Extended pelvic lymph node dissection in prostate cancer: a 20-year audit in a single center.


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Abstract

BACKGROUND: We set to assess the impact of stage migration in prostate cancer (PCa) on the evolution of the pN1 rate and tumor characteristics in pN1 patients over the last two decades.

PATIENTS AND METHODS: We evaluated 5274 PCa patients treated with radical prostatectomy and anatomically extended pelvic lymph node dissection (ePLND) between 1990 and 2010. Year-per-year trends of clinical and pathological characteristics were examined. Logistic regression analyses addressed predictors of pN1.

RESULTS: The median number of lymph nodes (LNs) removed was 16.0. Overall, the pN1 rate was 13.8% and it decreased from 26.1% to 15.6% between 1990 and 2010 (P < 0.001). For the same period, the pN1 rate changed from 0% to 3% in the low-risk PCa, from 20% to 7% in the intermediate-risk PCa, and from 33% to 44% in the high-risk PCa (P ≤ 0.01). In pN1 patients, pre-operative cancer characteristics and the median number of positive LNs (three in 1990 versus two in 2010) did not significantly change overtime (all P ≥ 0.1). Year of surgery was not an independent predictor of pN1 (all P ≥ 0.06).

CONCLUSION: Based on ePLND outcomes, contemporary patients with intermediate- and high-risk PCa's still harbor a significant LNI risk. In consequence, stage migration does not justify omitting or limiting the extent of PLND in these individuals.

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