

UROTHELIAL CARCINOMA

Removing lymph nodes extends the life of patients without metastases

Data from the largest cohort of patients with nonmetastatic upper-tract urothelial carcinoma ever studied go some way towards clarifying whether lymphadenectomy has a positive impact on clinical outcome. Marco Roscigno and colleagues found that removing at least eight lymph nodes during radical nephroureterectomy improved long-term survival. “In node-negative patients, a higher number of lymph nodes removed was associated, in multivariable analyses, with better disease-free survival and cancer-specific survival. This may relate to the removal of undetected lymph node micrometastases,” he comments.

There is strong evidence that the presence of metastases in lymph nodes predicts poor survival. Nevertheless, lymphadenectomy has not been incorporated into standard treatment

regimens for upper-tract urothelial carcinoma. In an effort to establish the value of this procedure, Roscigno *et al.* studied 552 consecutive patients from 13 centers who underwent nephroureterectomy (464 open surgeries and 88 laparoscopic) with removal of lymph nodes between 1992 and 2006. The extended study period was necessary because of the relative rarity of this malignancy. Median follow-up was 4 years.

Although the number of lymph nodes removed was not associated with cancer-specific mortality in the cohort as a whole, it independently predicted cancer-specific survival in the subgroup of lymph-node-negative patients. “The hazard ratio for the subset of pN0 patients [0.93, $n = 412$] means that for any node removed, we found a 7% increase in survival,” notes

Roscigno. Removal of at least eight lymph nodes prolonged survival significantly in this subgroup (hazard ratio 0.42). On average, six nodes were removed (range 1–41).

“In the absence of accurate prediction tools, it may be prudent to perform a lymphadenectomy in all patients treated with radical nephroureterectomy if accurate staging and possible therapeutic advantage [are] desired,” states Roscigno. Prospective trials are now required to provide definitive answers, but enrolling sufficient patients will be a challenge.

Kathryn Senior

Original article Roscigno, M. *et al.* The extent of lymphadenectomy seems to be associated with better survival in patients with nonmetastatic upper-tract urothelial carcinoma: how many lymph nodes should be removed? *Eur. Urol.* doi:10.1016/j.eururo.2009.06.004