

PE33 Improving continence after robot-assisted radical prostatectomy: Surgical and functional outcomes of modified postero-lateral reconstruction technique

EUR Urol Suppl 2019;18(6):e2594

Palagonia E., Scarcella S., Montesi L., Franzese C., Capretti C., Giglioni G., Leone L., Tiroli M., Dell'atti L., Milanese G., Galosi A.

AOU Politecnica delle Marche - Ospedali Riuniti di Ancona, Dept. of Urology, Ancona, Italy

Introduction & Objectives: Different surgical techniques have been developed for continence improvement during robot assisted radical prostatectomy (RARP), but their role still remains controversial. As a matter of facts literature reported significant functional advantages in the first 90 days after posterior reconstruction with low complications rates. We present our modified robotic technique of postero-lateral reconstruction (PLR) using the tendinous arch as support of the pelvic floor.

Materials & Methods: We retrospectively reviewed the clinical data of 111 patients (pts) who underwent RARP performed by a single experienced urologist from October 2017 to October 2018. Surgical complications were recorded according to the modified Clavien-Dindo grading scale classification. Follow up controls were performed at 3, 6 and 12 months after surgery. First step of PLR is the fixation of the medial recto-urethral muscle posteriorly to the Denonvilliers' fascia; second step requires the attachment of the Denonvilliers' fascia laterally to the endopelvic fascia through the support of the tendinous arch. The stitch is passed from the medial to the lateral line, crossing superficially the tip of the neurovascular bundle (NVB), without clamping it. This PLR technique can provide a tension free urethro-vescical anastomosis and a restoration of the integrity of the fascial plane normally involved in urinary continence. Our technique was suggested by pelvic floor reconstruction in radical cystectomy.

Results: The median (IQR) age and body mass index (BMI) were respectively 65 years (61-71) and 26 (24-28). The median (IQR) prostate volume was 39 ml (30-50). Median surgical time was 230 minutes (200-250). In 74 (66,7%) cases lymph node dissection was performed, in the other 37 (33,3%) pts it was avoided according to the Briganti's Nomogram. Postoperative complications were recorded in 13 (6,7%) pts. Median (IQR) time of continence recovery was 2 (0,25-3) months. Complete functional and perioperative outcomes are reported in table 1.

Conclusions: Our postero-lateral reconstruction is a feasible and reproducible technique. It guarantees an anatomical support of posterior plane to the urethro-vescical anastomosis. This reconstructed plane seems to play a role in synergy with the rhabdosphincter to ensure better continence

outcomes. In our experience 80% of pts are continent at 1 years of follow up.

Functional Outcome	1 Months	3 Months	6 Months	12 Months
Continence (No Pads)	31,5%	63,1%	76,6%	80,2%
Erection (Sexual Intercourse)	8,2%	26,1%	42,6%	47,4%
Perioperative Outcomes				
Operative Time (min, IQR)	230 (200, 250)			
Nerve Sparing Technique				
Not Performed	16,2%			
Monolateral	20,7%			
Bilateral	63,1%			
Length of Stay (Days, IQR)	4 (3, 4)			
Catheter Placement (Days, IQR)	9 (7, 10)			
Anastomotic Leakage	2%			
Stricture	1%			
PTNS	19,8%			
D.E. Therapy	60,4%			

Table 1: Functional and Perioperative Outcomes

(IQR = interquartile range; PTNS=percutaneous tibial nerve stimulation; D.E.=erectile dysfunction)