included): Gleason 3+3 cT1c/cT2, PSA 10-20 ng/ml or Gleason 3+4/ 4+3, jÜ63% of positive cores and PSA < 5ng/ml (risk of LNI: 3.5 and 5%, respectively); b)Moderate risk (23% of patients included): Gleason 3+4/4+3, jÜ63% of positive cores and PSA > 5ng/ml (risk of LNI: 14.6%); c)High risk (12% of patients included): Gleason 3+4/4+3, >63% positive cores (risk of LNI:20%; p<0.001). The accuracy of the model was 71%

CONCLUSIONS: LNI rate in patients with intermediate risk PCa treated with RP and ePLND is not negligible (8%). In men with more favourable PCa characteristics the rate of LNI is low (iU5%) even when ePLND is performed. The proposed predictive tool allows to spare the use of this extensive, surgical approach in more than 60% of intermediate risk patients

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IS MORE NECESSARILY BETTER?: STANDARD VERSUS EXTENDED PELVIC LYMPH NODE DISSECTION DURING ROBOTIC-ASSISTED RADICAL PROSTATECTOMY

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INTRODUCTION AND OBJECTIVES: For men undergoing open radical prostatectomy, recent literature suggests that extended PLND is better than standard PLND for detecting lymph node-positive prostate cancer. In keeping with this, the most recent NCCN guidelines recommend that an extended template be used in those cases where PLND is performed. In contrast to this trend, PLND is often omitted during robotic-assisted laparoscopic prostatectomy (RALP) due to the technical difficulty of reaching the lymph node fields and to the low-risk nature of the disease in most men undergoing RALP. We sought to evaluate the utility of extended PLND in men undergoing RALP.

METHODS: We retrospectively reviewed the experience of a single surgeon (JWD) performing RALP over three years. From May 2006 to October 2007, all robotic PLND were performed using a standard template (obturator nodes only). From November 2007 to May 2009, the technique was modified and all robotic PLND were performed using an extended template (external iliac, internal iliac, obturator, and hypogastric nodes). These two cohorts of men were well-matched with regards to pre-operative PSA, Gleason sum, and clinical stage. We compared lymph node yields in men undergoing standard versus extended PLND during RALP and we used the Fisher's exact test to determine differences in rates of LN positivity.

RESULTS: Of 612 patients that underwent RALP between May 2006 and May 2009, 118 had standard PLND and 150 had extended PLND. The average number of LNs removed was 8.0 for standard PLND and 17.4 for extended PLND. The rate of LN positive disease was 6.8% for standard PLND versus 20% for extended PLND (p = 0.0024).

CONCLUSIONS: Routine use of extended PLND as part of RALP provides higher LN yield and greater detection of LN positive disease. In keeping with current NCCN guidelines and similar to the trend for open radical prostatectomy, an extended template should be considered for all men undergoing RALP in whom a PLND is to be performed.

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SENTINEL LYMPH NODE SURGERY IN PROSTATE CANCER: RESULTS OF A PROSPETCTIVE STUDY WITH A 10 YEARS FOLLOW UP

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INTRODUCTION AND OBJECTIVES: Sentinel lymph node surgery (SLNs) in prostate cancer (PC) is now a well know technique that try to restrict the extension of the lymphadenectomy (PLND) in order to reduce morbidity. Aim of this prospective study is to evaluate the detection rate and the oncological outcomes of SLNs for PC with 10 years follow-up

METHODS: From 2001 to 2005 123 patients with PC underwent SLNs and retropubic radical prostatectomy (RRP) and were prospectively followed up. Patients were submitted to transrectal ultrasound guided injection of Technetium 99 nanocolloids and a dynamic lymphoscintigraphy the day before surgery. Intraoperatively a gammaprobe was used to scan lymph nodes (LN) with removal of any hot spot area (suggestive of SLN). A limited PLND was then performed in all patients. Pathological specimens were examined by a single institutional pathologist. Kaplan-Meier curves and Cox regression analysis were used to assess cancer specific survival (CSS), overall survival (OSS) and biochemical recurrence free survival (BCR) rates as well as risk factors associated with BCR free survival

RESULTS: Sensitivity of SLN in the detection of positive LN (pN+) disease was 100%. No pN+ disease was detected in all patients with negative SLN. All pN+ experienced BCR while negative LN (pN0) at SLN showed excellent BCR free survival. SLN was identified in 100 patients (81.3% Group A) whereas in 23 cases (19.7% Group B) it could not be found. In vivo scanning showed presence of 173 hot spots (1.7 mean nodes for each patient). LN locations are detailed in table1. At 10 year follow up, 79/87 patients (91%) in Group A and 20/23 (87%) in Group B had normal PSA values, while 2 (2.2%) in Group A and 1 (4%) in Group B had recurrence after a mean of 25.8 months and underwent an hormonal therapy. In Group B, 8 patients had biochemical relapse and all patients had positive surgical margins. We also evaluated pathological staging and oncological outcomes for 87 pN0 Group A patients and 23 Group B patients with no SNL detection and we matched the two groups. No statistical significance was found among the two groups for all pathological variables (p>0.05), including surgical margins, PSA recurrence before adjuvant treatment and need for adjuvant treatment

CONCLUSIONS: SLNs has high sensitivity in detecting nodal disease extension in PC patients. Good clinical outcome of patients staged as pN0 at SLN further reassures on the accuracy of the procedure. In up to 20% of cases no SLN could be detected

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SUBJECTIVITY IN MEASURING THE QUALITY OF PELVIC LYMPH NODE DISSECTION BY THE NUMBER OF LYMPH NODES REMOVED.

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INTRODUCTION AND OBJECTIVES: The correlation between the anatomical extent and number of lymph node (LN) retrieval during radical prostatectomy has led some investigators to propose a required minimal number of LN to determine the quality of a lymph node dissection (LND). Our aim was to examine the number of LN removed over time for men undergoing a standard pelvic LND during radical prostatectomy

METHODS: Between February 2005 and September 2009, 2119 patients with clinically localized prostate cancer underwent a standard pelvic LND including the external iliac, hypogastric and obturator fossa nodal groups, during radical prostatectomy. Surgery was performed via an open or laparoscopic approach. Those who were missing data on the number of LN removed (n=17) were excluded, leaving 2102 patients available for analysis. To test whether the number of LN increased over time, we entered the date of each patient's surgery into a linear regression model. To allow for a potential non-linear relationship between the date of surgery and number of LN removed, date of surgery was entered into the model with non-linear terms (restricted cubic splines). To account for potential differences in the patient population over time, we also adjusted for the probability of having a positive LN using the nomogram.