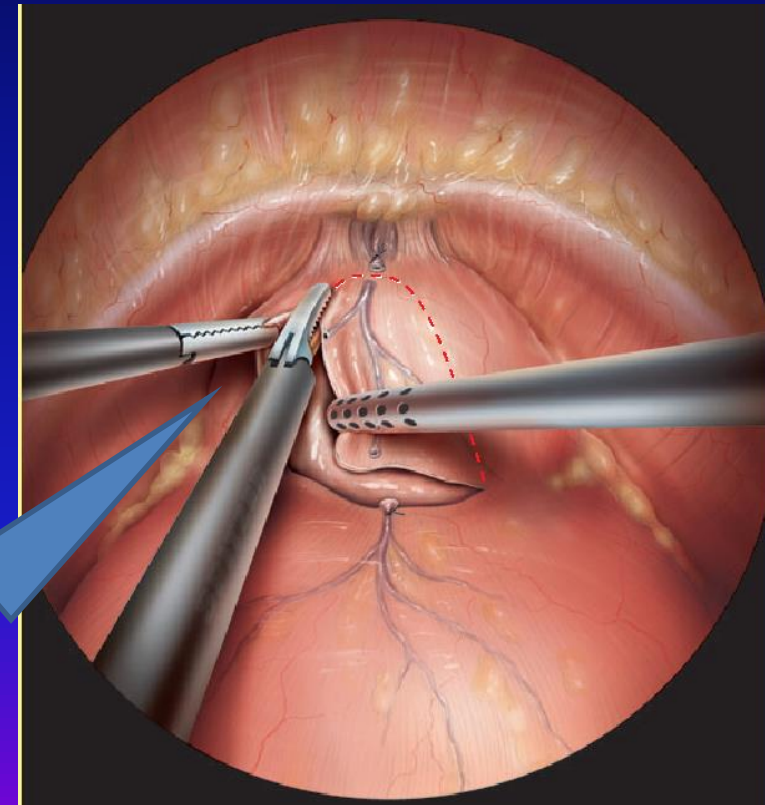
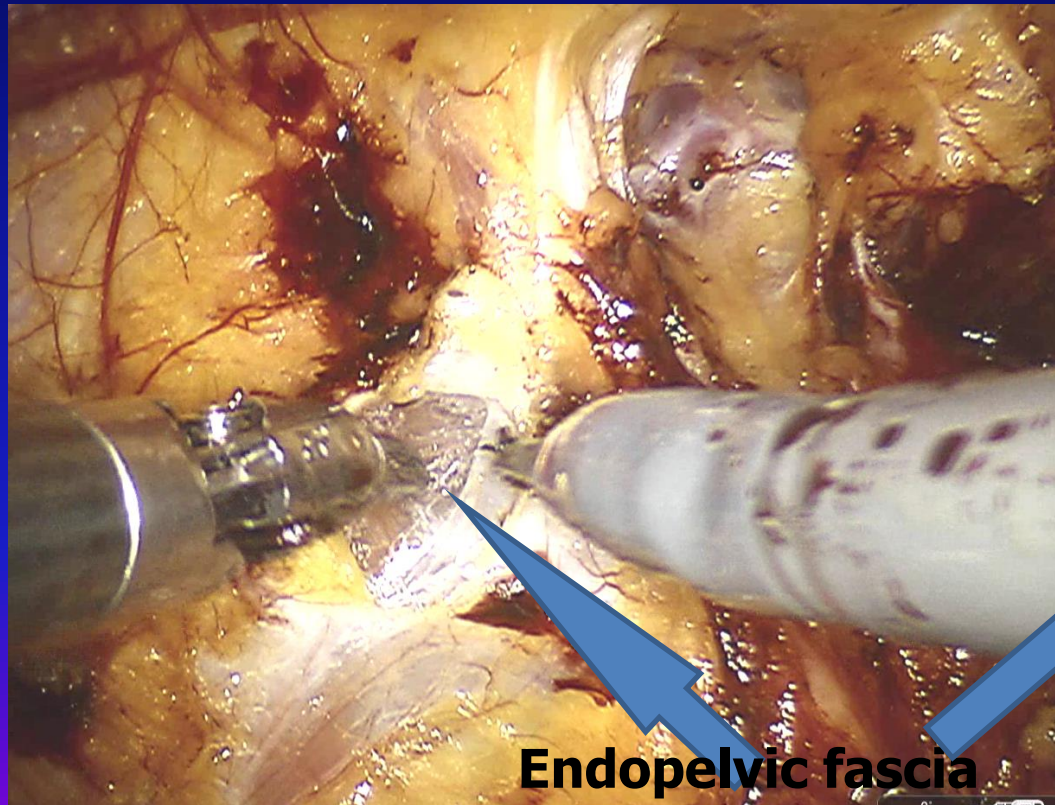
RP procedures

➤ Development of Retzius space



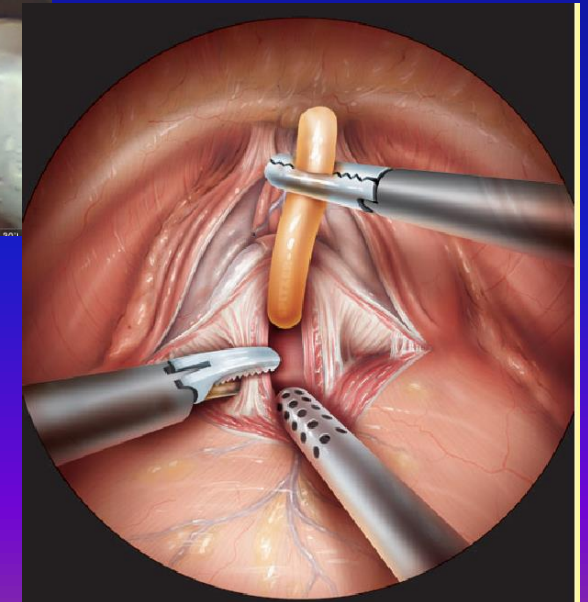
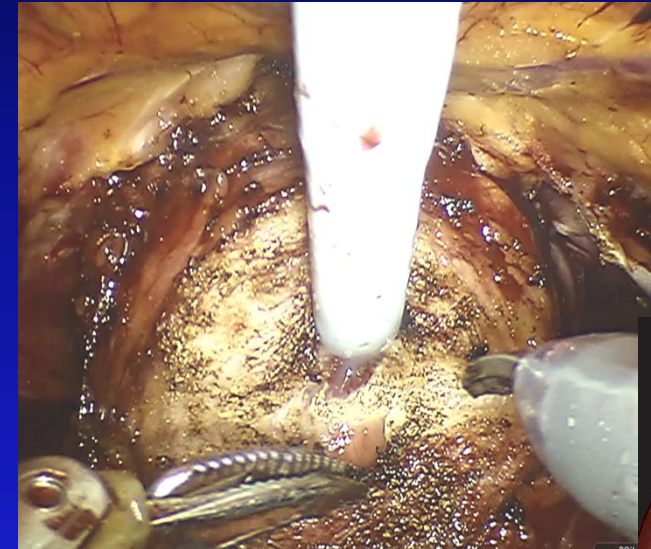
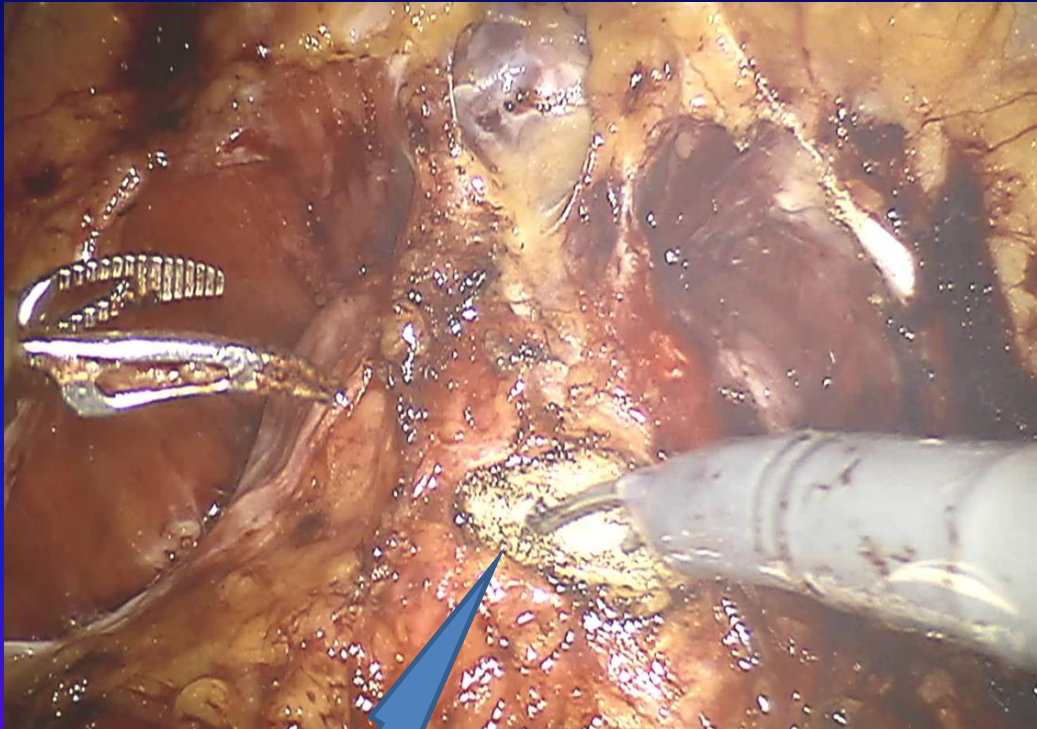
RP procedures

➤ Exposure of apex and Endopelvic fascia



RP procedures

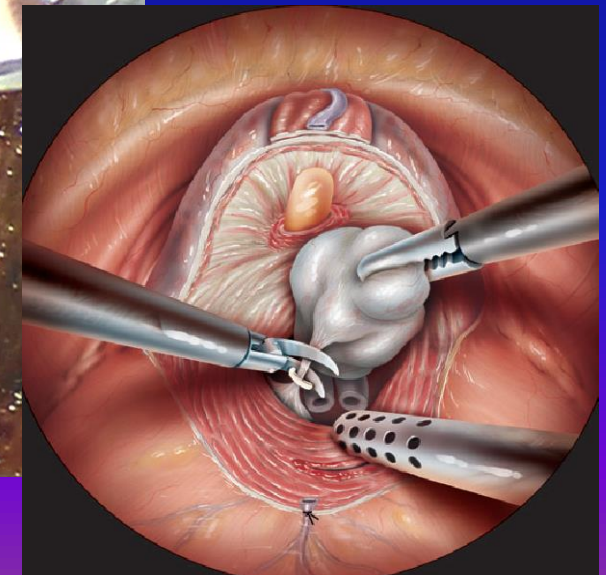
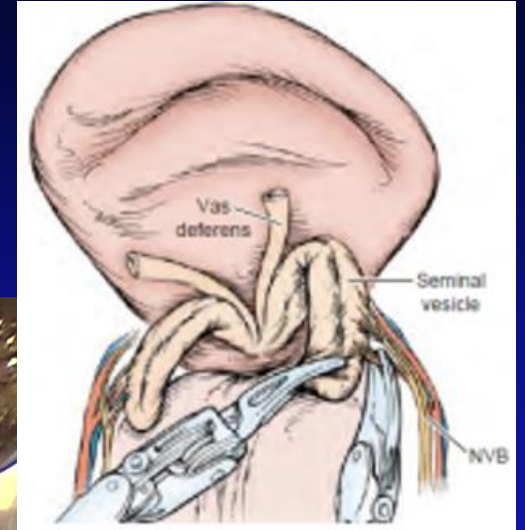
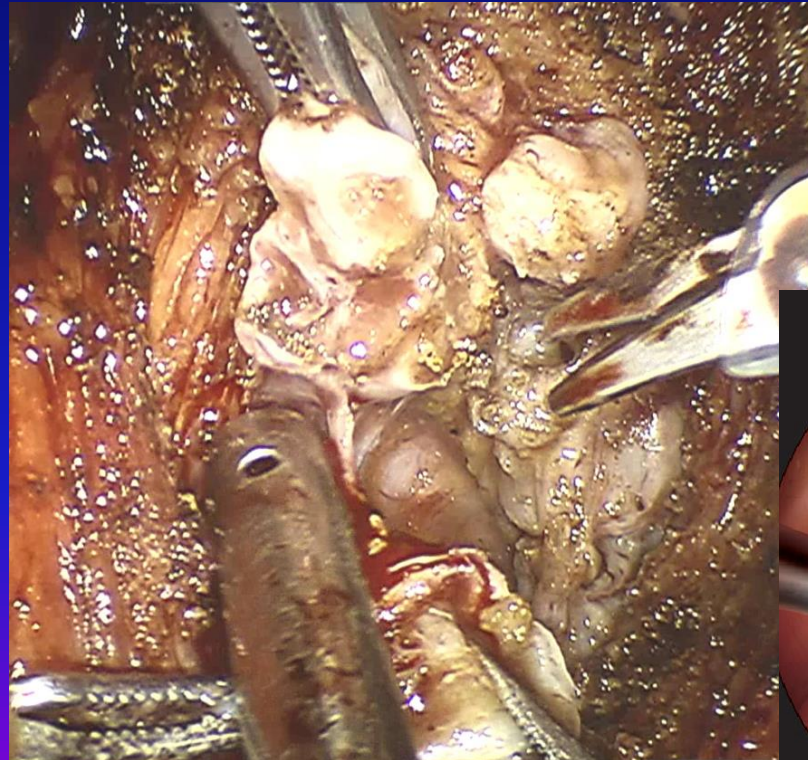
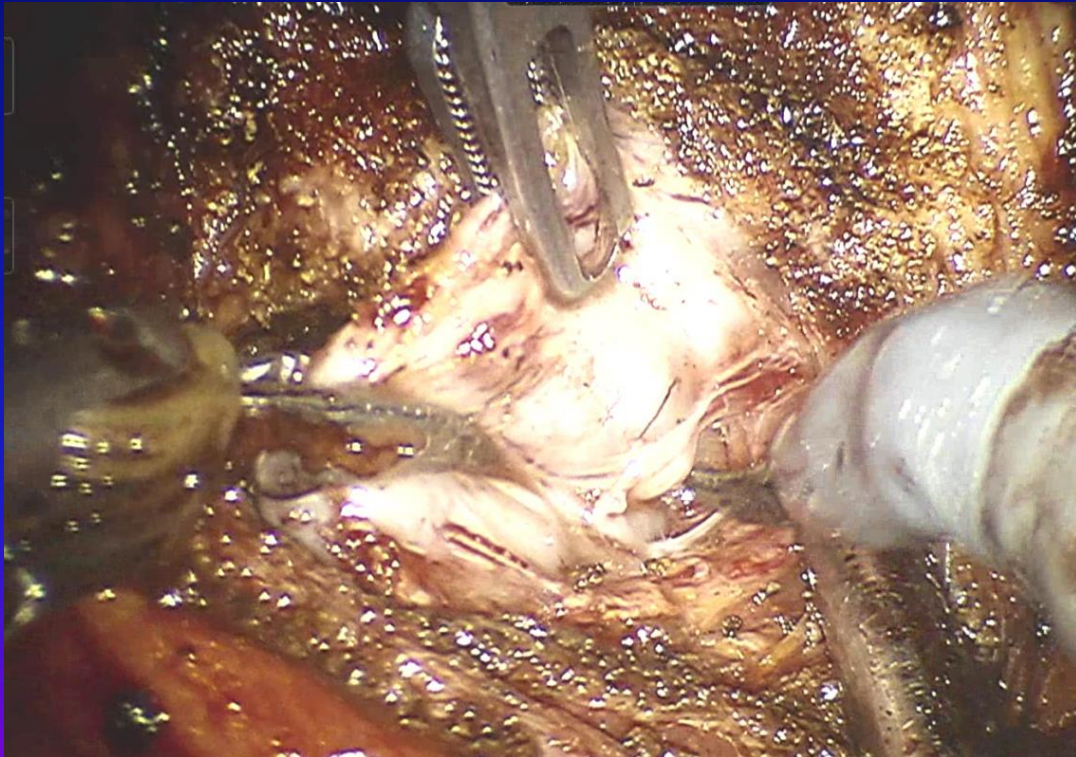
➤ Bladder neck transection



Vesico-prostatic junction

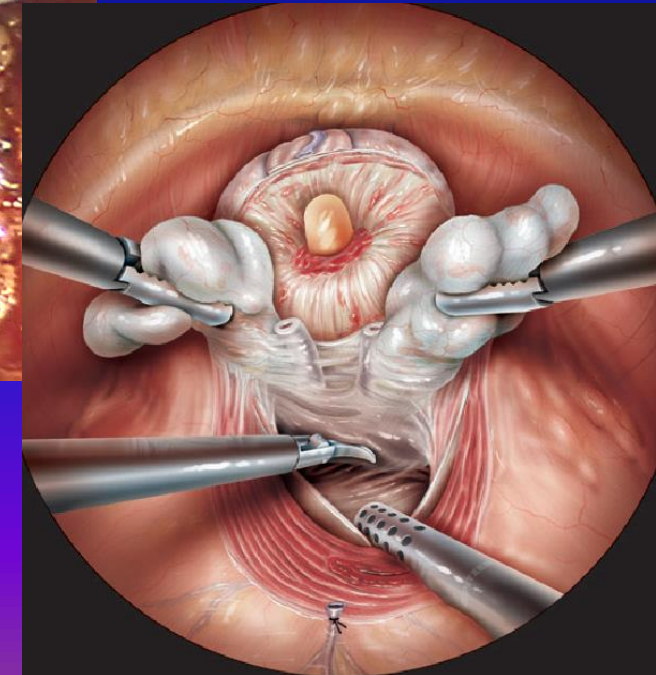
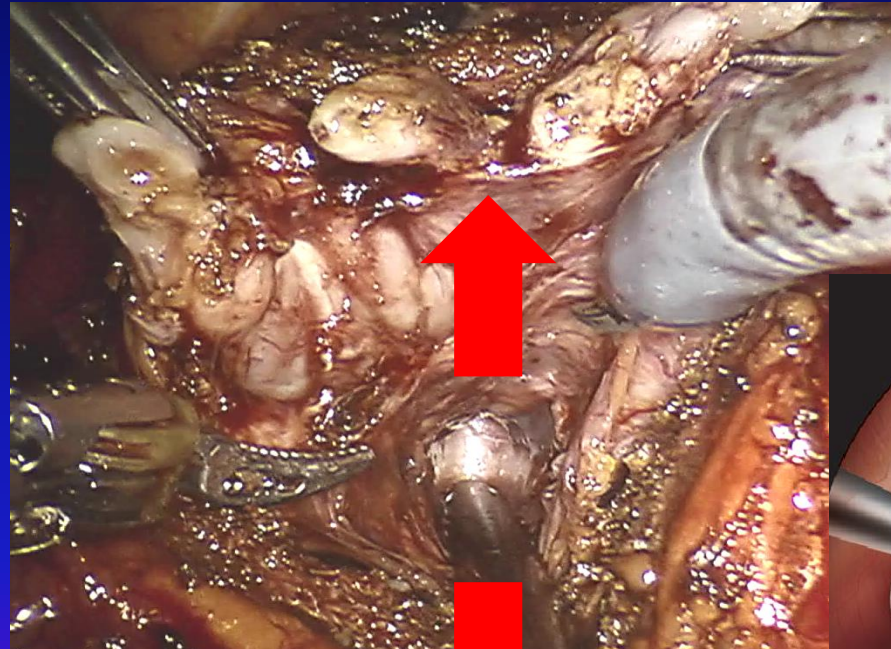
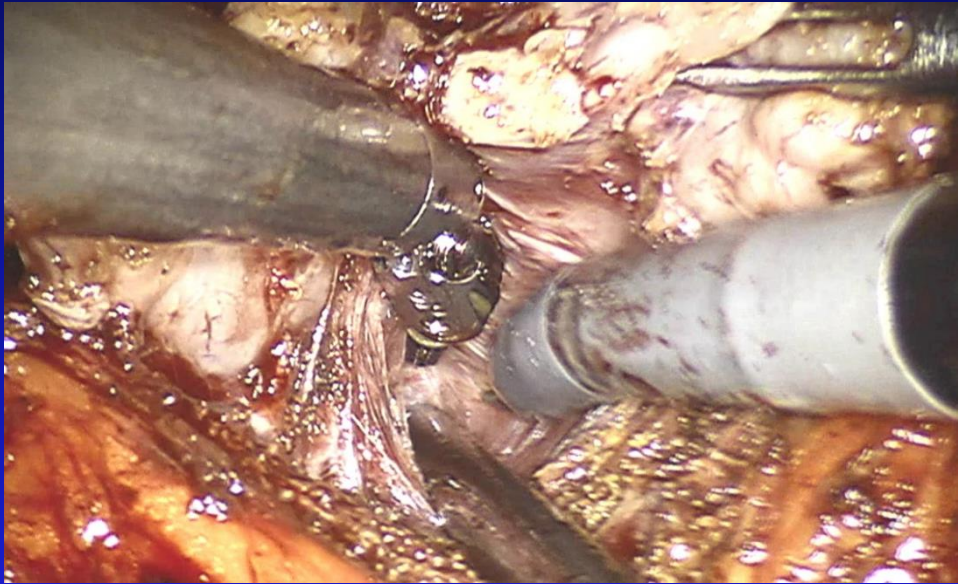
RP procedures

➤ Seminal vesicle dissection



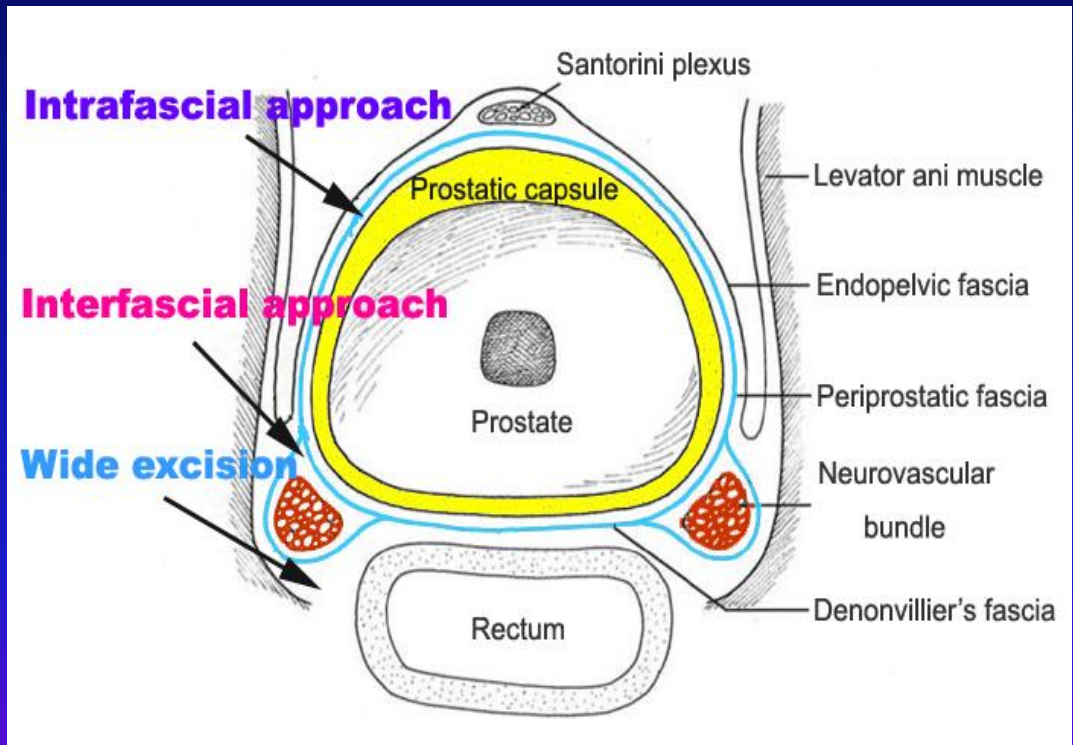
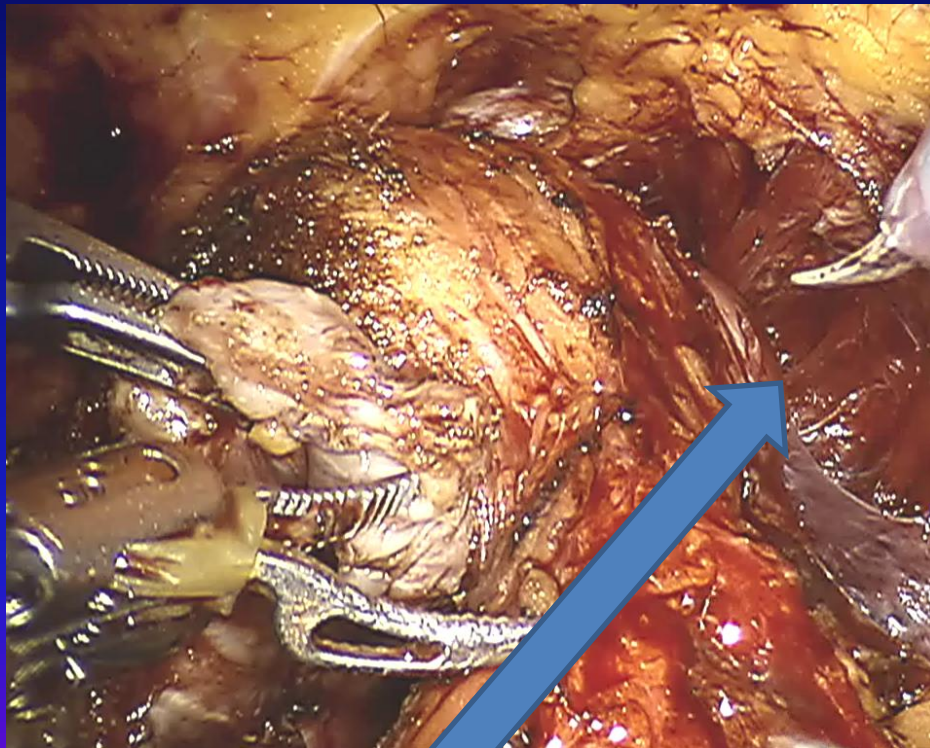
RP procedures

➤ Separation of prostate from rectum



RP procedures

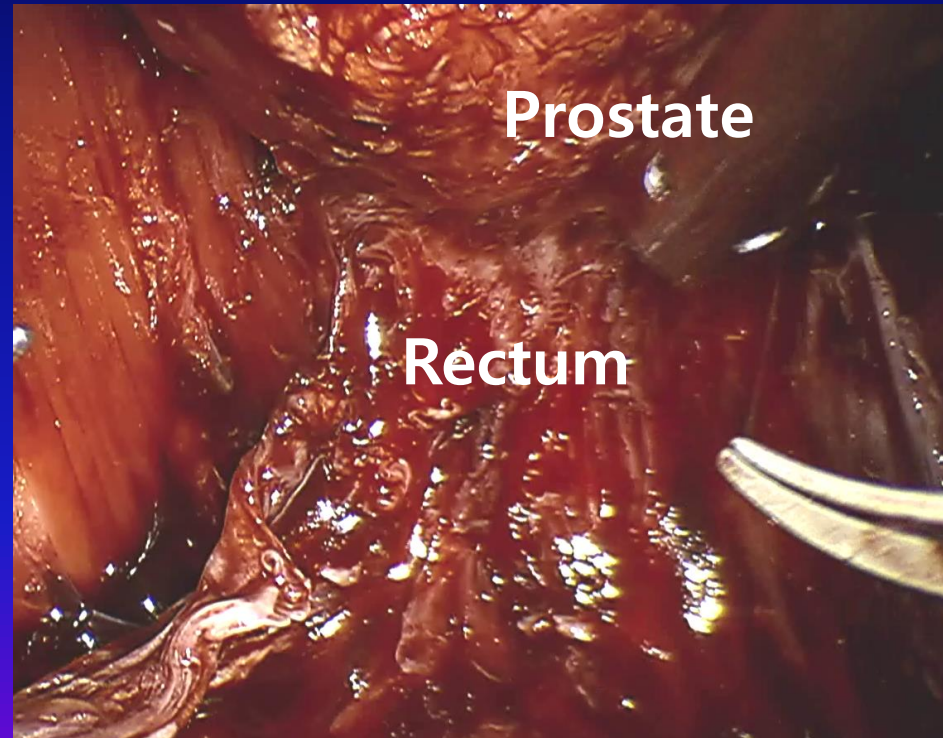
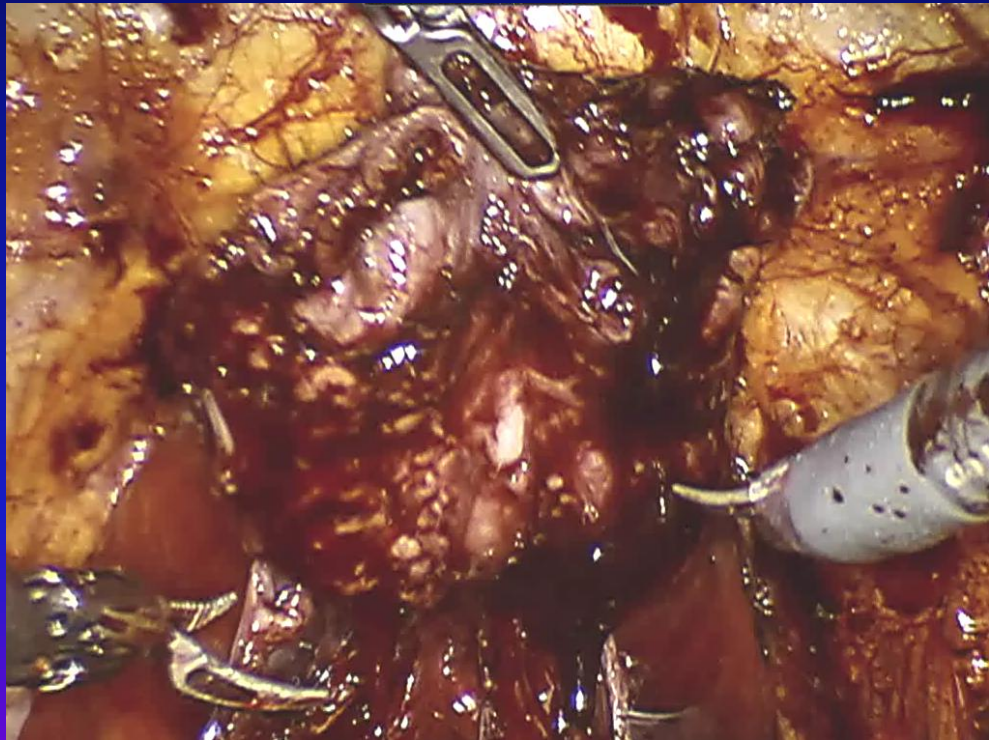
➤ Lateral pedicle control



Nerve sparing technique (interfascial)

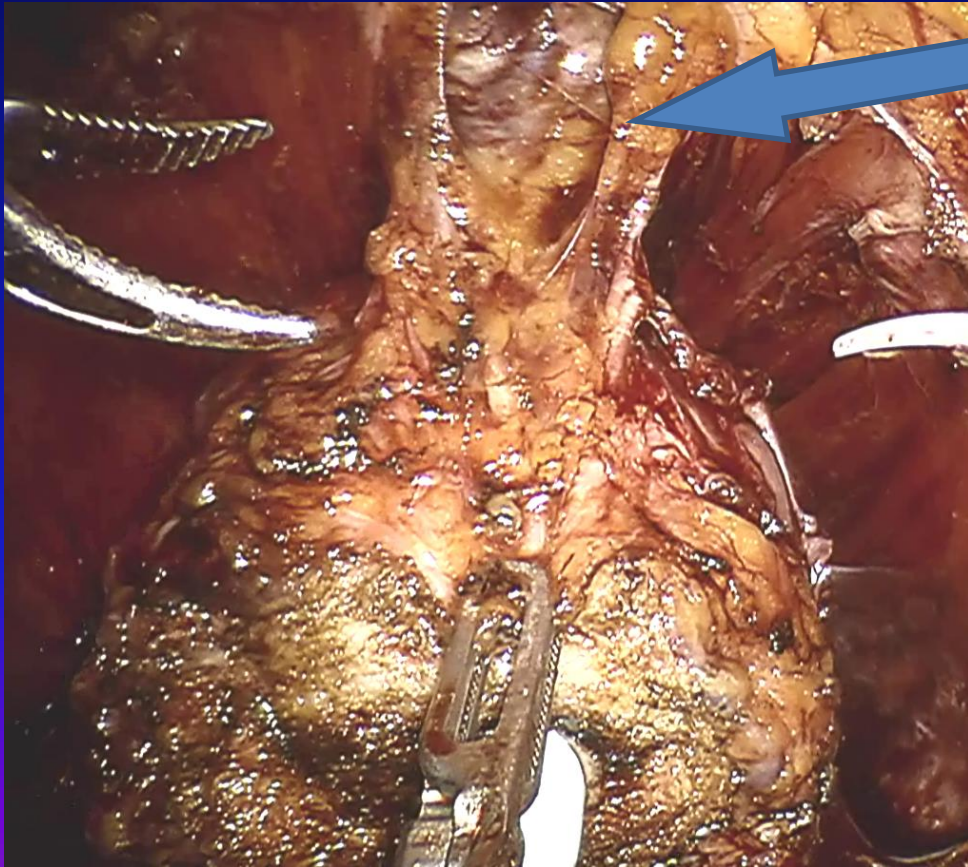
RP procedures

➤ Posterior apical dissection

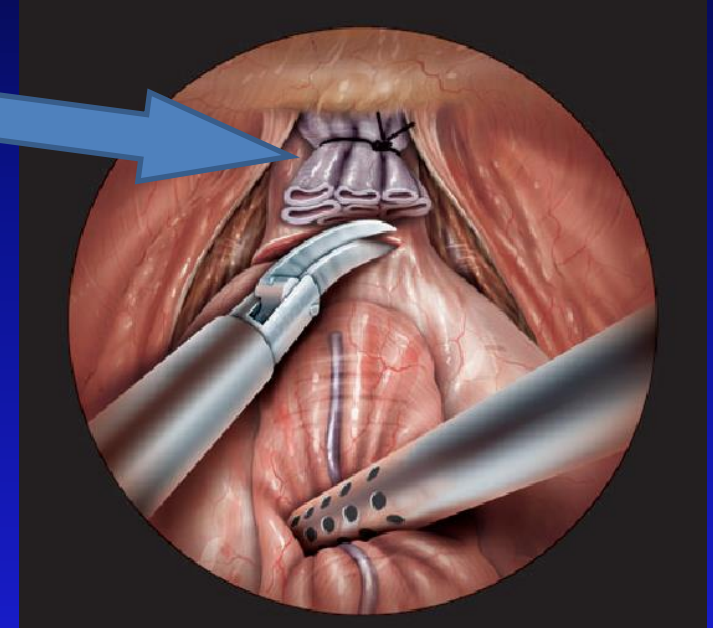


RP procedures

➤ Anterior apical dissection

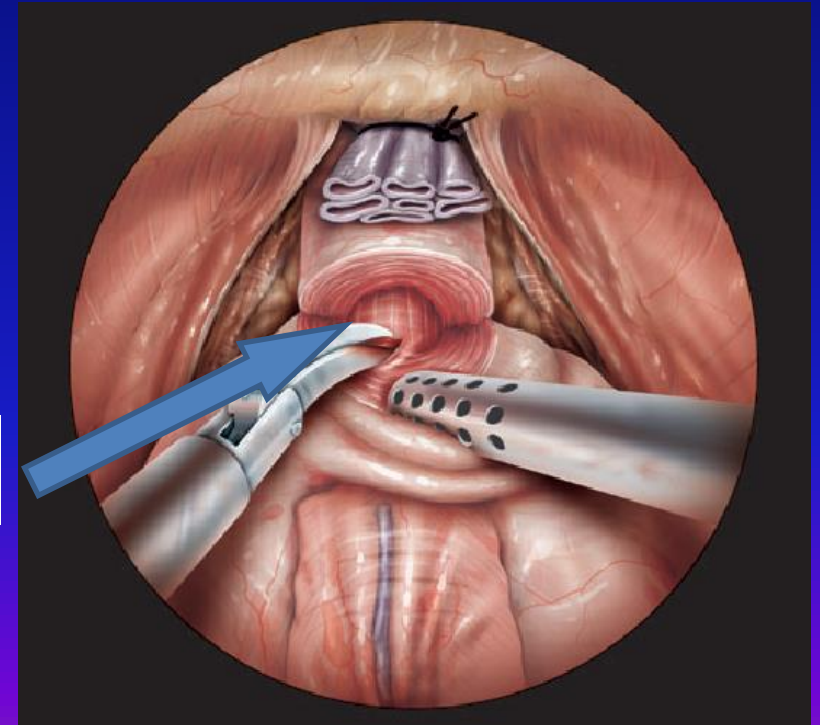
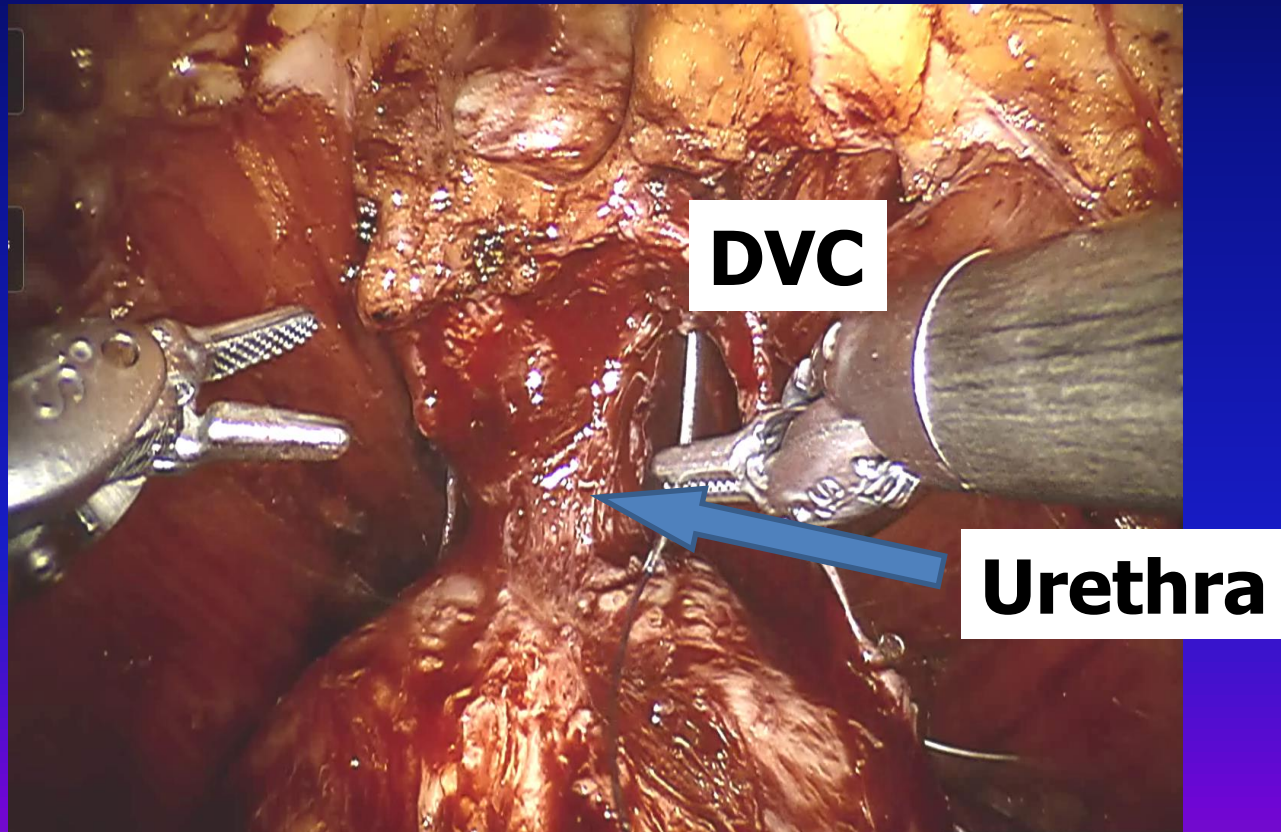


DVC



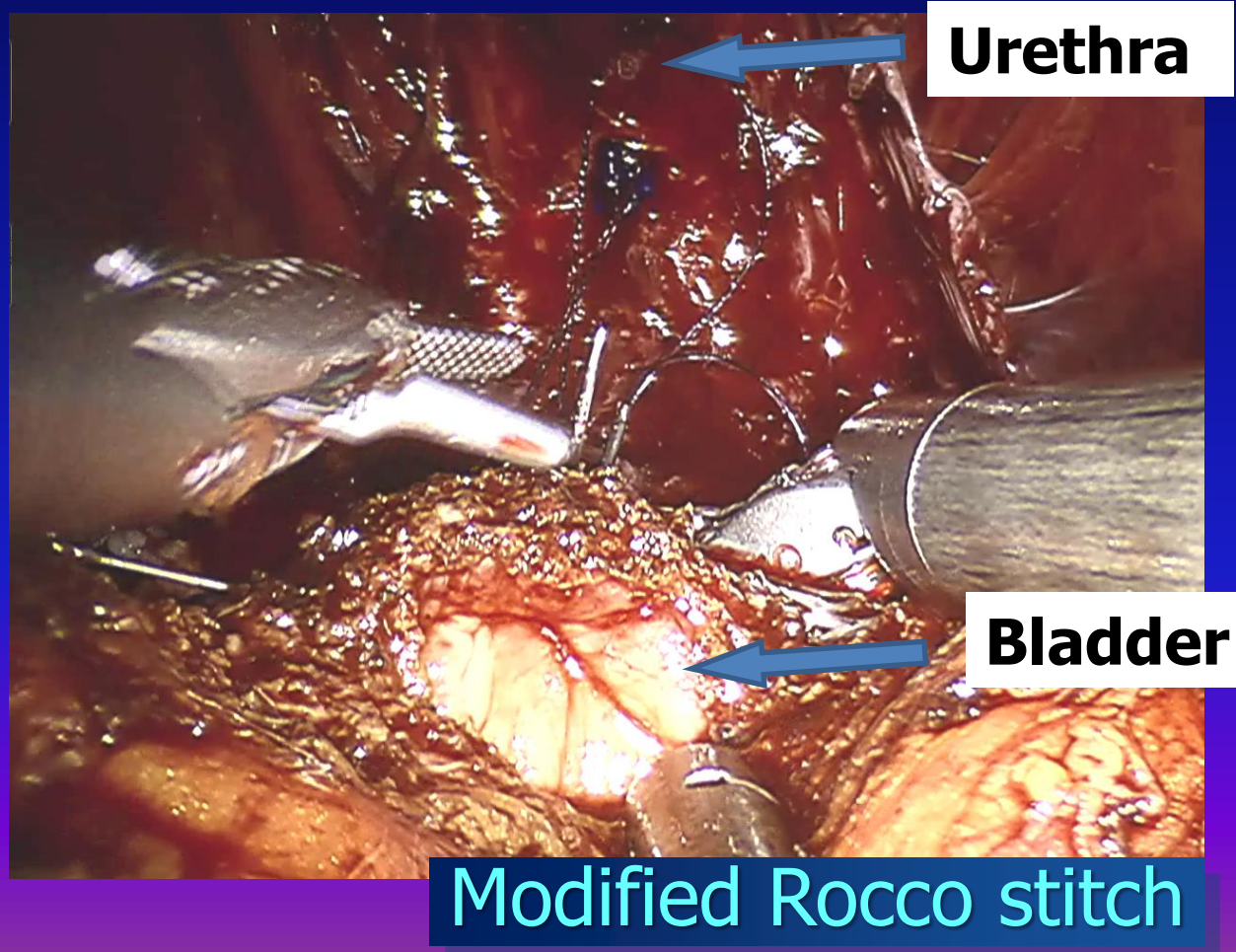
RP procedures

➤ Transection of dorsal vein complex and repair



RP procedures

➤ Posterior reconstruction

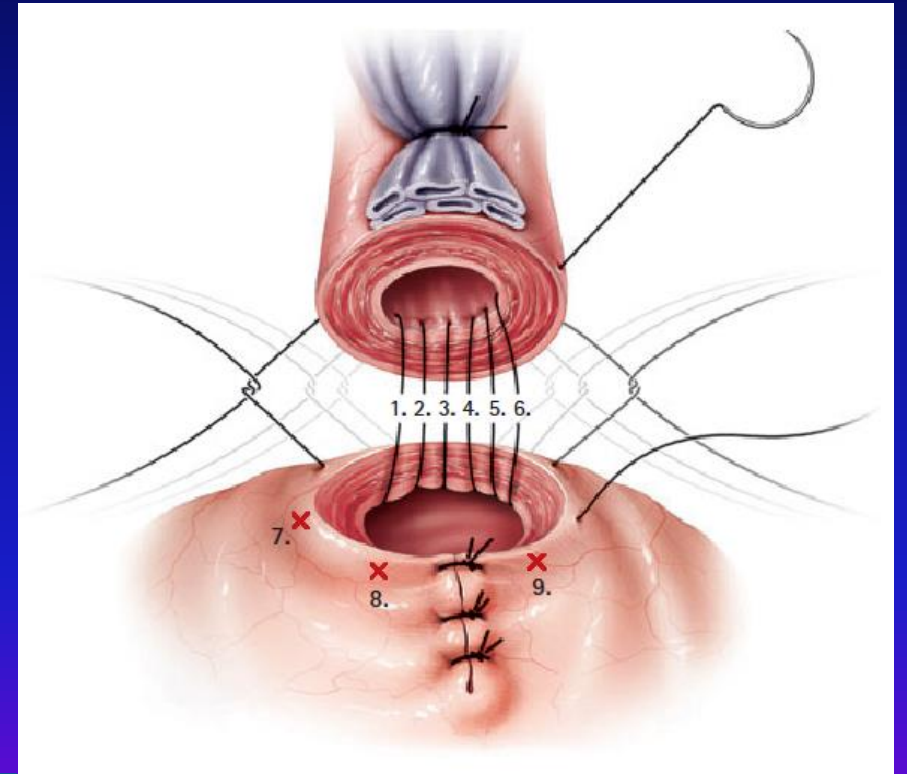
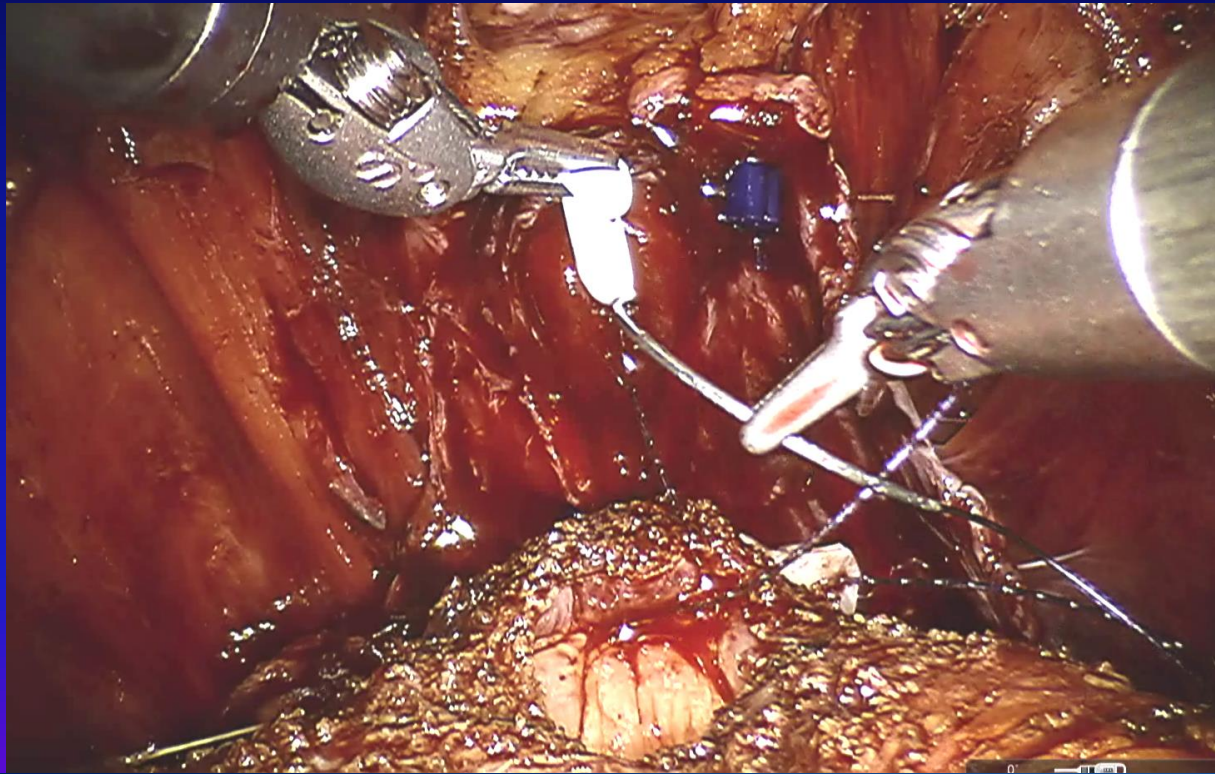


➤ Bleeding control

➤ Incontinence ↓

RP procedures

➤ Urethro-vesical anastomosis



Bidirectional continuous, 3-0 V-loc suture

Wound

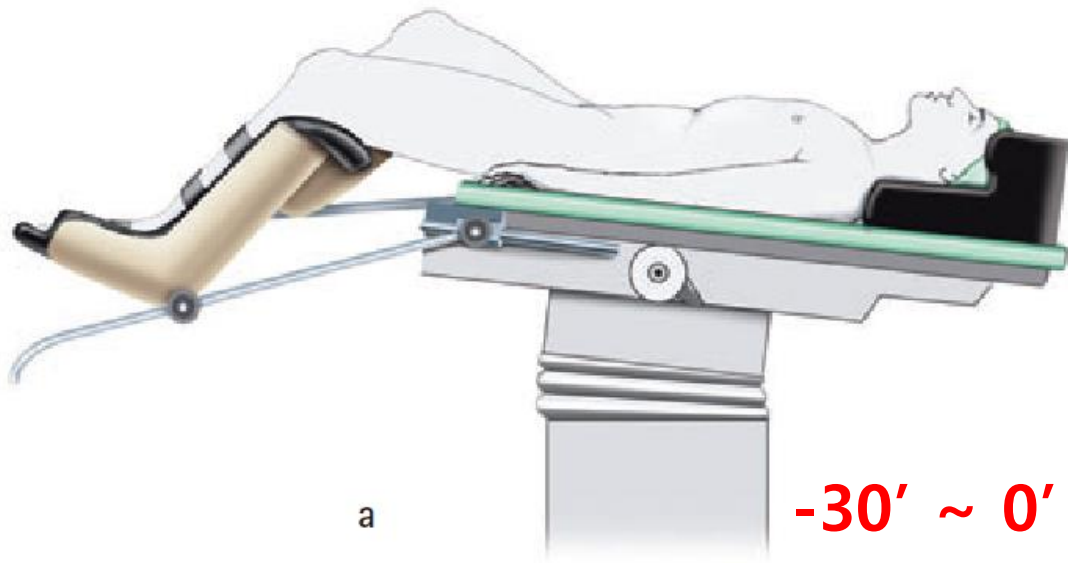
➤ Alexis laparoscopic system



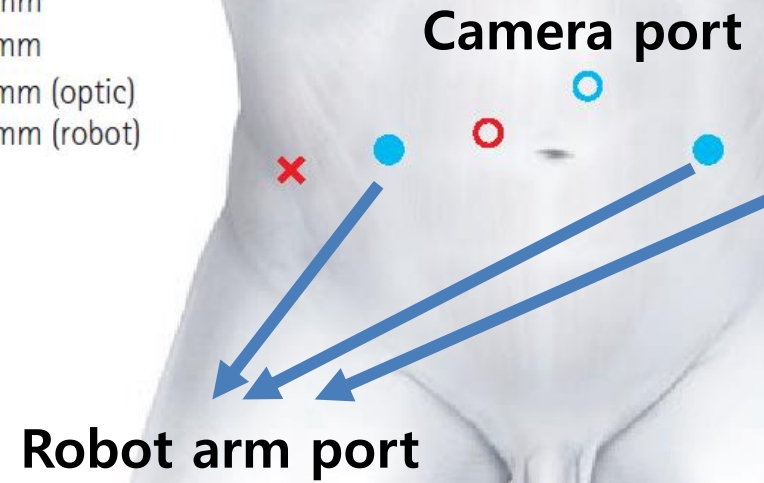
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Port placement



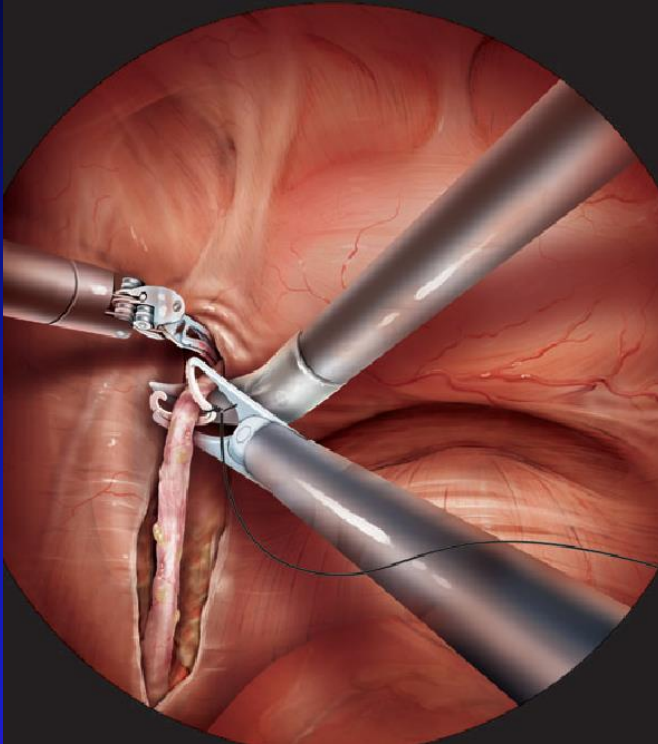
- 15 mm
- 12 mm
- × 5 mm
- 12 mm (optic)
- 8 mm (robot)



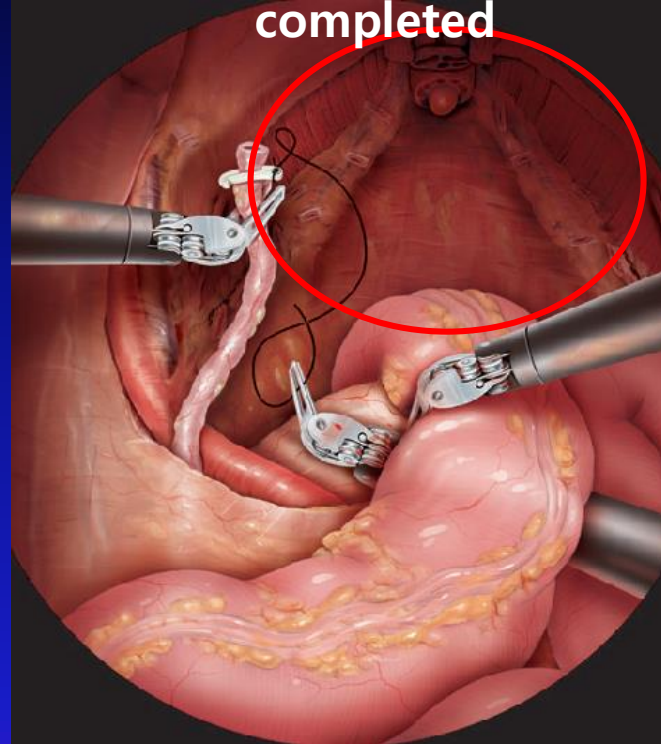
b

Robotic radical cystectomy (neobladder)

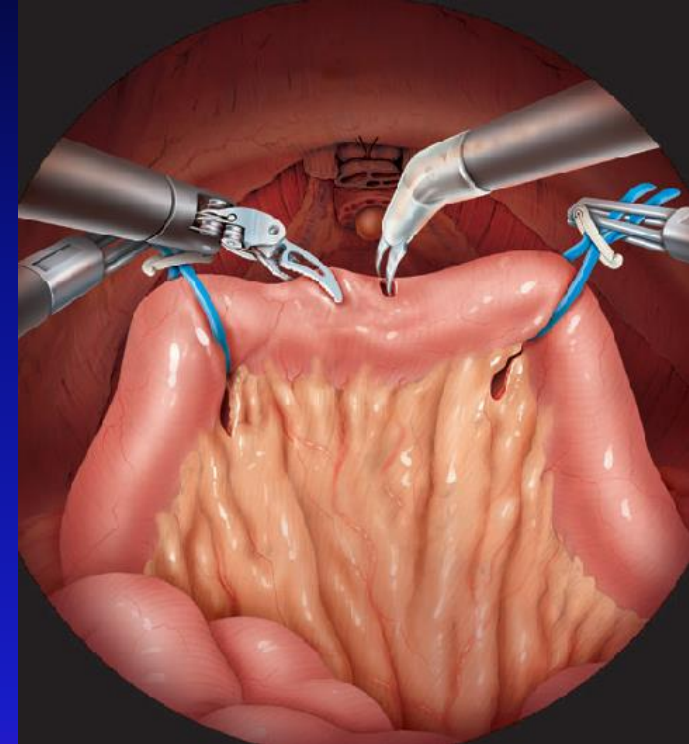
- Radical cystectomy completed



- Putting stay clip suture at the ureters after their ligation during RRC

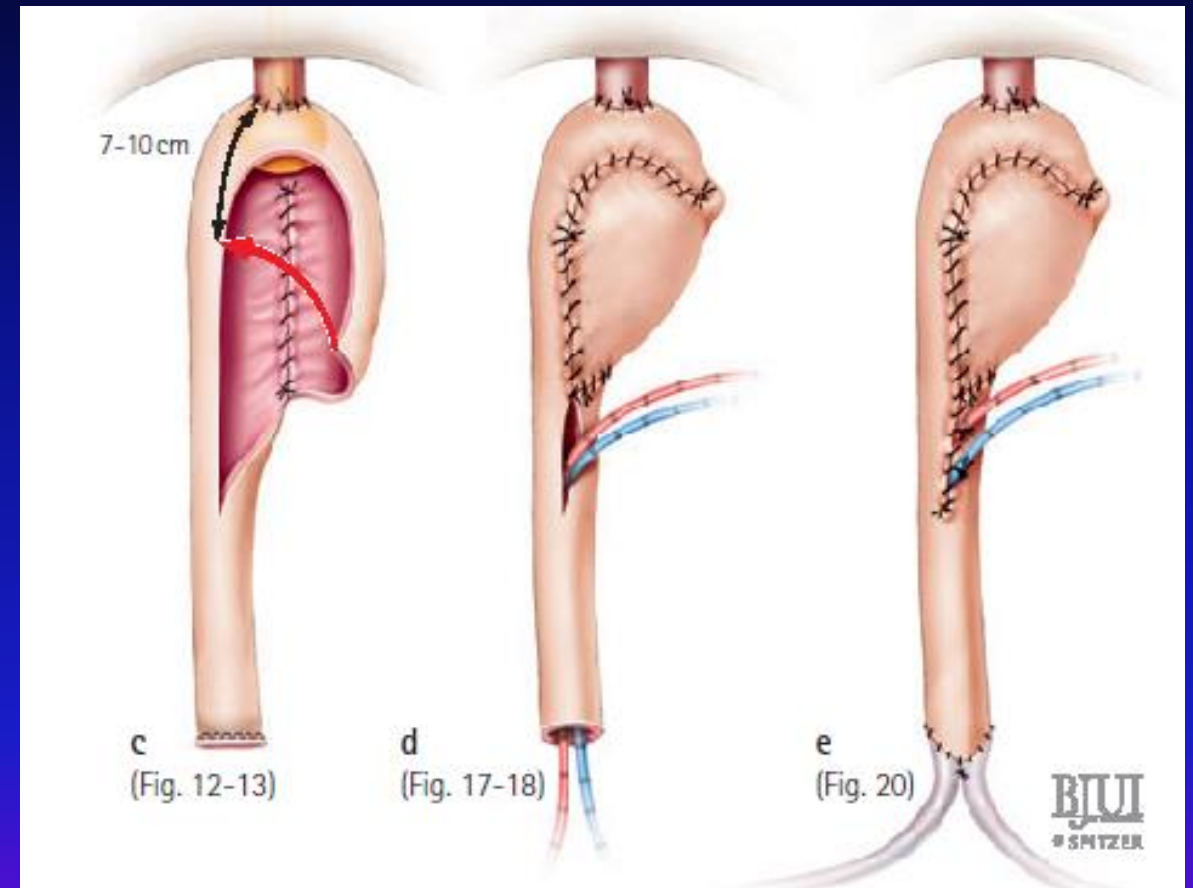
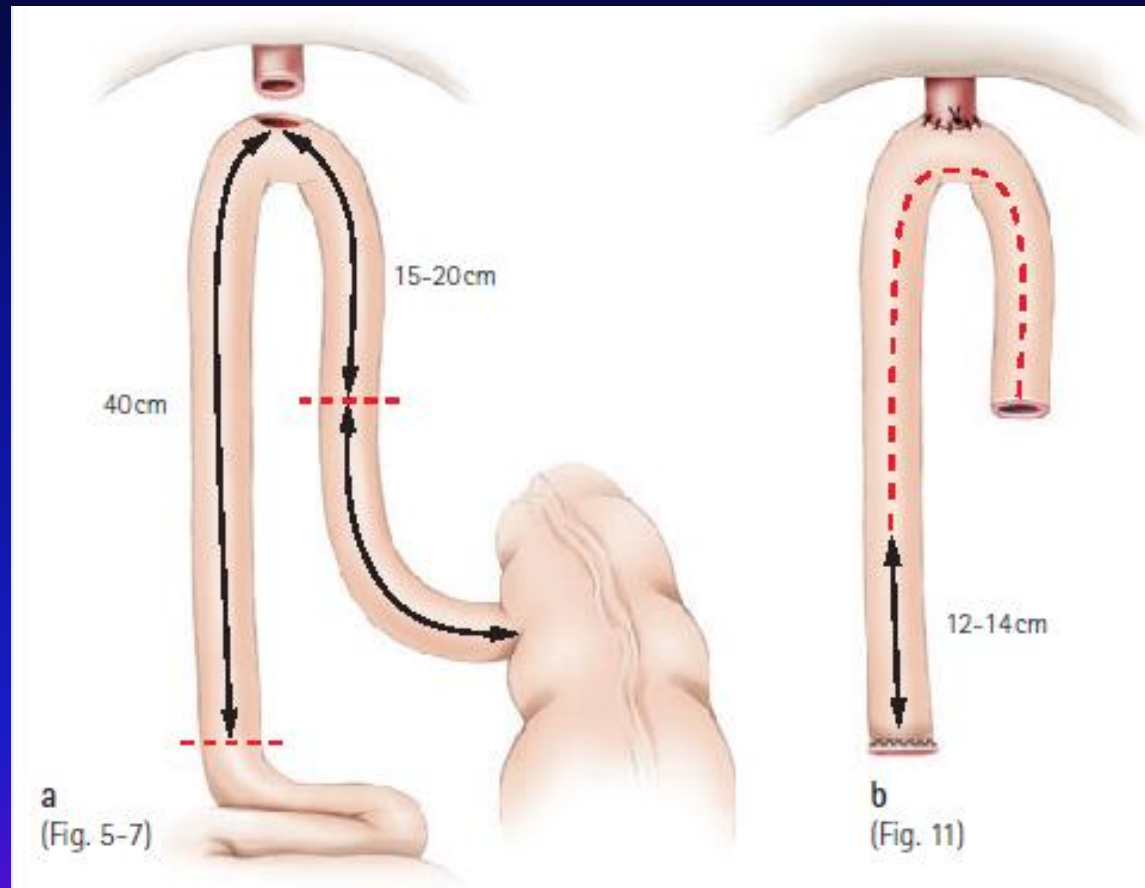


- Passing the left ureter to the right side under the mesosigmoid

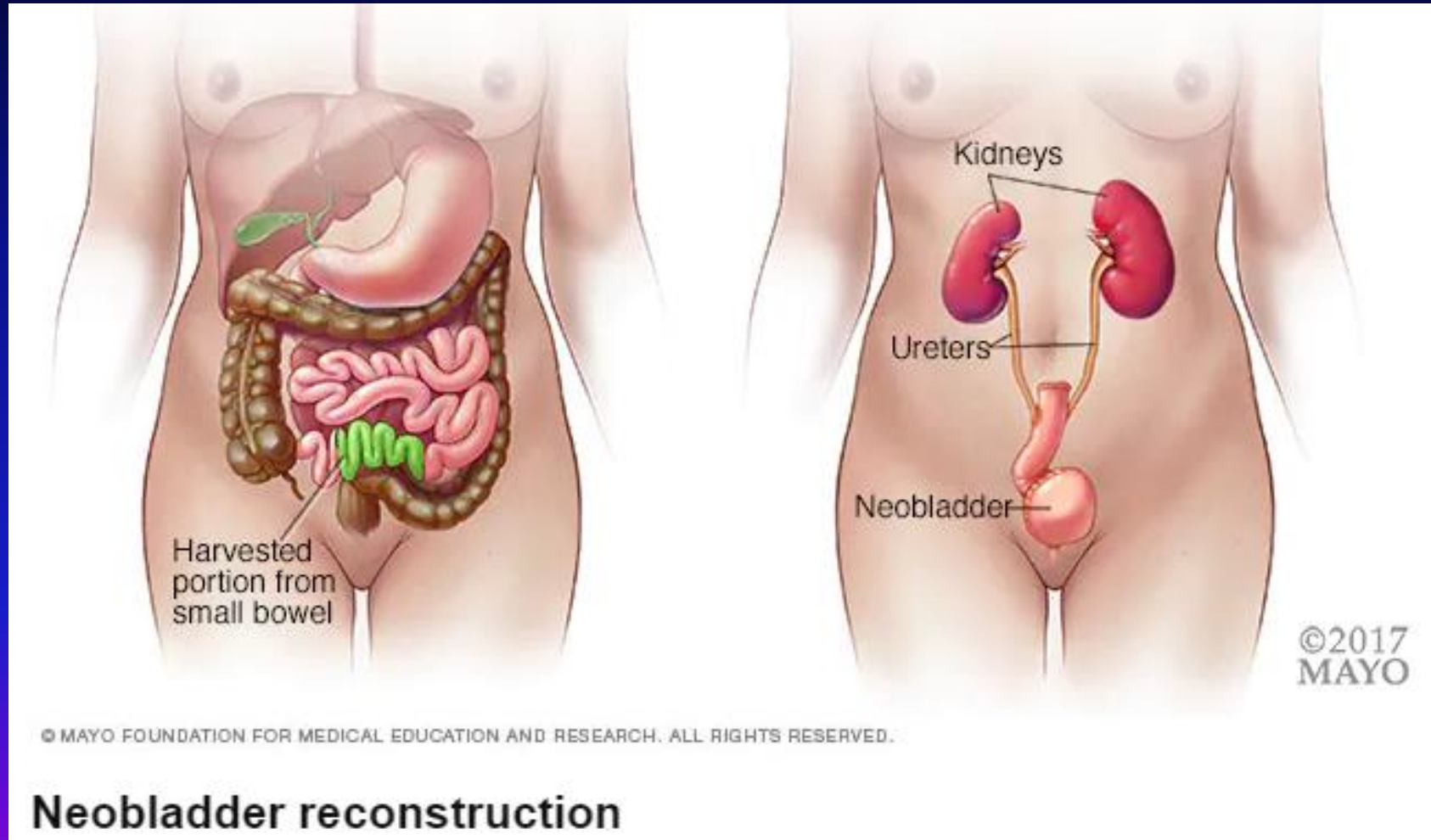


- Isolation of terminal ileum loops

Robotic radical cystectomy (neobladder)



Neobladder



Wound

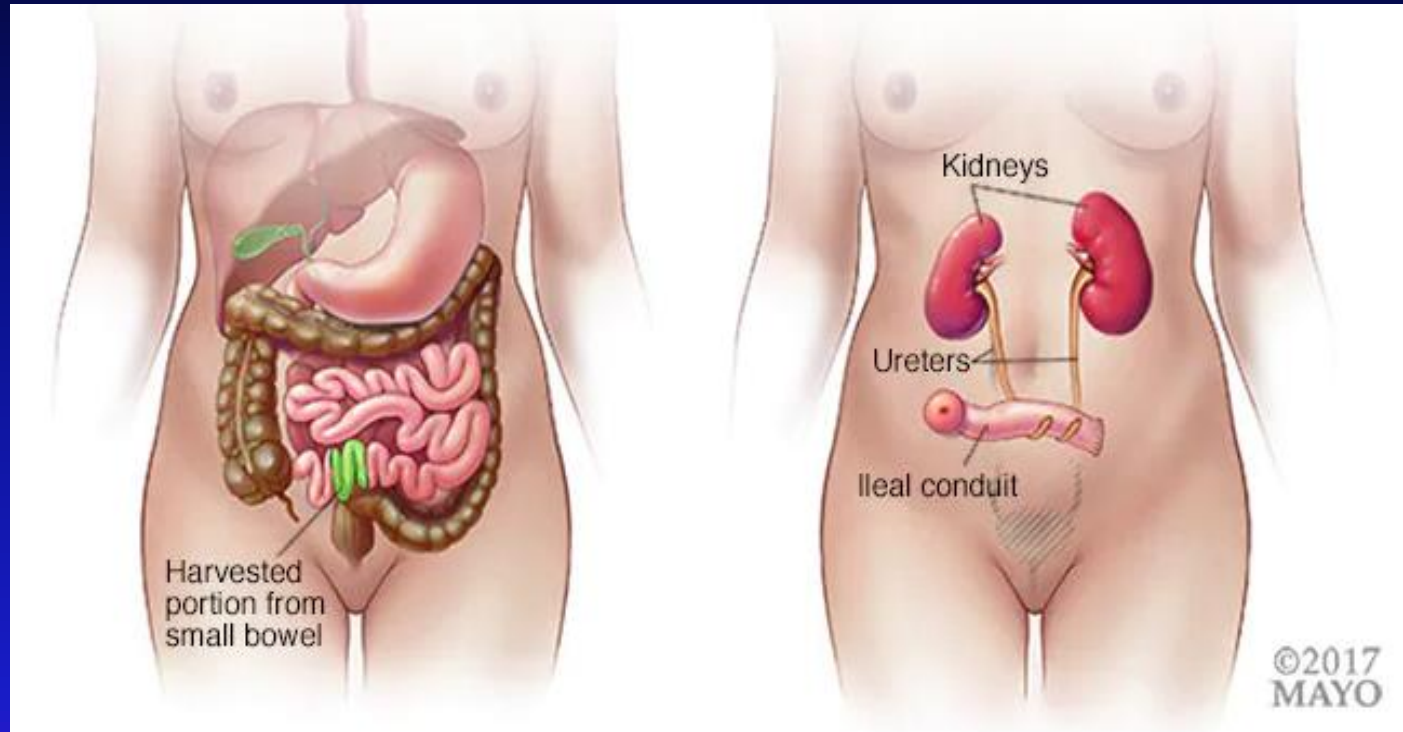


➤ Robotic neobladder



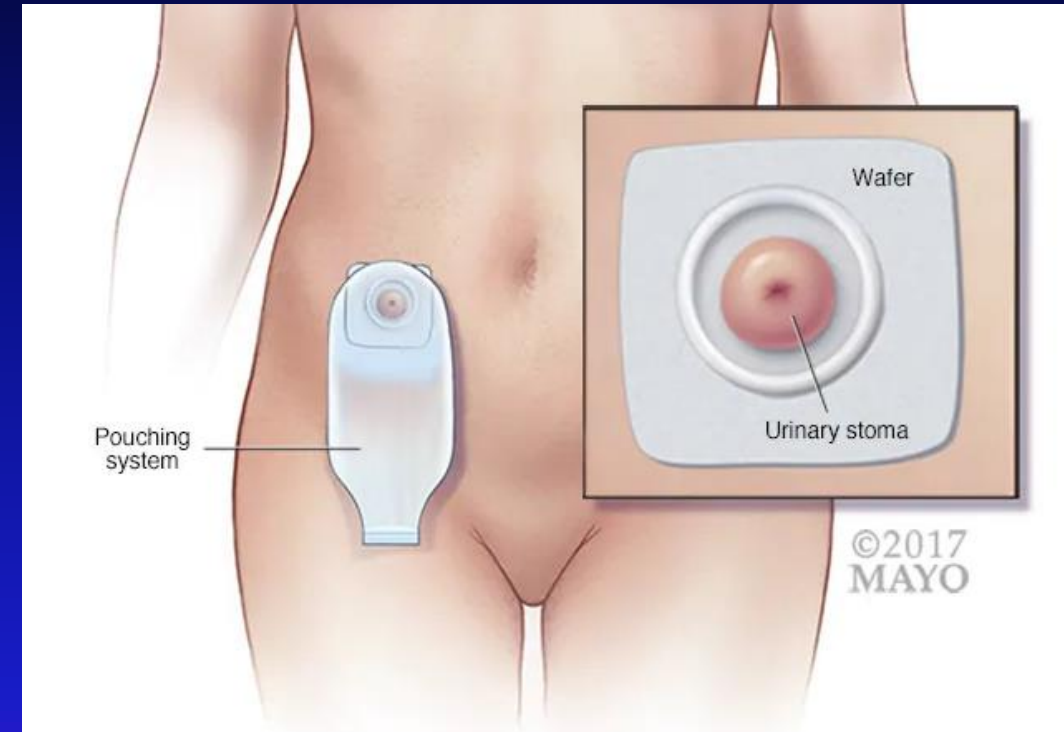
➤ Open conduit

Ileal conduit



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Ileal conduit



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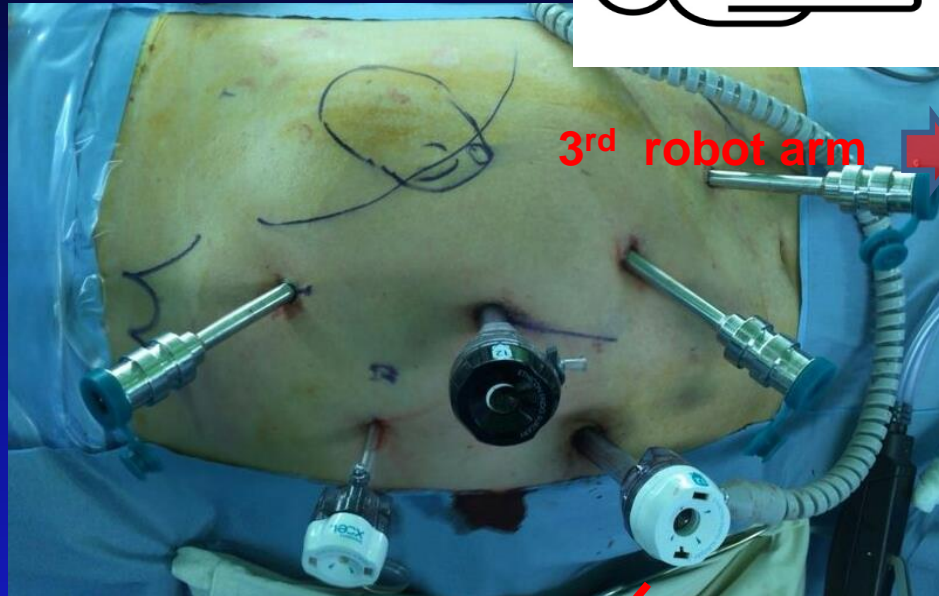
Stoma and pouching system

Contents

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- **Wound problems in current urologic surgery**

JP drain site – incisional hernia & wound problem

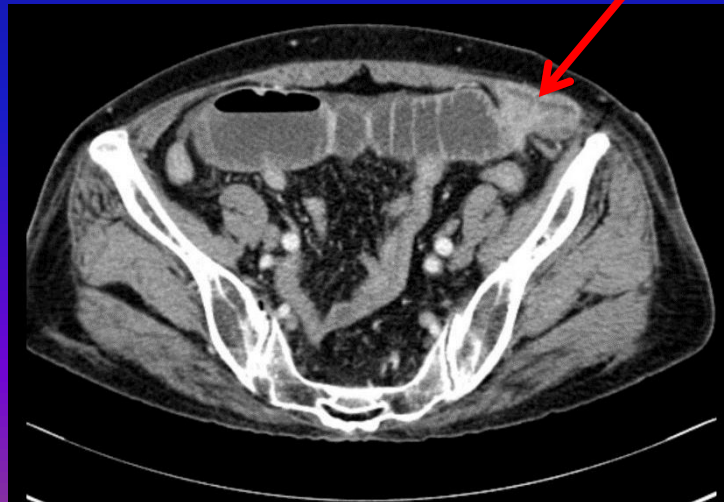
➤ Case (F/75)



JP drain inserted,
no fascial closure done

➤ Hospital course

- POD #4, JP drain removed.
- POD #5, vomiting, abdominal pain aggravated.
- **CT Abdomen + Pelvis : Incarcerated incisional hernia and mechanical ileus**



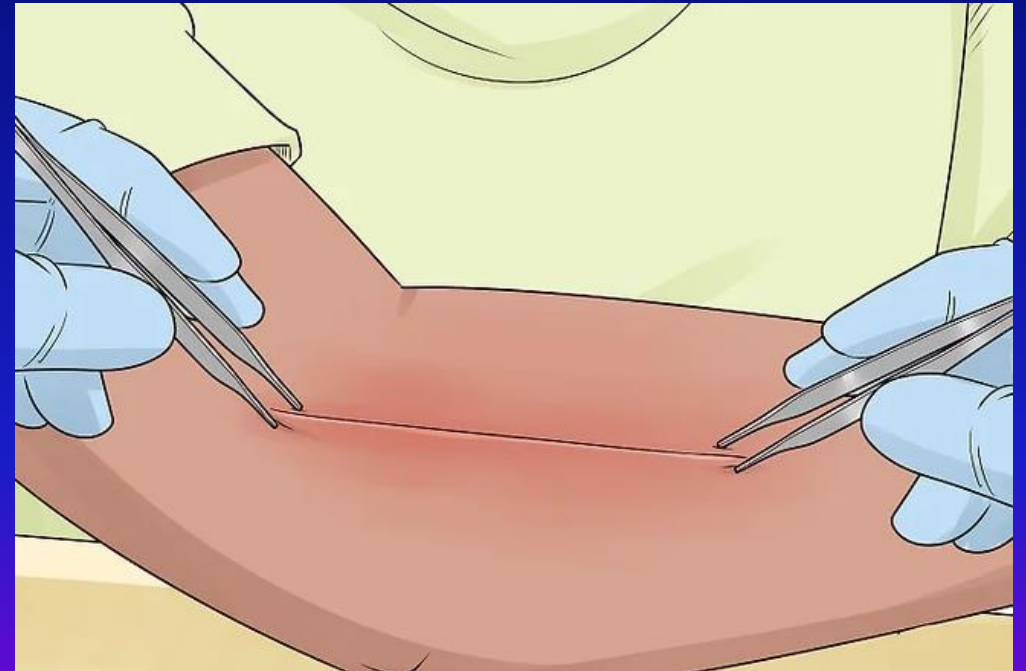
➤ Incisional hernia repair done :

- no bowel incarceration, mild serosa disruption
→ repair done

Using Tissue Adhesive for Wound Repair



- Wait until the wound stops bleeding



- Grasp each end of the wound with Adson forceps

Thank You!

