COMPARATIVE EXPRESSION OF APOPTOTIC MARKERS IN LUNG ADENOCARCINOMA AND SQUAMOUS CELL CARCINOMA

<u>Irena Porębska</u>¹, Ewa Sobańska², Ewa Wyrodek², Renata Jankowska¹

1. Chair and Department of Pulmonology and Lung Cancer, Wroclaw Medical University, Poland 53-439 Wroclaw, ul. Grabiszyńska 105, iporebsk@poczta.onet.pl

The evaluation of apoptosis markers has great potential in lung cancer. The goal of our study was comparative evaluation of apoptosis regulators: p53, bcl-2, Bax, COX-2 and survivin in lung adenocarcinomas (AC) and squamous cell carcinomas (SCC). The relationship between apoptosis markers expression and clinicopathological parameters was also done.

The expression of studied markers were performed using immunohistochemical method on 56 non small cell lung cancer (NSCLC) tissue specimens (30 AC and 26 SCC). The results of immunostaining were viewed by light microscopy.

We revealed significantly more frequent expression of Bax and survivin in AC than SCC (p=0.0061 and p=0.0186). Bcl-2 immunoreactivity was seen more often in AC without lymph node metastases as compared with AC with lymph node involvement (p=0.046). We didn't revealed the correlation of apoptosis regulators immunoreactivity with sex, disease stage, presence of vessel emboli. The intragroup diversification of studied markers was clearly seen in AC, while in SCC this variation was not present.

There were statistically significant differences between two pathological type of NSCLC in Bax and survivin expression. We did not revealed any correlation between studied markers and TNM characteristics accept bcl-2 presence and lymph node involvement in AC group.

² Chair and Department of Clinical Immunology Wroclaw Medical University, Poland, 50-368 Wroclaw, ul. Mikulicza-Radeckiego