

# **Effectiveness of diagnostic materials in the diagnosis of lung cancer in elderly patients**

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## **Introduction**

Lung cancer is one of the leading causes of cancer morbidity and mortality worldwide. Due to rise in life expectancy in most countries, the number of patients with lung cancer aged >70 years is increasing. Obtaining diagnostic samples is required to confirm a diagnosis in histopathological examination. It is important to provide elder patients with the most appropriate and efficient diagnostic methods that allows them to benefit from treatment options and that can improve patient outcomes.

## **Aim**

The aim of study was to assess the effectiveness of diagnostic materials obtained by methods like bronchoscopy with a transbronchial lung biopsy, fine needle aspiration biopsy (FNAB) , brush and bronchial wash cytology, biopsy of lymph nodes in the histopathological diagnosis of lung cancer in patients aged  $\geq 70$  years.

## **Materials and methods**

Retrospective cohort study was performed among patients aged  $\geq 70$  years, treated in 2016-2017 in the 1st and 2nd Department of Lung Diseases and Tuberculosis, Medical University of Bialystok. Patients' medical records were surveyed, including type of diagnostic materials and methods, their usefulness in histopathological evaluation and obtained diagnosis of lung cancer.

## **Results**

In the studied group of patients the most effective type of material in histopathological examination of tissue were samples collected in FNAB (100%). Lowest diagnostic yield was observed in cytological examination of bronchial wash cytology (54,55%).

## **Conclusions**

Based on the results of data analysis it appears that collection of bronchial wash cytology is unnecessary for the diagnosis of lung cancer in elderly patients.