

# Lung-sparing resection instead of pneumonectomy in patients with wide spread lung cancer

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*The 5-year survival rate of the patients after lung-sparing resection (Group A) was 18.2% vs. 15.9% after pneumonectomy (Group B) ( $p > 0.05$ ). Recurrences were detected in 63.6% of patients of group A vs. 56.9% in patients of group C (after lob - bilobectomy) ( $p > 0.05$ ).*

**Key words:** lung neoplasms-lobectomy; pneumonectomy; survival rate

## Introduction

Some authors dissuade the surgical treatment of the patients with wide spread lung cancer (Stage III) because long-term survival has remained extremely low, while the others defend extensive resection with complete mediastinal lymph node dissection for both radicality and exact staging as well as the correct adjuvant therapy indication.

## Patients and methods

During the last 10 years (from 1987 to 1996), 207 patients with wide spread lung cancer (Stage III A) underwent the surgical treatment in combination with postoperative adjuvant radiochemotherapy. In 138 patients pneumonectomy was performed (Group B), 58 - lob - bilobectomy (Group C), and 11 - non-standard lobectomy with the resection of the pulmonary artery or / and of the main bronchus because of the primary tumor invasion into these structures (Group A). In all the patients, complete mediastinal lymph node dissection was made. The distribution of the patients in groups by age, gender, histological type of tumor, was comparable.

## Results

Only two patients of Group A (18.2%) had longer survival than 5 years. The first underwent pneumonectomy due to local spread of tumor (lob-bilobectomy with a sleeve resection of the main bronchus) and the second had a window resection of the main bronchus with a wedge resection of the pulmonary artery. Of 138 patients (15.9%) of Group B, after pneumonectomy, 22 survived more than 5 years. Similar results were observed in the patients of Group C; 10 patients of 58 (17.2%) lived longer than 5 years.

Most of the patients in all the analyzed groups died in the first 2 years after the operations due to local relapses and distant metastases. Recurrences in the patients after standard lob-bilobectomy (Group C) and after non-standard lob-bilobectomy (Group A) was similar (56.9% and 63.6% accordingly). There were no lethal complications of organ-preserving surgery.

## Conclusion

According to the preliminary results, lung-sparing resection with postoperative adjuvant radiochemotherapy in the patients with wide spread lung cancer (Stage IIIA) can be an alternative method to pneumonectomy not only in high risk patients but in all patients where it is possible to perform it. It may also be recommended as the treatment results are no worse

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than in other therapies and the quality of life quality of the patients improved.

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