

**Prostate Cancer: Localized: Surgical Therapy V****Moderated Poster**

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10:30 AM-12:30 PM

**MP69-01****LIMITED VERSUS EXTENDED PELVIC LYMPHADENECTOMY DURING ROBOT-ASSISTED RADICAL PROSTATECTOMY: IMPACT ON THE NUMBER OF NODES AND ON NODAL INVASION.**

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**INTRODUCTION AND OBJECTIVES:** The aim of the study is comparing the extended pelvic lymphadenectomy (EPL) with limited pelvic lymphadenectomy (LPL) in patients undergoing robot-assisted radical prostatectomy (RARP) in our center and evaluating the differences in terms of the number of lymph nodes removed and the rate of lymph node invasion (LI), stratifying patients according to D'Amico risk classes.

**METHODS:** From January 2011 to January 2015, 347 consecutive patients underwent RARP. Data, prospectively collected, were then retrospectively analyzed by stratifying patients according to D'Amico risk classes. Finally, we compared the results of LPL with those of EPL.

**RESULTS:** Of the 347 patients, pelvic lymphadenectomy was performed in 139 (patients with probability of LI > 5% according to Briganti nomogram), of which 101 (72.7%) LPL and 38 (27.3%) EPL. According to the D'Amico classification, 8 (5%) patients were at low risk (LR), 83 (59.7%), intermediate risk (IR) and 49 (35.3%) high risk (HR). The total percentage of LI was 18.7%, 11.8% in LPL, 34.1% in EPL (LPL vs. EPL  $p < 0.05$ ). The average number of lymph nodes removed was 15.9 (+10.3), 13.3 (+10) in LPL and 20.8 (+9.7) in EPL ( $p < 0.05$ ), while the average number of positive lymph nodes was 0.21 (+0.75) in LPL and 0.9 (+1.8) in EPL. Data on LPL and EPL are stratified according to D'Amico classes reported in Tables 1 and 2.

**CONCLUSIONS:** The study we performed has verified the feasibility of extended lymphadenectomy with a robotic approach and its contribution to increase the number of LN and detection of LI, highlighting a greater number of lymph nodes removed after an EPL rather than after the LPL, and a rate of LI significantly greater than the data reported in the literature. Limitations of the study include its retrospective nature and a limited number of patients.

Strengths in our work include standardization of the surgical procedure and the degree of experience gained by the pathologists.

The EPL during RARP turned out to be a better staging tool in terms of number of lymph nodes removed and identification of LI in patients at intermediate and high risk candidates for lymphadenectomy according to the Briganti nomogram.

Variable	Low risk	Intermediate risk	High risk
Lymph nodes removed (mean + SD)	15,17 + 9,33	13,63 + 11,18	12,78 + 8,02
Lymph nodes removed (min-max)	2-27	5-31	3-30
Percentage of positive LPL	0	41,6 %	58,4 %
Positive lymph nodes (mean + SD)	0 + 0	0,10 + 0,36	0,42 + 1,16

Table 1: comparison data of LPL after D'Amico stratification of risk

Variable	Low risk	Intermediate risk	High risk
Lymph nodes removed (mean + SD)	18	23,21 + 9,09	21,54 + 6,12
Lymph nodes removed (min-max)	18	12-36	11-33
Percentage of positive EPL	0	50 %	50 %
Positive lymph nodes (mean + SD)	0 + 0	0,71 + 1,46	1,54 + 2,50

Table 2: comparison data of EPL after D'Amico stratification of risk

**Source of Funding:** none**MP69-02****COMPARISON OF TWO TEMPLATES OF LYMPHADENECTOMY IN PATIENTS WITH HIGH RISK PROSTATE CANCER**

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**INTRODUCTION AND OBJECTIVES:** High risk prostate cancer treatment considers an extended lymphadenectomy. We have compared two templates of pelvic lymphadenectomy in high risk patients undergone an extraperitoneal or transperitoneal laparoscopic radical prostatectomy.

**METHODS:** Two consecutive series of patients affected by high risk prostate cancer underwent laparoscopic radical prostatectomy. In group 1 (101 pts), the procedure was realized by a preperitoneal access with an extended lymphadenectomy including external iliac and obturator nodes; in group 2 (25 pts), access was transperitoneal with a broader lymphadenectomy consisting of common iliac, external iliac, hypogastric and obturator nodes. We have compared perioperative outcomes in terms of number of nodes removed, positive nodes, complications in the two groups of patients. Statistical analysis has been realized using SPSS 16

**RESULTS:** Data on 126 patients were analyzed. Baseline characteristics are reported in table 1. Preoperative data were balanced between two groups of patients except for biopsy Gleason score. Postoperative outcomes are listed in table 2: Group 2 patients presented worse pathological stage, longer operative time, more nodes removed (mean 31.6 vs 15.9,  $p < 0.001$ ) and more positive pathological nodes (28.0 vs 1.9%,  $p < 0.001$ ). Moreover, a wider lymphadenectomy template was not associated to greater risk of complications or lymphocele.

**CONCLUSIONS:** In our retrospective analysis, a transperitoneal laparoscopic radical prostatectomy with an extended lymphadenectomy template including obturator, external iliac, common iliac and hypogastric nodes allows to remove a greater number of nodes, to obtain a more positive nodes without increasing risk of complications.

Table 2. Postoperative outcomes

		Total	Group 1	Group 2	p value
Operative time	min.	249.4 60.2	246.1 64.2	271.0 51.8	0.005
Prostate volume	gr.	51.7 18.4	51.2 18.3	53.6 18.9	0.56
Path. Stage	pT2	65.1	67.5	56.2	0.01
	pT3	33.4	31.5	39.7	
	pT4	1.6	1.0	4.1	
Pathol. Gleason	3+3	3.9	4.9	0	0.18
	3+4	16.5	17.6	11.8	
	4+3	40.2	42.2	32.1	
	>7	39.3	35.3	56.1	
Positive SM	%	22.0	19.6	32.2	0.15
Complications	%	23.6	25.5	16.1	0.3
Lymphocele	%	4.7	5.9	0	0.1
Number nodes removed	n	19.0 10.4	15.9 8.4 (2-38)	31.6 8.1	<0.001
Positive nodes	%	7.1	1.9	28.0	<0.001

**Source of Funding:** NONE**MP69-03****ASSOCIATION BETWEEN LYMPH NODE COUNTS AND ONCOLOGICAL OUTCOMES IN LYMPH NODE POSITIVE PROSTATE CANCER PATIENTS**

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**INTRODUCTION AND OBJECTIVES:** We investigated the association between total and positive lymph node (LN) counts and oncological outcomes in pN1 patients at radical prostatectomy (RP).

**METHODS:** The records of 706 LN-positive patients undergoing RP and ePLND between 1998 and December 2012 in a single tertiary center were analyzed. Median follow-up was 47.8 months. Number of harvested and positive LNs and their influence on biochemical recurrence (BCR)-free survival, metastasis-free survival (MFS) and cancer-specific survival (CSS) was evaluated using uni- and multivariate Cox regressions. Number of harvested LNs was used as a continuous and dichotomous variable with a cut-off of 13 LNs.