Evaluation of Pulmonary Tissue Biopsies of 222 Patients

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Objectives: Lung cancer is the leading cause of cancer deaths. Lung cancers are usually diagnosed in advanced stages. The aim of this study was to investigate the patients who underwent lung tissue biopsy in our hospital and to investigate their survival.

Methods: The files of 222 cases who underwent lung tissue biopsy between January 2018 and January 2019 were evaluated retrospectively. Pathological diagnoses, age of patients, diagnostic method and whether there were any complications were recorded. Pathological diagnosis was classified as neoplastic and nonneoplastic according to WHO 2015 classification. Pathological diagnoses without specific diagnosis and without sign of malignancy were classified as nondiagnostic. Immunohistochemical examination was also performed.

Results: One-hundred and nintytwo patients were male and 30 were female. The mean age was 63.9±12.7 (range:16-86) years. One-hundred and fiftyseven patients underwent transthoracic needle biopsy; 26 of them were ultrasonography guided and 133 of them were computed tomography-guided. Nine patients who underwent transthoracic needle biopsy had pneumothorax and 1 patient had hemoptysis. Bronchoscopy was performed in 57 cases and open lung biopsy was performed in 6 cases. No complication occurred after bronchoscopy. One-hundred and fiftynine biopsy cases were diagnostic and 63 of them were nondiagnostic. Of those 159 cases, 153 biopsies were neoplastic and 6 were nonneoplastic. The cases according to the pathological diagnosis are classified. The metastatic tumors of the lung. Twenty-three patients of all 65 adenocarcinoma cases (35.4%) were lost in a year. Fifty-seven adenocarcinoma cases (87.7%) were diagnosed by transthoracic needle biopsy.

Conclusion: In this study, 222 tissue biopsies were performed and 63 of them were non-diagnostic, 153 of them were neoplastic and 6 of them were non-neoplastic. Complications were seen in only 10 cases (0.4%). Transthoracic biopsy was performed in 159 cases. Lung cancer is more common in advanced age and men, and adenocarcinoma is usually localized at the periphery. The limitations of this study are; the number of bronchoscopies is low due to the non-functioning of the bronchoscopy unit in a period of time. Mediastinoscopy and EBUS are not performed in our hospital.

Keywords: Bronchoscopy, lung neoplasms, transthoracic needle biopsy