

PROSTATE CANCER

Extended pelvic lymph node removal—extended survival

The therapeutic benefit of extended pelvic lymph node dissection (ePLND) for patients with prostate cancer is uncertain. New data from a study by Firas Abdollah, Alberto Briganti and colleagues from the Ospedale San Raffaele, Milan, demonstrate that removing a higher number of lymph nodes during radical prostatectomy in men with lymph node invasion was associated with improved cancer-specific survival.

In current clinical practice, ePLND is utilized less frequently than in the past, even in patients with intermediate-risk or high-risk tumours. This decline might be attributed to the increasing use of minimally invasive surgery, which makes ePLND more laborious. However, emerging data suggest that omission of ePLND might have a negative effect on survival.

To investigate this hypothesis, Briganti and his team of researchers retrospectively analysed a tertiary care centre database of 315 patients with prostate carcinoma and pathological evidence of regional lymph node metastasis (stage pN1). All patients had undergone radical prostatectomy and standardized, anatomically defined ePLND followed by adjuvant hormonal therapy. About half of the patients also received adjuvant radiotherapy.

The investigators assessed the relationship between the number of removed lymph nodes and cancer-specific mortality using univariate and multivariate Cox regression analyses, taking into account several confounding factors, such as Gleason score, D'Amico risk group, pathological tumour stage, number of positive lymph nodes, and number of lymph nodes removed. "After adjusting for confounders, higher number of lymph nodes removed was significantly associated with lower risk of dying from prostate cancer after radical prostatectomy," Briganti told *Nature Reviews Urology*.

Survival curves for patients who had eight, 17, 26, 36, and 45 lymph nodes removed were estimated from the multivariate analysis. The survival rate after 10 years was highest for patients who had the highest number of lymph nodes removed and significantly higher at the most informative cut-off of 14 removed lymph nodes. "The excellent cancer-specific survival rates observed in our cohort suggest that not all patients with node-positive prostate cancer harbour systemic disease," explains Briganti. "This observation may also have important implications regarding the administration of additional cancer therapies after surgery."

The researchers hope their findings will be used for planning prospective studies in the future, but are clear to acknowledge the limitations. "Although the findings of our study are at least promising, they require validation in other settings, such as well-designed and well-performed prospective randomized trials with long-term follow-up," Briganti concludes.

Clemens Thoma

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