Laparoscopic and Robotic Radical Prostatectomy
Tips and Tricks
Case Discussion

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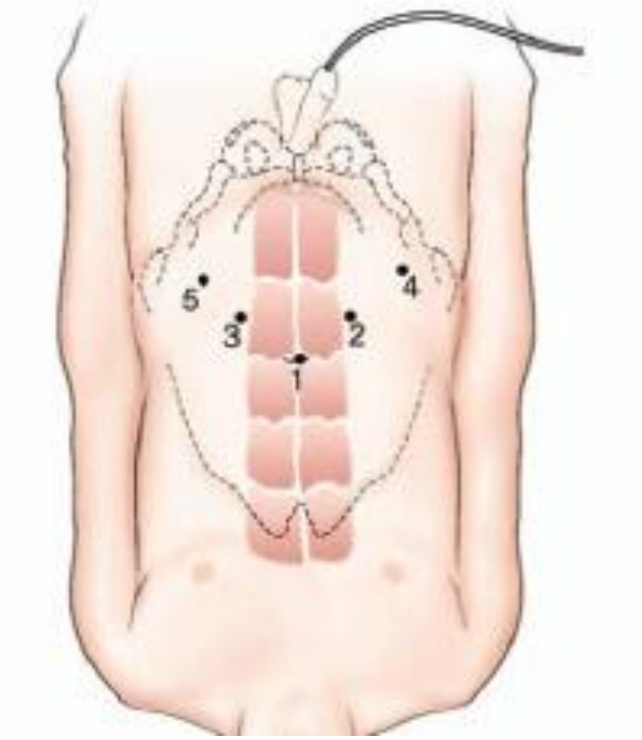
Case 1

- 69 years old - PSA: 7ng/dl
- T1c, Gleason 6 CaP
- TRUS volume: 30 ml
- PMh: none
- PSh: TURP 5 years ago, 35gr, TURP syndrome



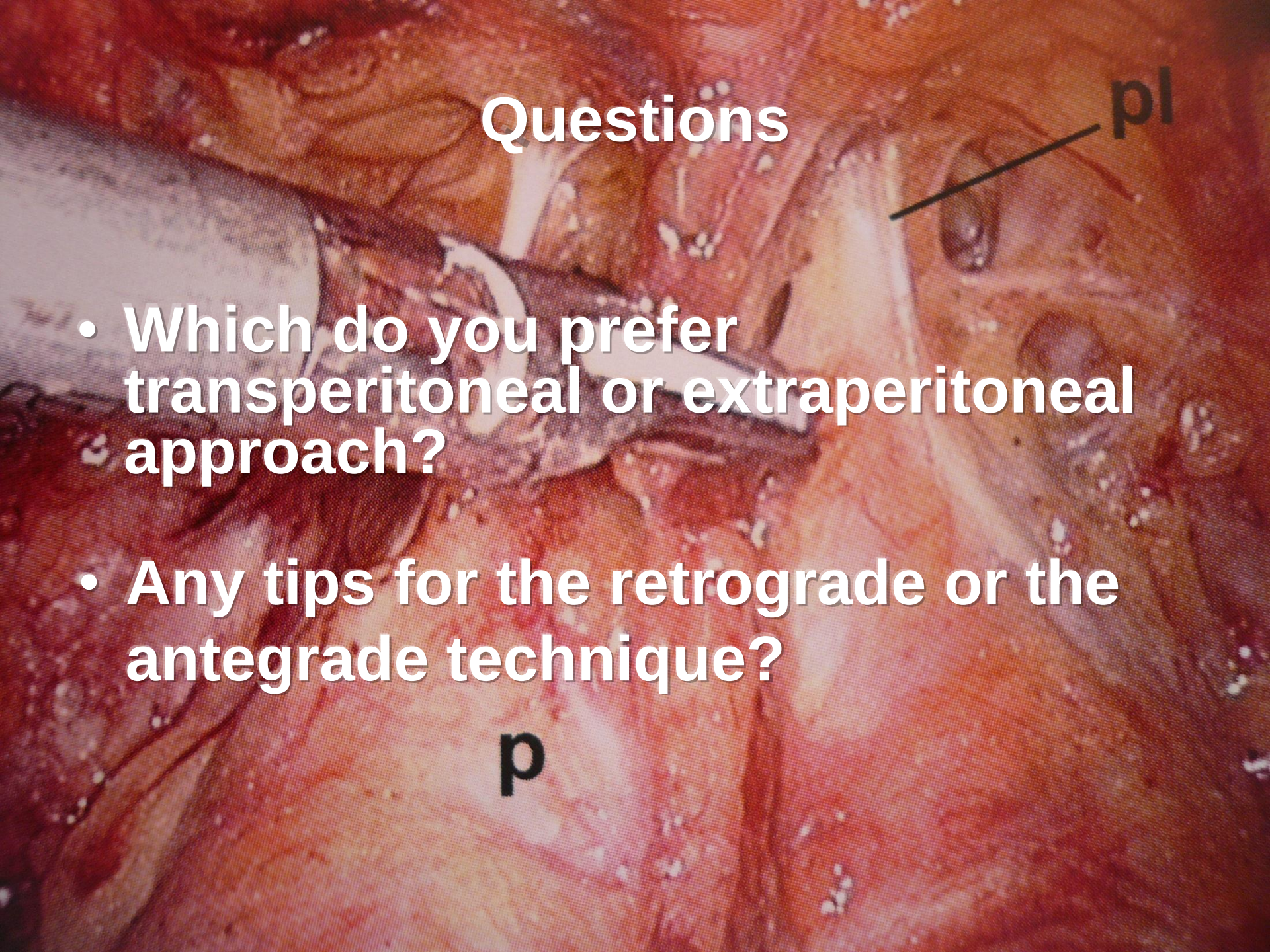
Questions

- Would you perform cystoscopy preoperatively?

- Would you insert double pig-tail stents preoperatively?

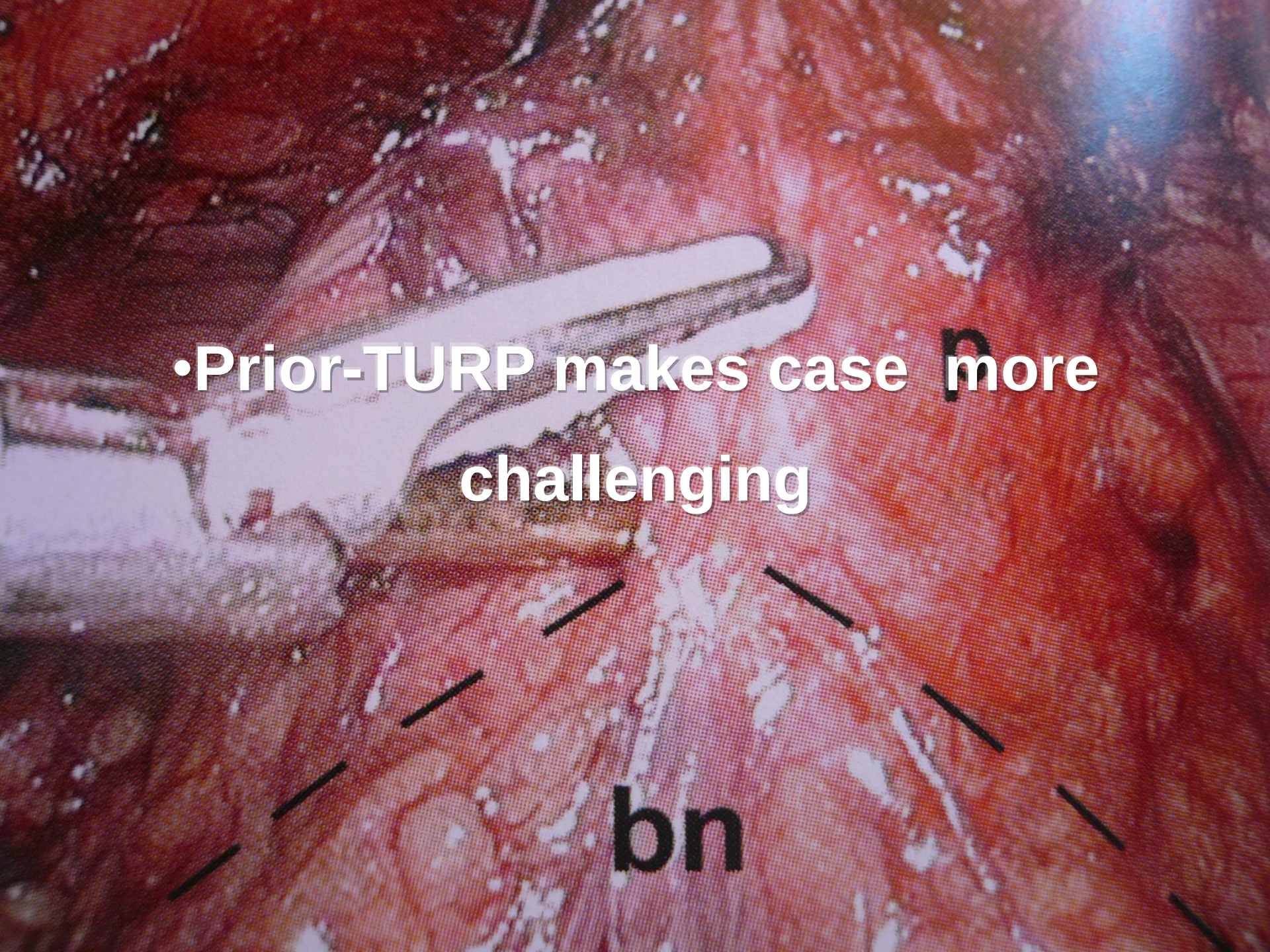
Questions

- Which do you prefer transperitoneal or extraperitoneal approach?
- Any tips for the retrograde or the antegrade technique?

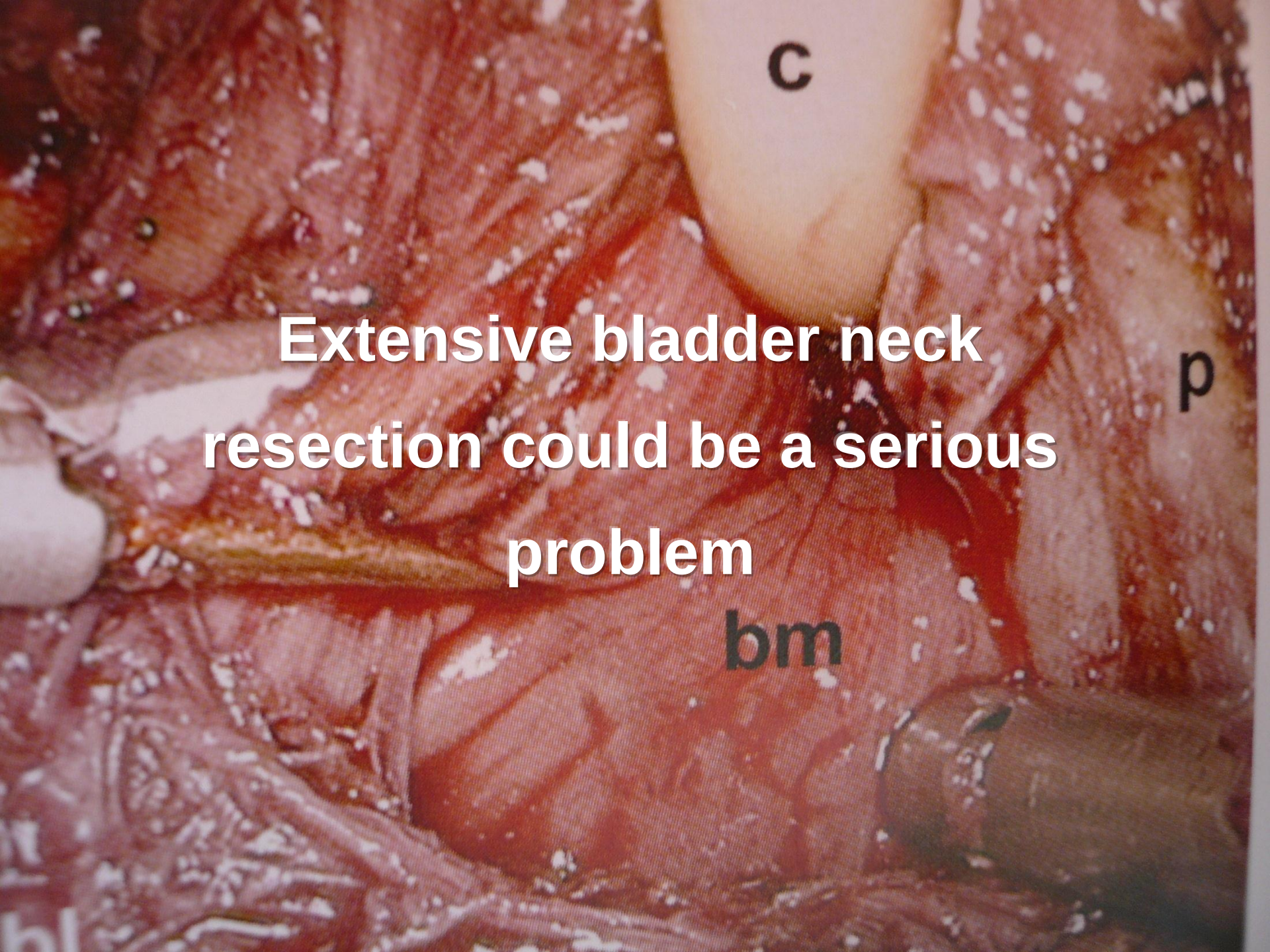


Questions

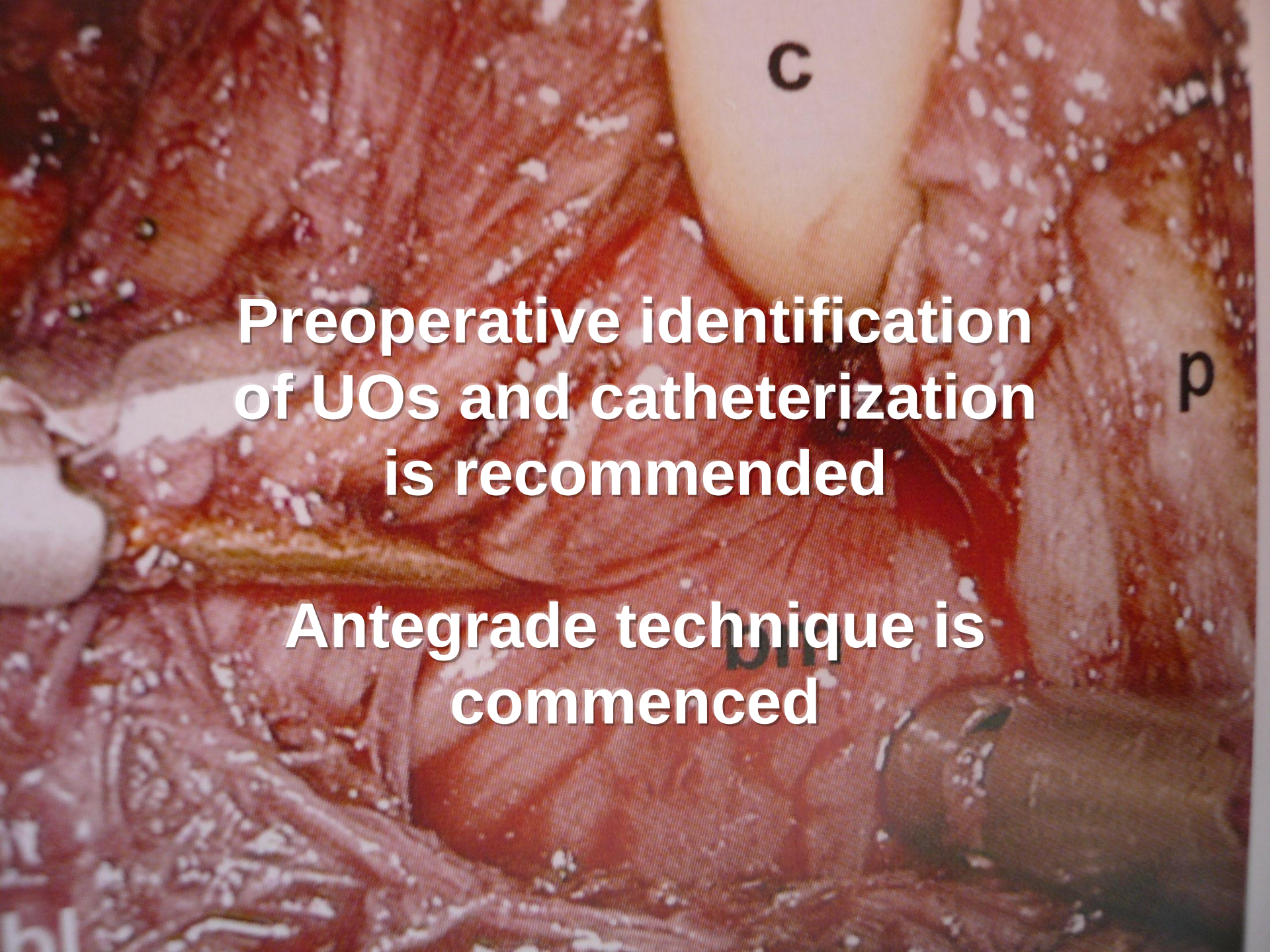
- How do you identify the bladder neck?
- How about apical dissection?
- Your thoughts about robotic surgery?



- Prior-TURP makes case more challenging

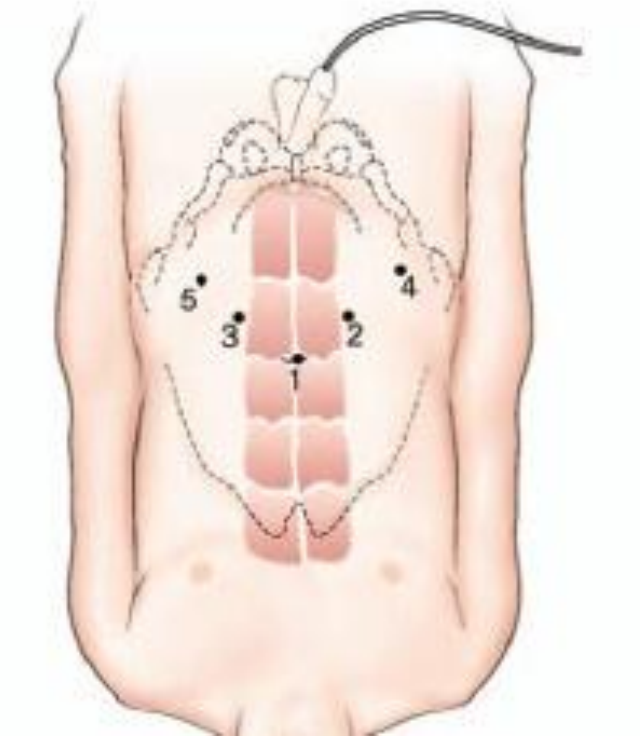


Extensive bladder neck resection could be a serious problem


Preoperative identification of UOs and catheterization is recommended
Antegrade technique is commenced

Case 2

- 71 years old - PSA: 10ng/dl
- T1c Gleason 6 CaP
- TRUS volume: 180 ml, large middle lobe, asymmetric apex
- PMh: CAD on medical therapy, BMI 29Kg/$m^{2,}$ potent
- PSh: none

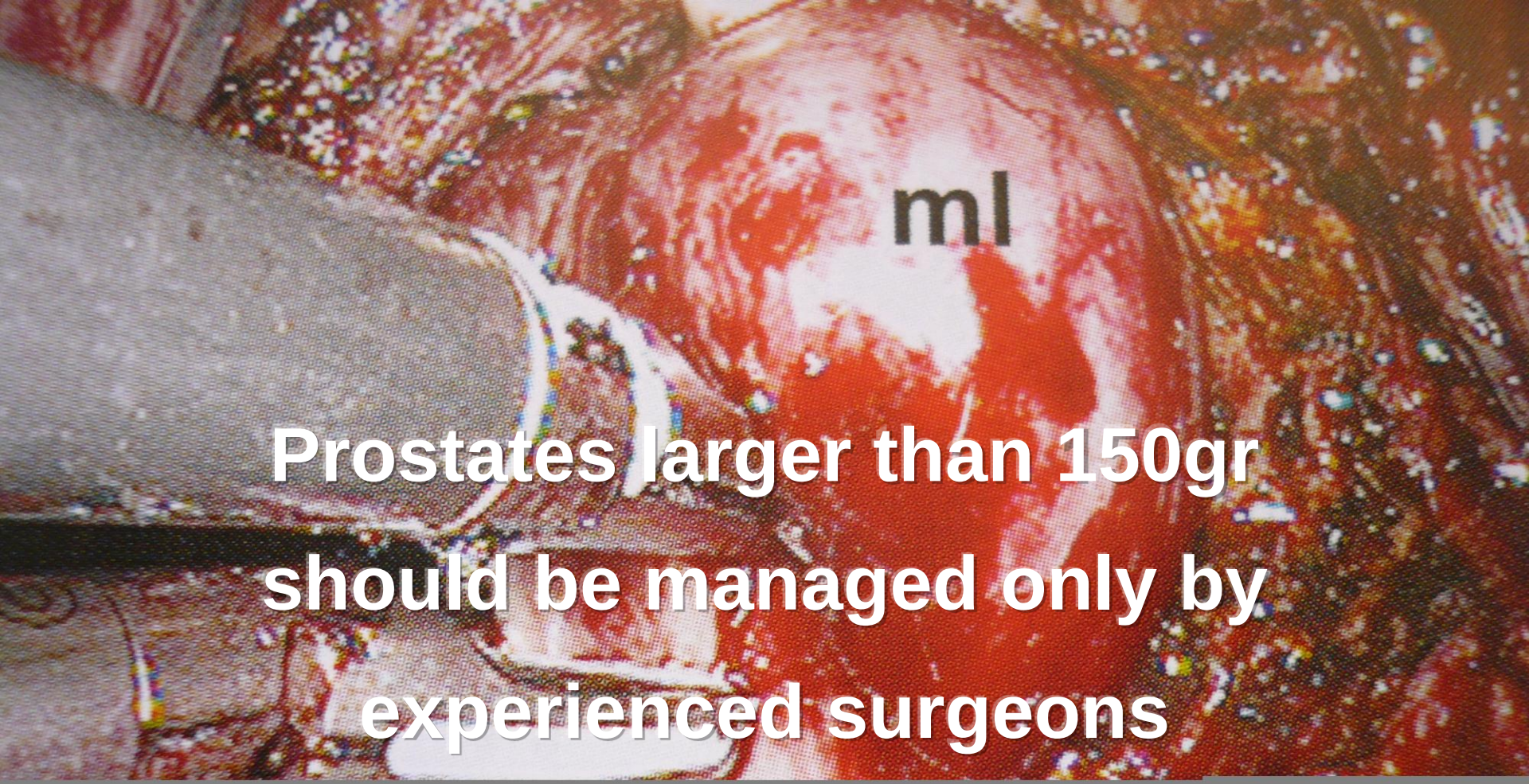


Questions

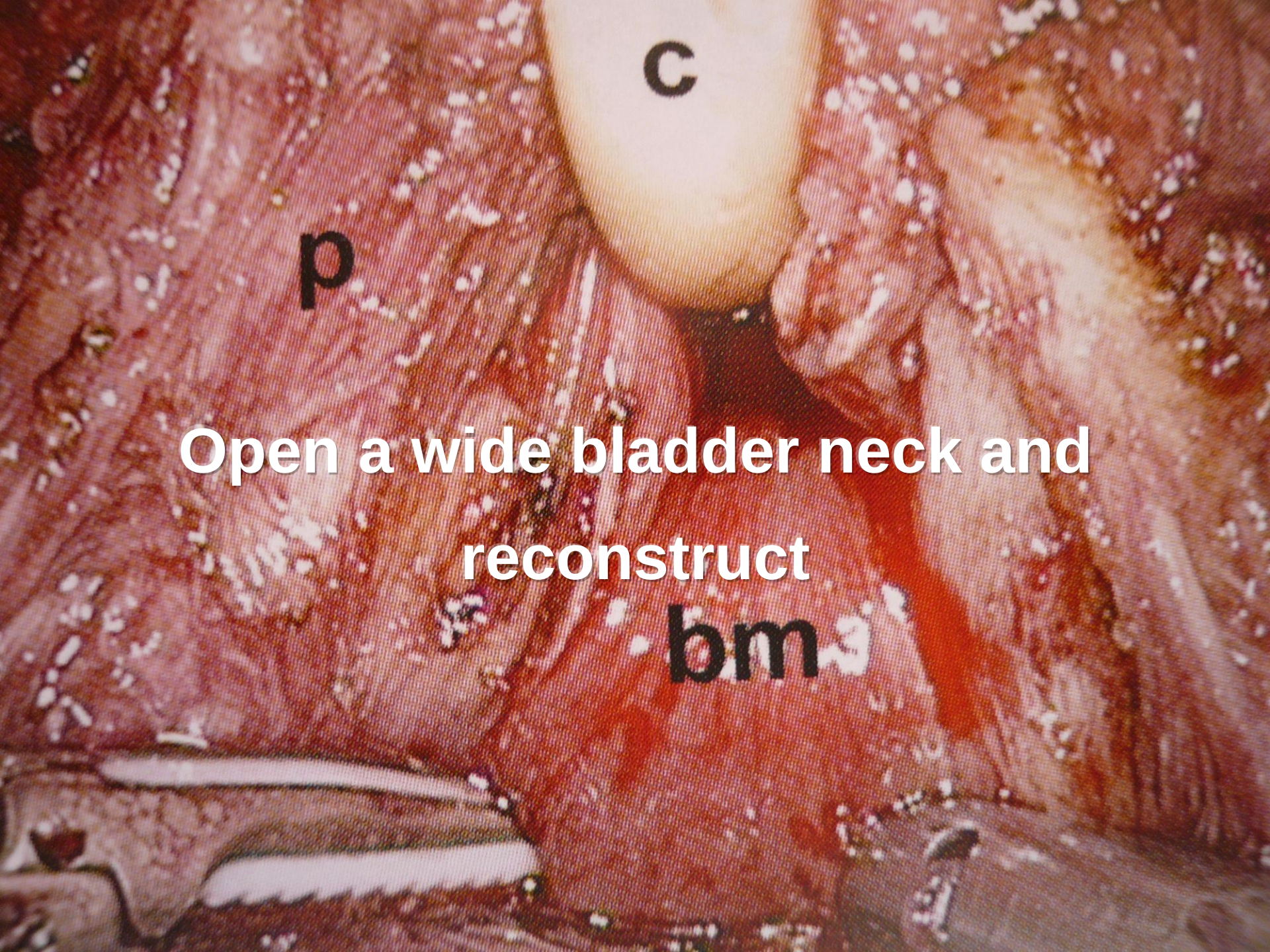
- Is this case ideal for laparoscopic or robotic radical prostatectomy?
- Transperitoneal or Retroperitoneal approach?
- Retrograde or antegrade technique?

Questions

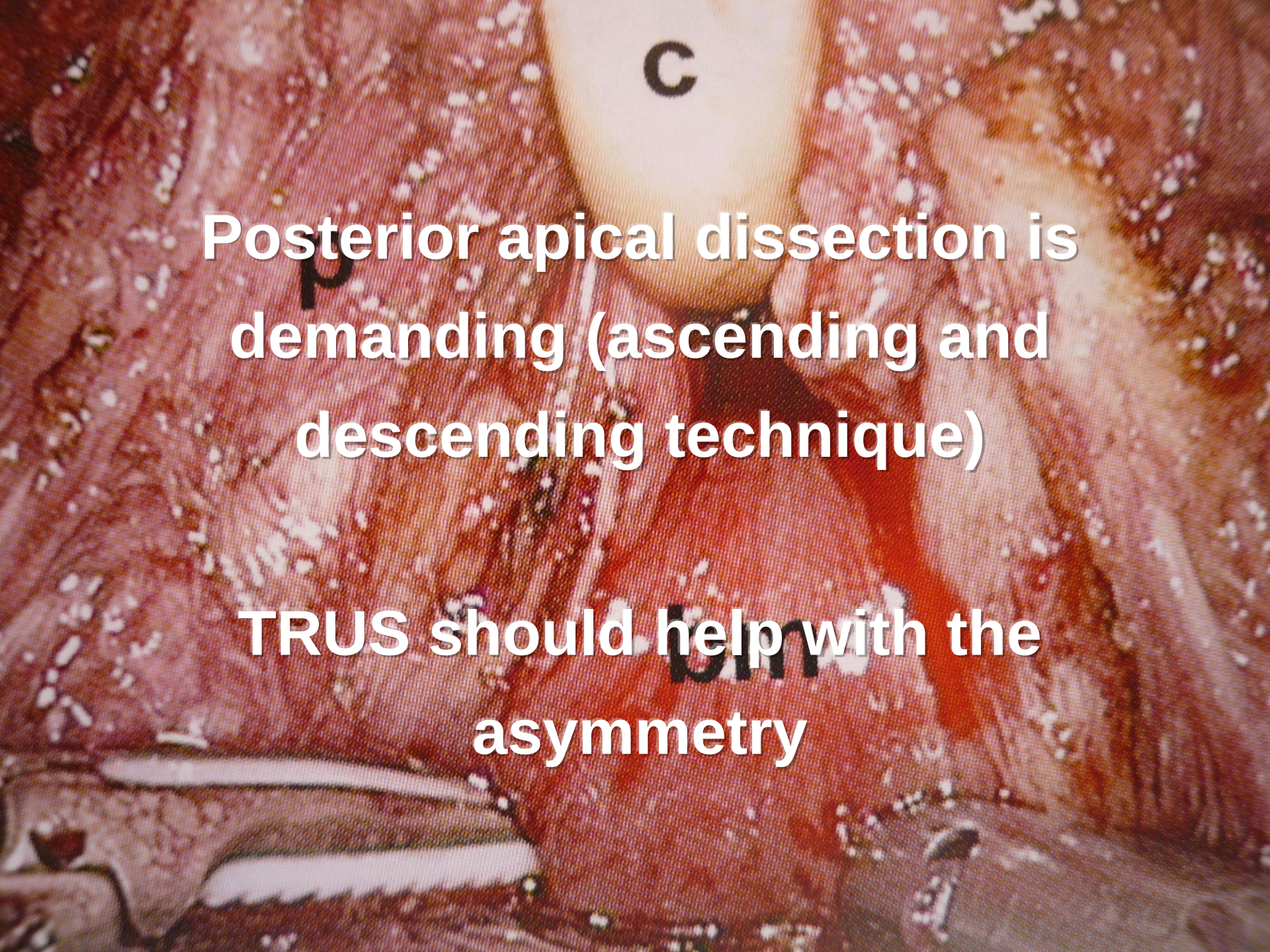
- How would you preserve the bladder neck?
- How do you transect the lateral pedicle and mobilize the neurovascular bundles during a nerve-sparing prostatectomy?
- How do you perform the apical dissection and maximize urethral length?



Prostates larger than 150gr should be managed only by experienced surgeons

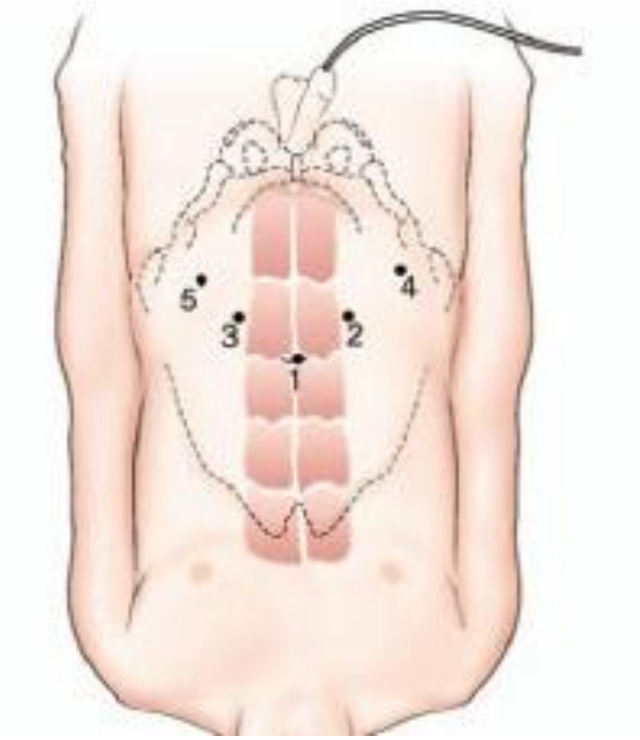


Open a wide bladder neck and reconstruct


Posterior apical dissection is demanding (ascending and descending technique)
TRUS should help with the asymmetry

Case 3

- 68 years old - PSA: 6ng/dl
- T2, Gleason 7 CaP
- TRUS volume: 65 ml
- PMh: CAD, Hypertension, Diabetes on medical therapy, ASA score II-III, BMI 47Kg/m^2
- PSh: none



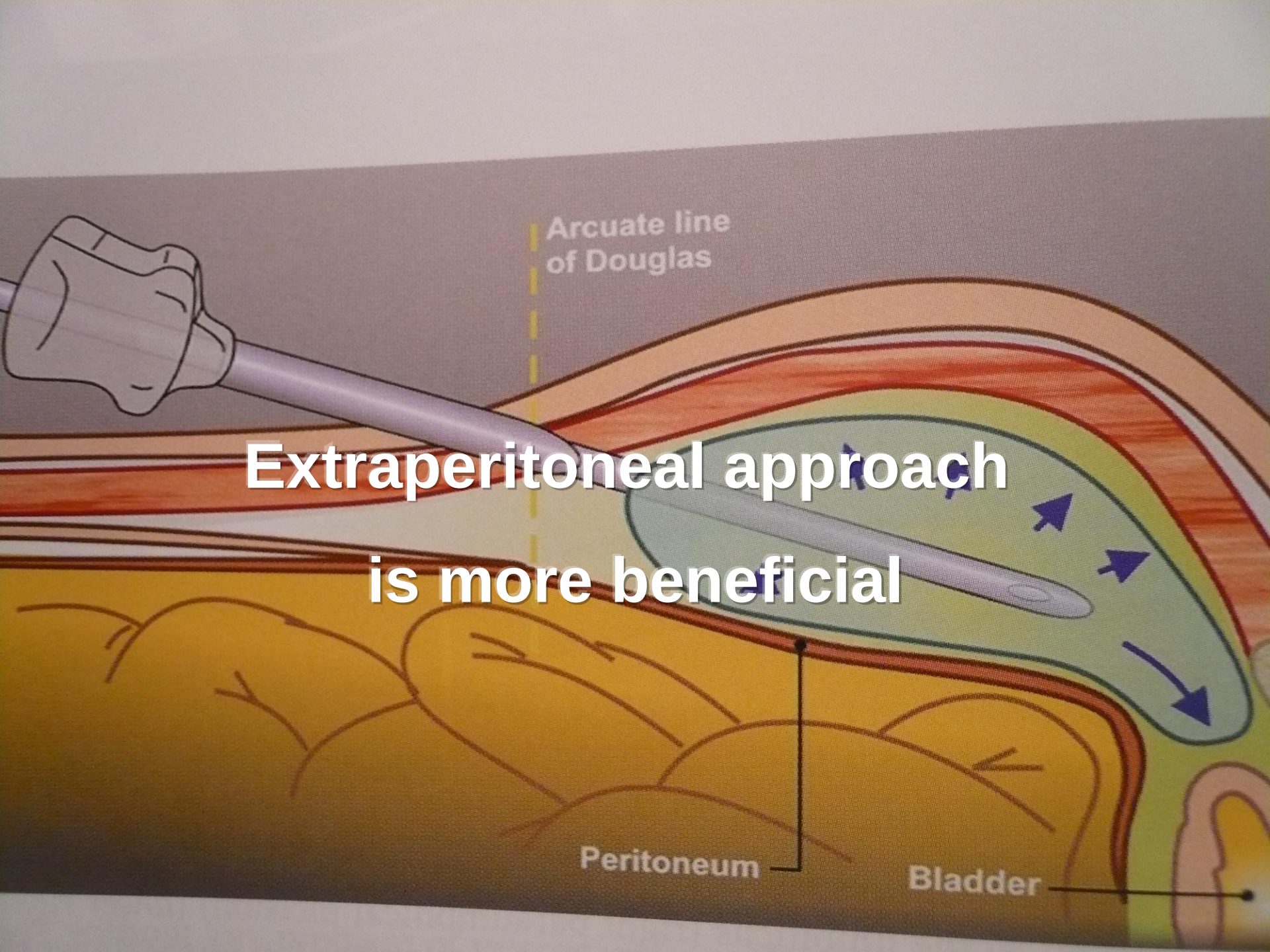
Questions

- How often are you confronted with such a patient?
- How do you see robotic prostatectomy to be different from pure laparoscopic prostatectomy?
- Transperitoneal or extraperitoneal approach?

Questions

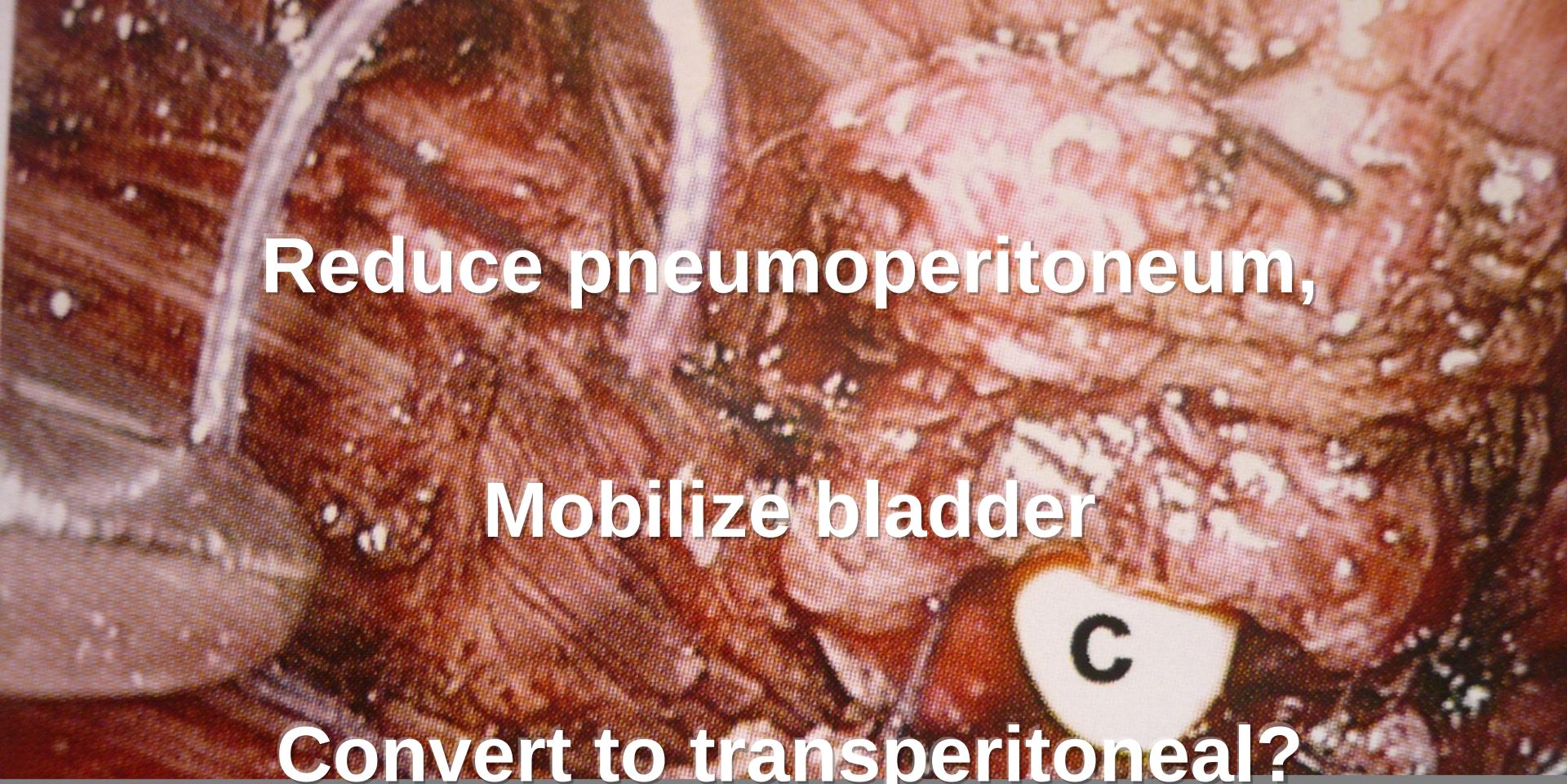
- What are the optimal angles of port placement?
- Same for robotic surgery?
- In case the bladder does not “reach” the apex what would you recommend?


Obese patents are challenging
but may benefit from laparoscopic
surgery



Extraperitoneal approach is more beneficial


•The trocars should be inserted 1-3cm caudally
• Increase Trendelburg



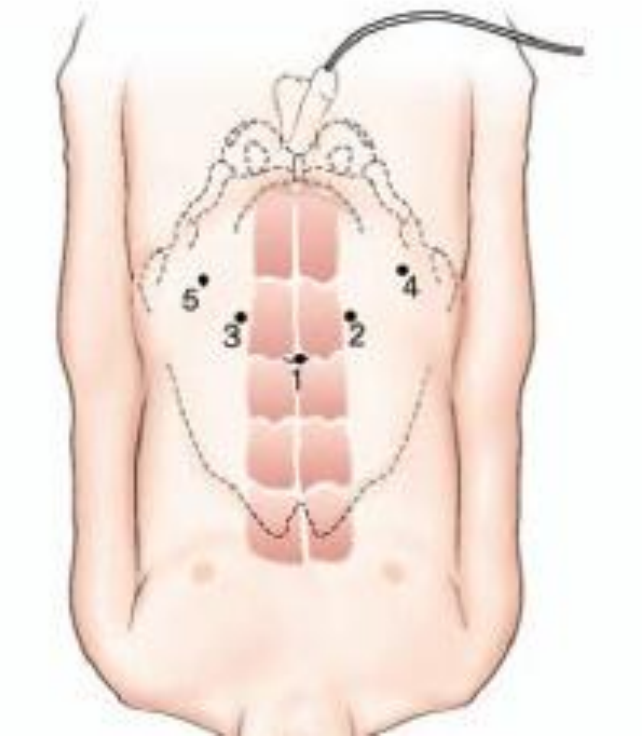
Reduce pneumoperitoneum,

Mobilize bladder

Convert to transperitoneal?

Case 4

- 65 years old - PSA: 5 ng/dl
- T1c, Gleason 6 CaP
- TRUS volume: 50 ml
- PMh: None
- PSh: 2 laparotomies for a perforated appendicitis 35ys ago, and a right TEP (or TAPP) hernioplasty 5 years ago

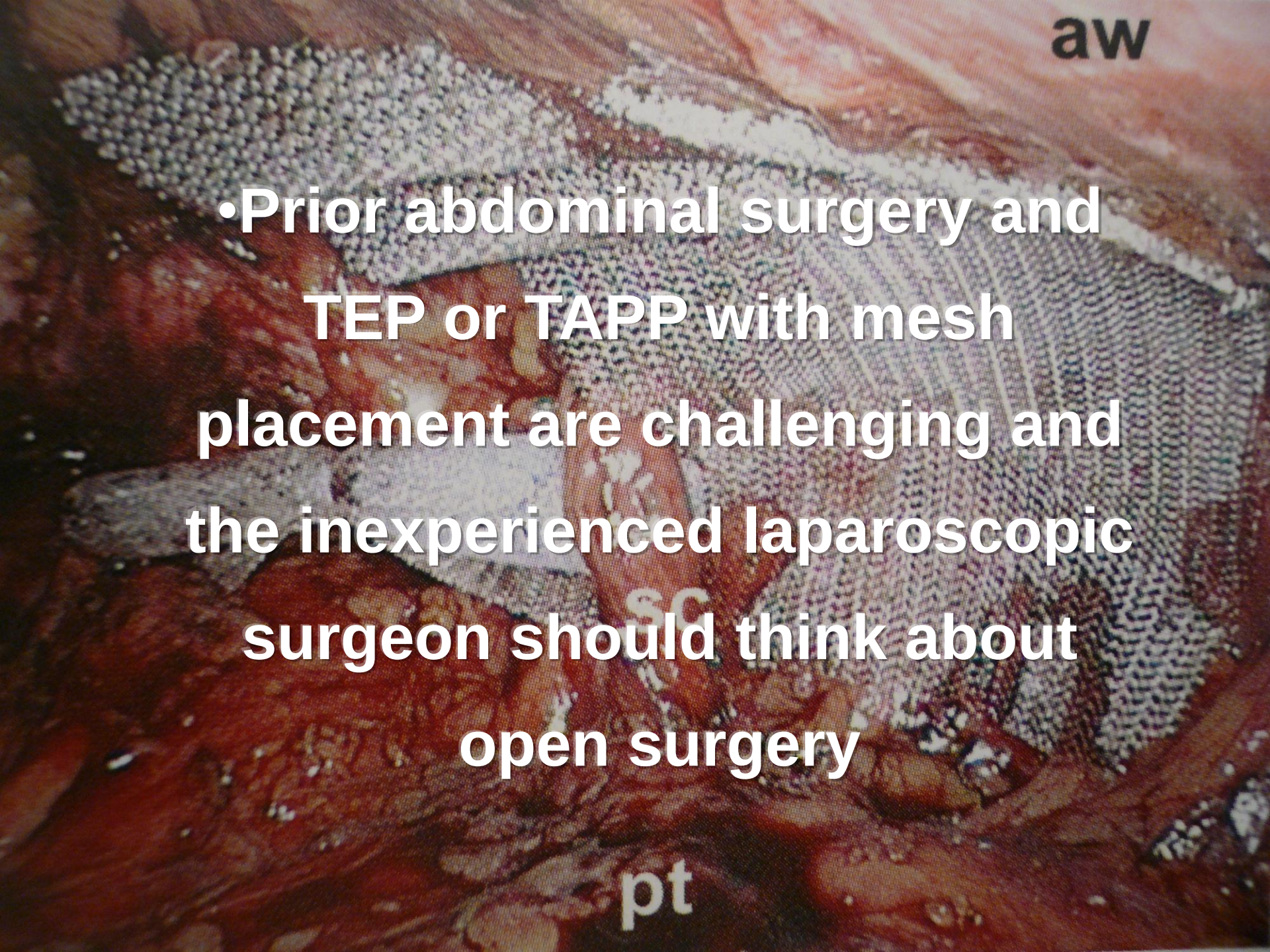


Questions

- Is this a reason for conversion to open surgery?
- Robotic, transperitoneal or extraperitoneal approach?
- Which is the optimal position of the trocars?

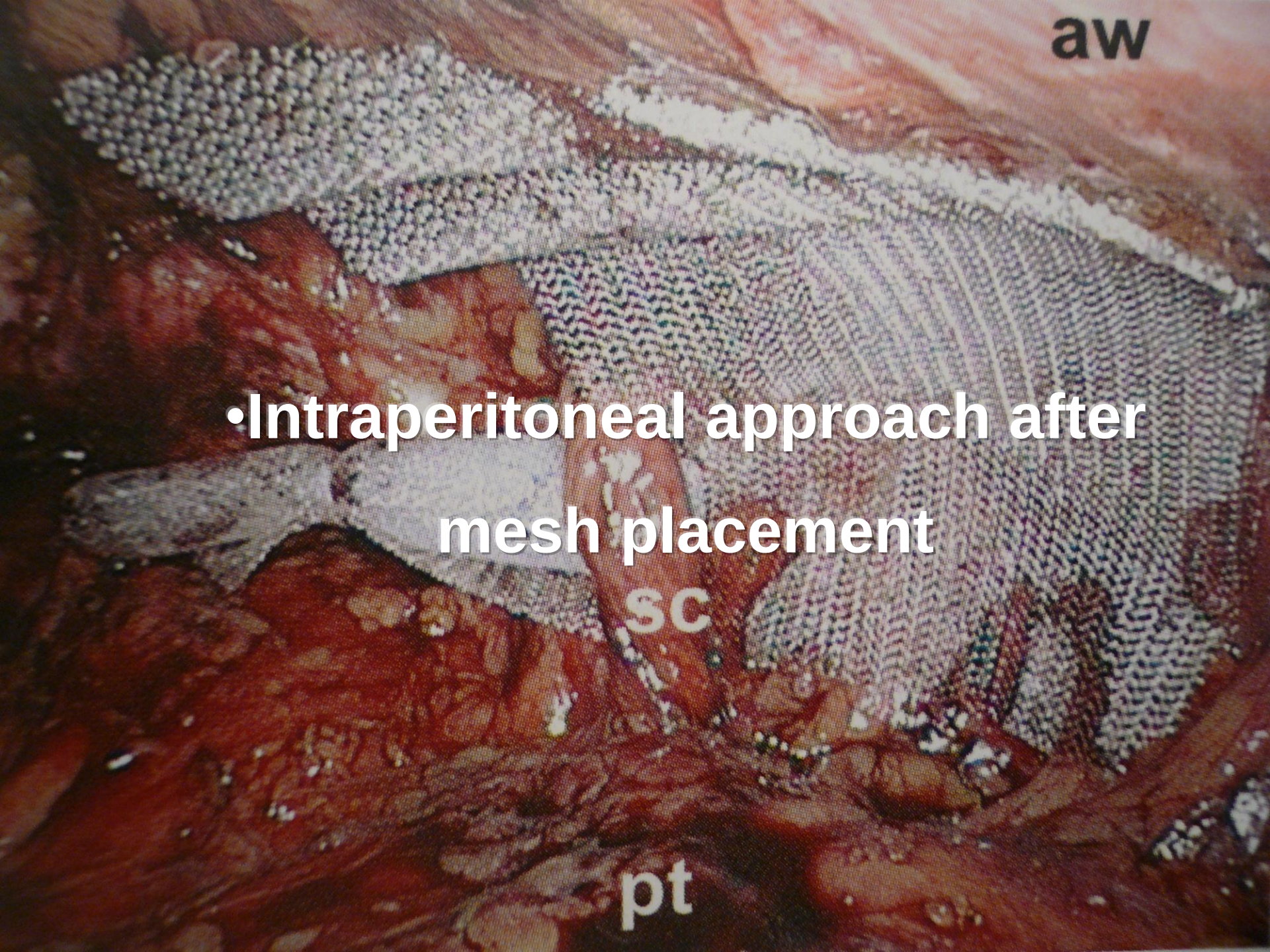
Questions

- Which is the optimal position of the trocars?
- Is there a higher risk for bladder injury?
- What about lymphadenectomy at the site of the mesh?



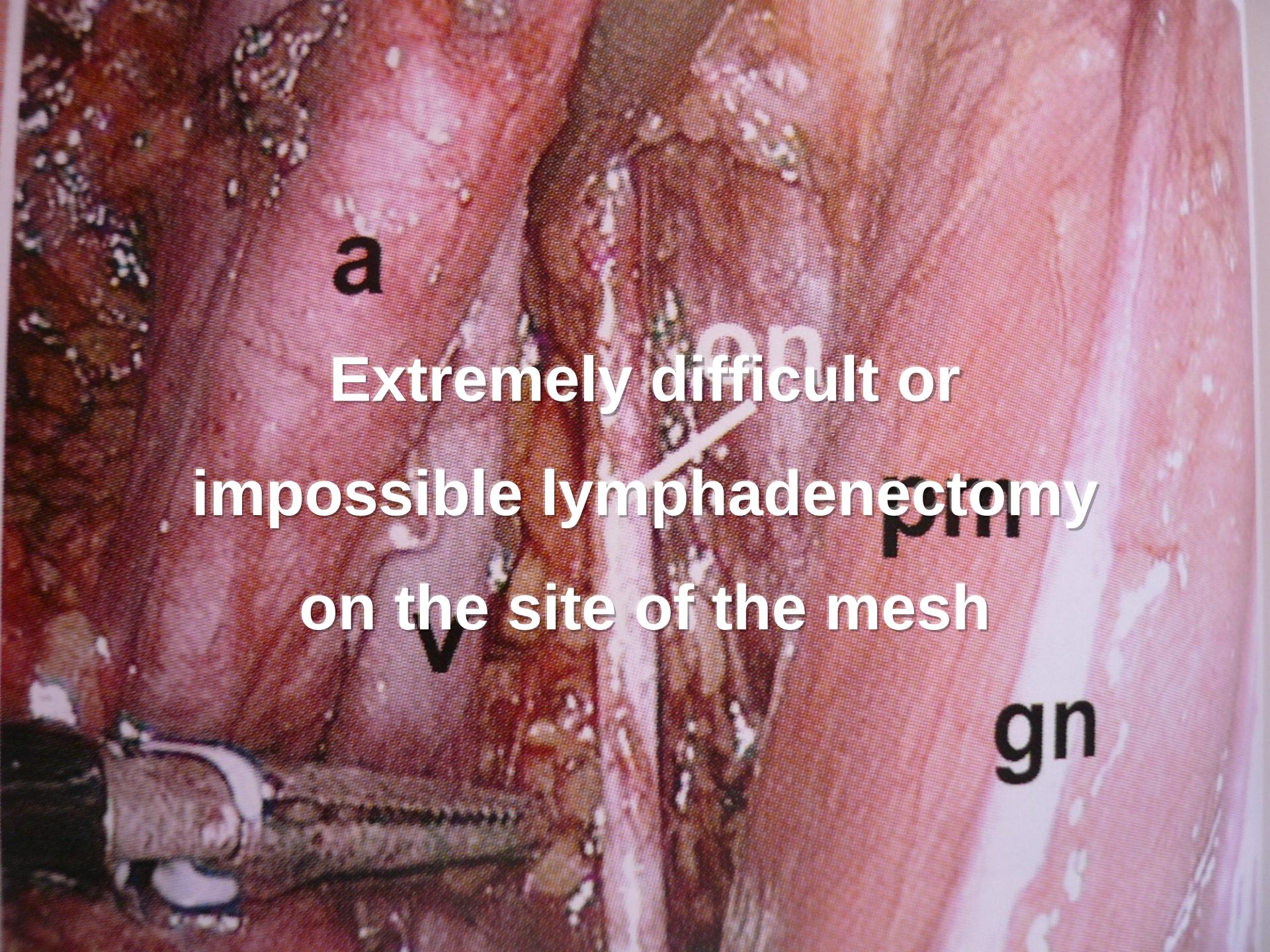
- Prior abdominal surgery and TEP or TAPP with mesh placement are challenging and the inexperienced laparoscopic surgeon should think about open surgery


The trocars should be adopted away from the adhesions that are present



- Intraperitoneal approach after mesh placement

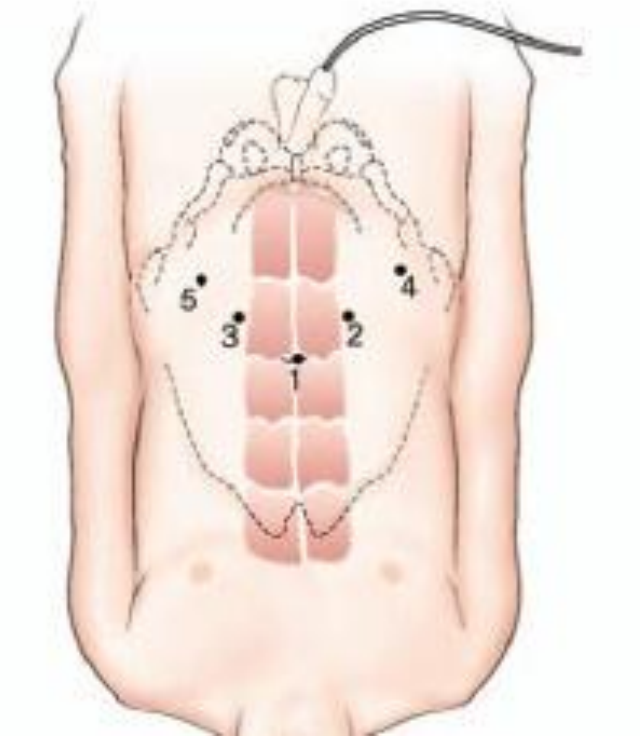

Extraperitoneal approach
after abdominal surgery



Extremely difficult or impossible lymphadenectomy on the site of the mesh

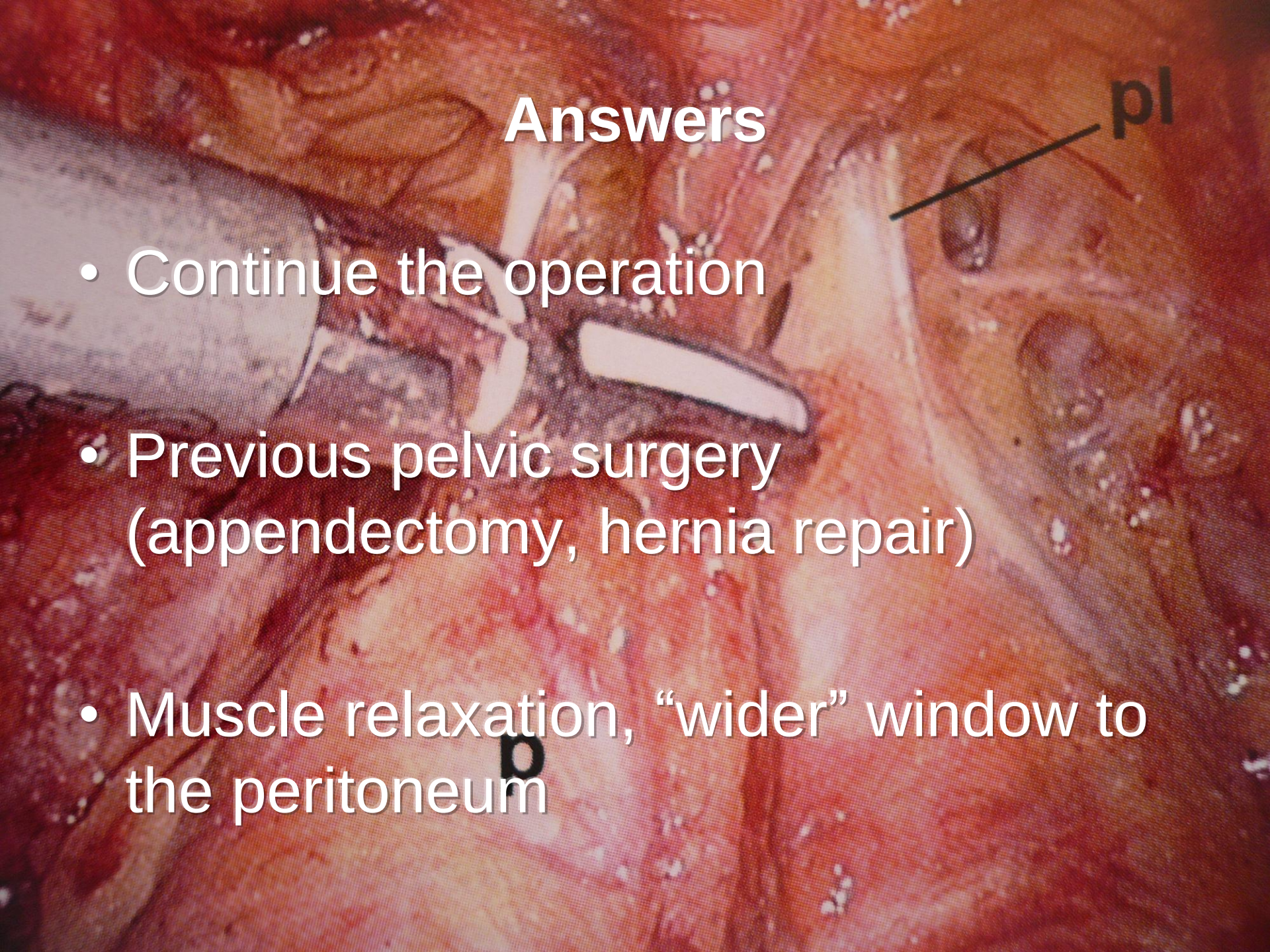
Case 5

- 65 years old
- PSA: 5 ng/dl
- T1c clinical stage CaP
- Laparoscopic Extraperitoneal Descending Radical Rrostatectomy



Questions

- What would you do if a rupture of the peritoneum during dissection of the extraperitoneal space occurs?
- What causes the problem (predisposing factors)?
- Are there any measures to increase the space?

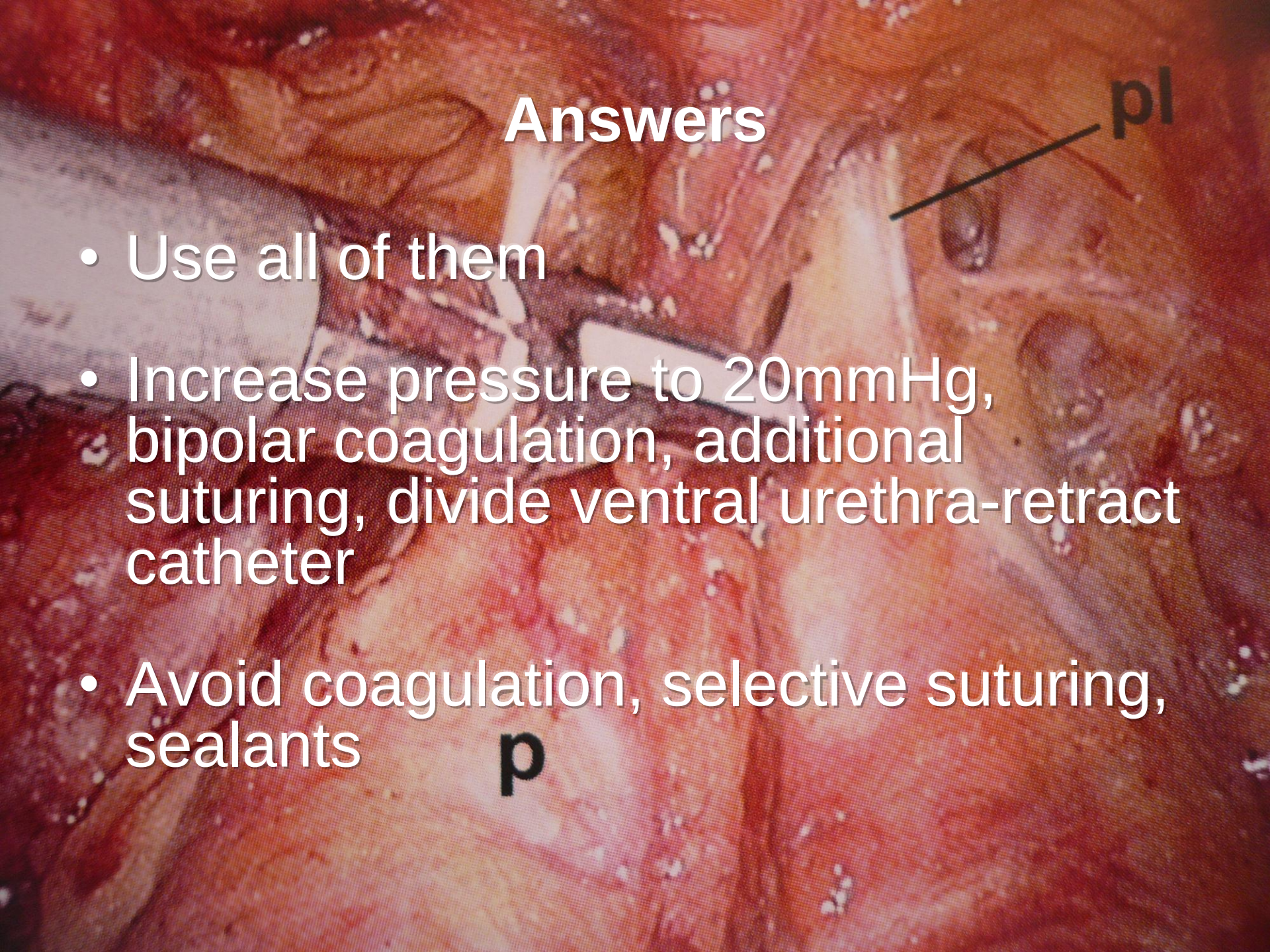


Answers

- Continue the operation
- Previous pelvic surgery (appendectomy, hernia repair)
- Muscle relaxation, “wider” window to the peritoneum

Questions

- How would you stop Santorini plexus bleeding?
- What would you do when arterial bleeding occurs (coagulation or clipping or suturing)?
- How do you control bleeding from NV bundles?

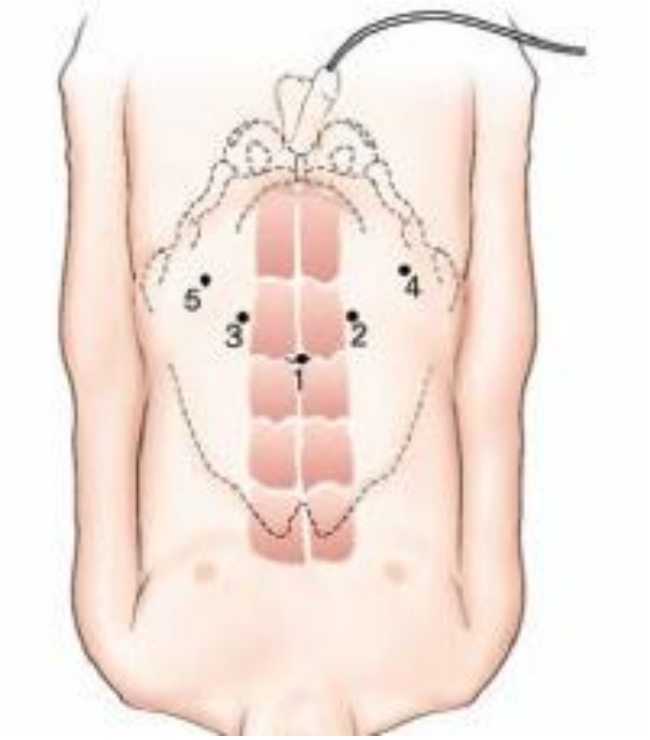


Answers

- Use all of them
- Increase pressure to 20mmHg, bipolar coagulation, additional suturing, divide ventral urethra-retract catheter
- Avoid coagulation, selective suturing, sealants

Case 6

- 56 years old
- PSA: 5 ng/dl
- T1c clinical stage CaP
- Robotic Transperitoneal Prostatectomy



Questions

- At which steps the ureter can be damaged?

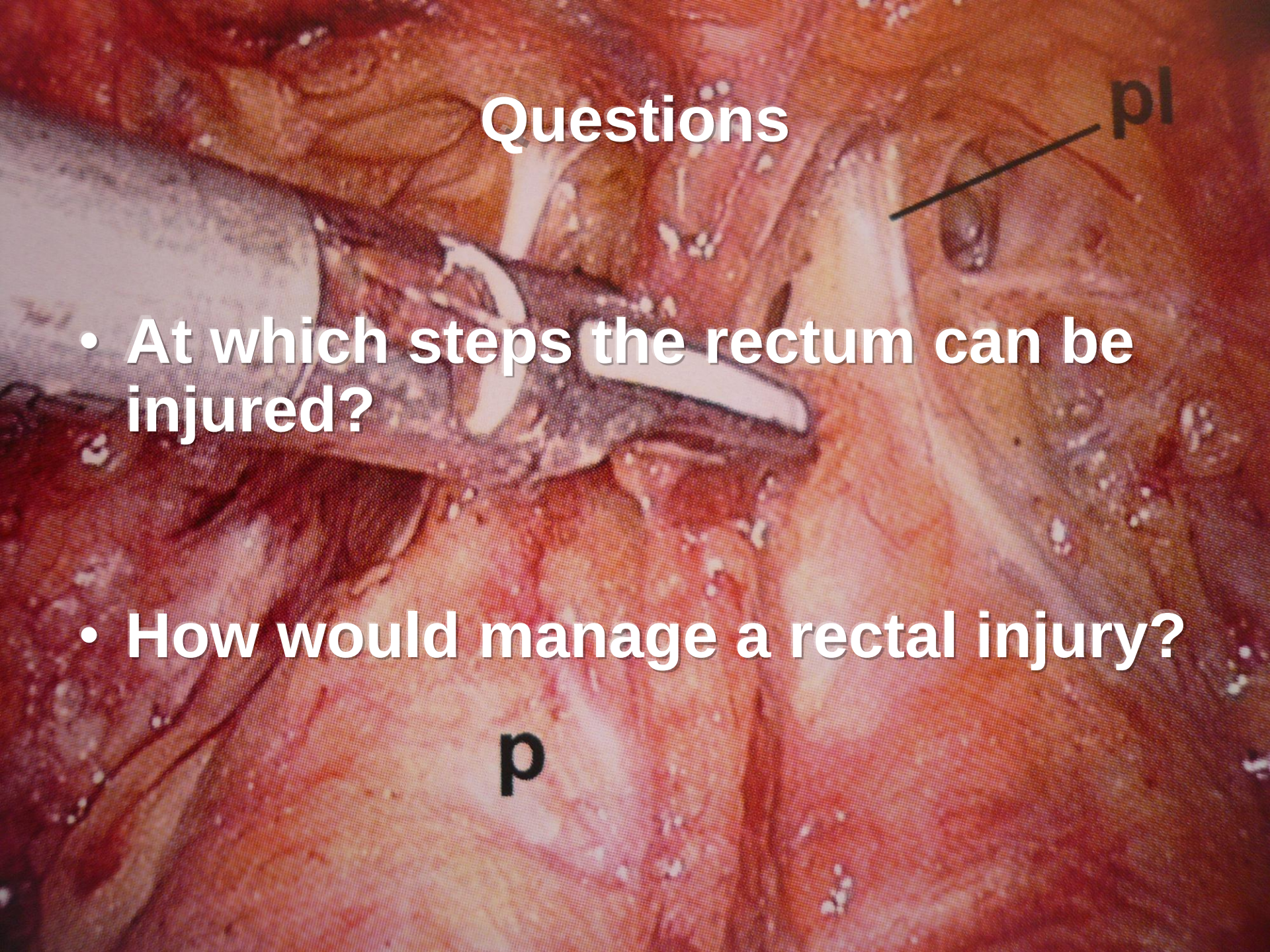
- How would manage a ureteral damage?

Answers

- LND, VD dissection, Posterior BN dissection, during anastomosis

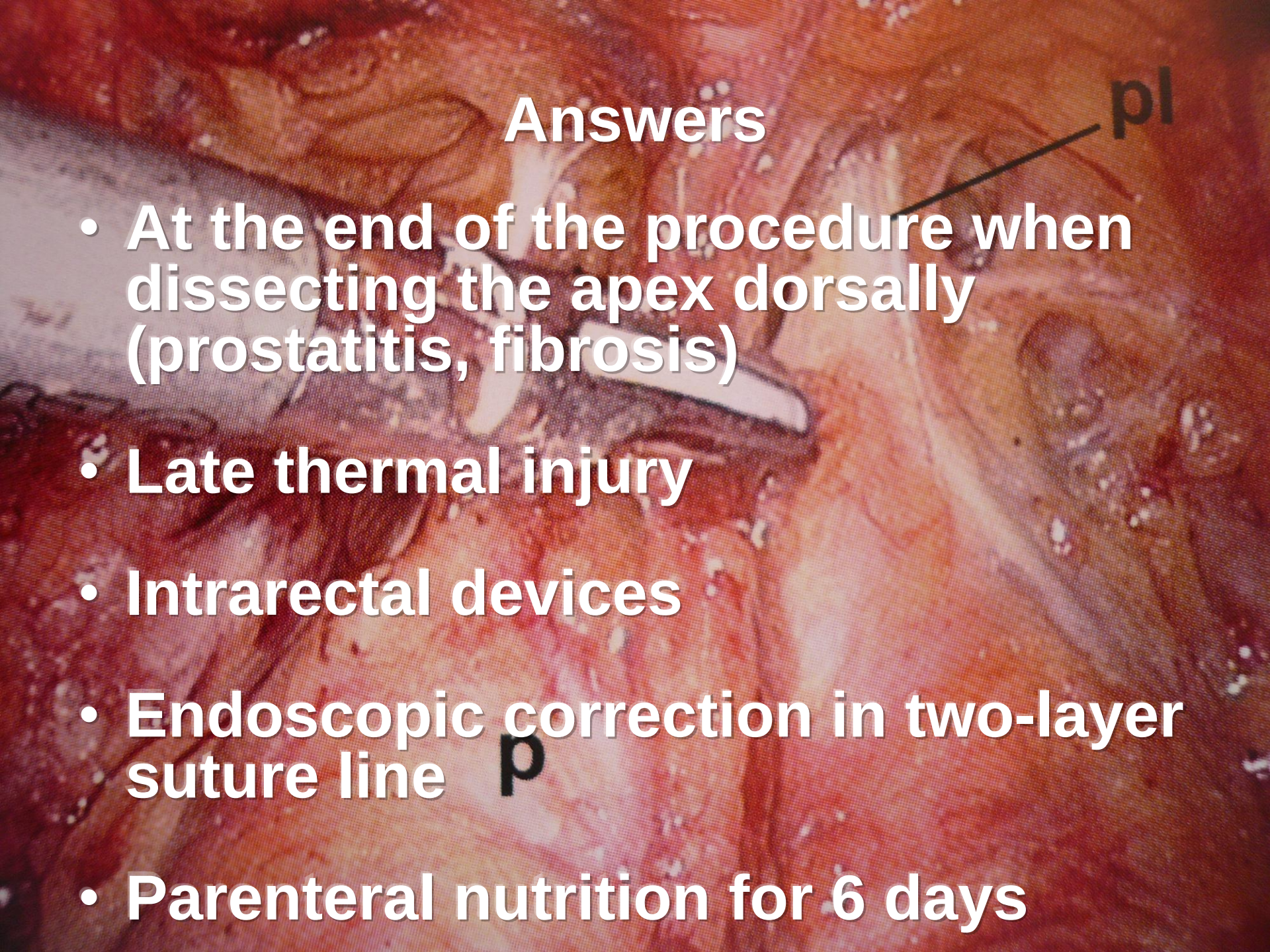
- Indigo carmine and furosemide, intraoperative catheterization, ureteral reconstruction, BN reconstruction at 6 o’clock

Questions



- At which steps the rectum can be injured?

- How would manage a rectal injury?



Answers

- At the end of the procedure when dissecting the apex dorsally (prostatitis, fibrosis)
- Late thermal injury
- Intrarectal devices
- Endoscopic correction in two-layer suture line
- Parenteral nutrition for 6 days

THANK YOU

Recommended reading: Endoscopic Extraperitoneal Radical Prostatectomy JU Stolzenburg Springer