Step-by-Step Guide to Laparoscopic Radical Prostatectomy

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Contents



- Introduction
- Operating Room
- Patient Positioning
- Port Placement
- Step-by-Step Surgical Techniques
- Conclusion

Introduction



Schuessler and colleagues, 1992

; no clear advantages over open surgery, primarily because of excessively long procedure times (mean 9.4 hours)

Guillonneau and Vallancien , 1998 ; pioneered, refined, standardized and ultimately popularized the procedure



Operating Room



LRP team



LRP team

; fully trained and skilled assistants, scrub nurse and circulating nurse.

- One skilled assistant or other independent surgeon is essential for LRP.
- The scrub nurse is an integral part of the operative team and must be versed in the wide array of laparoscopic instruments

Operating Room Setup





Patient Positioning





Patient Positioning



- to avoid neuromuscular injury
- a supine with arms tucked
- silicon pads to protect pressure points
- A safety belt is placed across the chest to secure the patient.
- 30° Trendelenburg position
- Pneumatic compression stockings



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Port Placement





Port Placement of LRP



• Camera

- Surgeon's Lt. Hand
 Bipolar forceps
- Surgeon's Rt. Hand Monopolar scissors
- Assistant's Lt. Hand
 Suction & irrigation device
- Assistant's Rt. Hand Grasping forceps

Step-by-Step Surgical Techniques





Step 1 ; Entering Retzius' space





Step 2 ; Endopelvic fascia incision





Step 3 ; DVC ligation





Step 4 ; Bladder neck dissection





Step 5 ; Posterior dissection





Step 6 ; Apical dissection





Step 7 ; Anastomosis



Conclusion





Conclusion



- Laparoscopy is not dying for radical prostatectomy. It is alive and well.
- In the hands of skilled laparoscopic surgeons, pure laparoscopic radical prostatectomy is equivalent to robotic-assisted laparoscopic prostatectomy.
- As the next step in the development of laparoscopy, new technologies are involved in the operating room to reduce morbidity and improve functional and oncologic results.