

EVALUATION OF THE EFFECTIVENESS OF BRONCHOFIBEROSCOPY IN LUNG LESIONS DIAGNOSIS

A. Nahorecki^{1,4}, K. Postrzech-Adamczyk¹, E. Straszak², A. Szuba^{1,4}, D. Janczak^{3,4} and M. Chabowski^{3,4}

¹ Dept. of Internal Medicine, 4th Military Teaching Hospital in Wrocław, 5 Weigla Street, 50-981 Wrocław, Poland, [**a.nahorecki@gmail.com**](mailto:a.nahorecki@gmail.com)

² Dept. of Internal Medicine and Rheumatology, University Hospital in Wrocław, 213 Borowska Street, 50-556 Wrocław, Poland

³ Dept. of Thoracic Surgery, 4th Military Teaching Hospital in Wrocław, 5 Weigla Street, 50-981 Wrocław, Poland

⁴ Faculty of Health Science, Wrocław Medical University, 5 Bartla Street, 51-618 Wrocław, Poland

Introduction

Lung cancer is the most common cause of cancer-related deaths. Short survival rate results from being diagnosed in advanced stage. The individualization of a therapy requires a valuable material for histopathological examination, which often brings difficulties.

Methods

The study was performed on a group of 110 patients suspected of malignancy on chest computer tomography. All subjects underwent bronchofiberoscopy (BF). Bronchoalveolar lavage (BAL) and endobronchial brushing (ENB) were performed in all cases, whereas forceps biopsy (FTB) was taken if mucous membrane abnormalities were observed. In case of a negative BF result invasive methods were implemented.

Results

At the end point malignant neoplasm was diagnosed in 106 cases. A positive result (cancer cells) after BF was described with 45 subjects. Cytology was positive in 38 and histopathological examination in 30 samples. Eleven samples of BAL (10,3%) were positive. Brushing was more effective: 27 positive samples (25,5%). FTB was performed in 33 cases with 90% sensitivity. The most frequent subtype was squamous cell carcinoma. No severe complications of BF were observed.

Conclusions

BF is a safe diagnostic method for lung lesions but its sensitivity and specificity are very low. Only when mucous macroscopic changes are observed, a precise diagnosis is possible.