Oncology of the chest

Results of pulmonary metastasectomy in lung cancer and colon cancer.

M. Majchrzak¹, *A. Rzechonek¹, P. Blasiak¹, W. Budzynski², M. Lubicz³, P. Le Pivert⁴, M. Majchrzak¹, *A. Rzechonek¹, P. Blasiak¹, W. Budzynski², M. Lubicz³, P. Le Pivert⁴

¹Medical University Wroclaw, Department of Thoracic Surgery (Wroclaw, Poland)

²Research Centre EIT (Wrocław Stablowicka Str. 147, Poland)

³University of Technology, Department of Computer Science and Management (50-372 Wrocław, Smoluchowskiego 25, Poland)

⁴Interventional Drug Delivery Systems and Strategies (Jupiter, FL 33458, USA, United States)

Summary:

The aim of the study was to compare the treatment options and results of pulmonary metastases resection in patients suffering from lung cancer or colon cancer.

Patients characteristics:

Between 2000 and 2012 year, 129 patients underwent pulmonary metastases resection of lung cancer (n=49) or colon cancer (n=80). The age and comorbidities did not differ between the two groups. The age of patients ranged from 42 to 84 years.

The mechanical resection was made in over 85% of procedures. In both groups adjuvant chemotherapy was used according to the standard eligibility criteria.

Methods:

The analysis recognized patient age, comorbidities, tumor staging, the primary tumor histology and associated treatment. The disease-free interval (DFI) and the probability of overall survival (pOS) was estimated using Kaplan-Meier method. **Results:** There were no perioperative deaths.

An adenocarcinoma was found in the colon cancer group (95% of patients) while in the group of metastatic lung in 40%.

3-year pOS in the group of colon cancer was 80%, in the lung cancer group was 55%.

There were no differences in OS after the period of 70 months. Disease free survival was similar in both groups - 41.5 - 42.5 months.

An assessment of well-being in both groups was similar; 7.19 and 7.21 out of 10 grades respectively.

Conclusions:

1. Metastasectomy in colorectal cancer is more effective in comparison to lung cancer

2. The better results of metastases resection seem to be achieved in tumors with. adenocarcinoma histology.