

The Role of Paraaortic and Paracaval Lymphadenectomy in Tumor Nephrectomy

Introduction and Objectives: The aim of our study is to evaluate the role of paraaortic and paracaval Lymphadenectomy in patients with renal cell carcinoma (RCC) following radical nephrectomy.

Materials and Methods: From 1999 to 2010, 123 patients underwent radical nephrectomy with RCC at our clinic. Mean age of the patients was 52,7 (range 32 to 76). A male-to-female ratio was 1.2:1. Of these, 85 were performed through a transabdominal approach and 38 through lumbotomy. Nephron-sparing surgery was performed in 33 cases (tumor size <6 cm). Paraaortic and paracaval lymphadenectomy was performed in 25 cases out of 85 transabdominal radical nephrectomies (the table below).

Renal cell carcinoma – 123 cases			
Transabdominal approach		Lumbotomy	
85		38	
Paraaortic and paracaval lymph node dissection (enlarged lymph nodes)	Renal hilar lymphadenectomy	Nephrectomy	Nephron-sparing surgery (tumor size <6 cm)
25	60	5	33
25 lymph node dissection			
Positive lymph nodes		Negative lymph nodes	
11		14	

Results: Lymph node metastases were pathologically confirmed in 11 out of 25 cases. In remaining 14 cases no malignant lesions were found in the lymph nodes. In 11 cases the tumor size was more than 10 cm and the 5-year survival rate did not exceed 12%. In 14 cases the tumor size was between 5 cm and 10 cm and the 5-year survival rate did not exceed 48%. In contrast, in 60 cases, in which paraaortic and paracaval lymphadenectomy was not performed, the 5-year survival rate did not exceed 20%.

Conclusions: Our experience with paraaortic and paracaval lymphadenectomy during radical nephrectomy yielded good clinical results. The overall 5-year survival rate with lymph node dissection was 48%, but anatomical, histological and clinical prognostic factors associated with RCC should also be taken into account to draw a bolder conclusion. Studies aimed at establishing the correlation between our findings and these factors are underway at our clinic.