A Retrospective Analysis of Diagnostic Significance of Bronchoscopy for the Cause of Chronic Obstructive Pulmonary Disease (COPD) and the Character of Pathogen Distribution

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PURPOSE: This study is to investigate the diagnostic significance of bronchoscopy for the cause of chronic obstructive pulmonary disease (COPD) and the character of pathogen distribution.

METHODS: A retrospective analysis was performed for 52 hospitalized patients admitted to the First Hospital affiliated to Jilin University during December 2009 to June 2013. All of the cases were diagnosed as chronic obstructive pulmonary disease (COPD) based on the Global Strategy for the diagnosis, management and prevention of COPD, and failed to the anti-infection treatment, even worse. Under the bronchoscopy, all subjects routinely carried through the bronchoalveolar lavage, then the bronchoalveolar lavage fluid was analysis of the etiology. According to chest CT or bronchoscope direct observation lung biopsy definite pathological diagnosis. To compare the conventional sputum culture positive rate of etiology with the the bronchoalveolar lavage fluid was determined the diagnostic significance.

RESULTS: Of 52 cases of patients, 31 cases were emphysema, pathologically confirmed 4 cases of chronic bronchitis, pulmonary aspergillosis in 2 cases; and obstructive pneumonia 18 cases of lung cancer and 10 cases of obstructive pneumonia, foreign bodies suction of 8 cases; Three suspected examples of lung cancer. Patients admitted to hospital routine sputum culture positive rate was 40.38% (21/52), etiology patients bronchoalveolar lavage fluid culture positive rate was 69.23% (36/52), sputum and lavage both consistent rate was 13.46% (7/52).

CONCLUSIONS: COPD should be performed bronchoscope examination as soon as possible, because it can enhance the accuracy in etiology diagnosis, guide the rational use of antibiotics, also can give a clear etiology and early treatment, avoid misdiagnosis, the disease.

CLINICAL IMPLICATIONS: COPD should be performed bronchoscope examination as soon as possible, because it can enhance the accuracy in etiology diagnosis, guide the rational use of antibiotics, also can give a clear etiology and early treatment, avoid misdiagnosis, the disease.

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