FLUORESCENCE BRONCHOSCOPY

Norihiko IKEDA*

A new approach for early detection of bronchial lesions is autofluorescence endoscopy.

The normal bronchial mucosa shows green autofluorescence when excited by blue light. However, cancer and preneoplastic lesion lack this green fluorescence therefore such lesions are recognized as cold areas. Using this phenomenon, the fluorescence diagnosis has been established.

A total of 392 fluorescence examination was performed for lung cancer cases, cases with abnormal sputum cytology, post operative follow up for stage I lung cancer and heavy smoker with respiratory complaints. This procedure was evaluated to be useful in;

- 1. objective evaluation of the margin of the tumor
- 2. increased detection rate for atypical metaplasia
- localization of the lesions of cases with abnormal sputum cytology finding

Fluorescence diagnosis is easy and safe examination and should increase the diagnostic rate of early lesions of bronchus if routinely used.

Department of Surgery, Tokyo Medical University, Tokyo, JAPAN.