



## Rigid Bronchoscopy Dilatation in Endobronchial Tuberculosis Case report

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### I. BACKGROUND

Endobronchial tuberculosis (EBTB) is defined as tuberculous infection of the tracheobronchial tree with microbial and histopathological evidence. It is seen in 10-40% of patients with active pulmonary tuberculosis. More than 90% of the patients with EBTB have some degree of bronchial stenosis. Rigid bronchoscopy dilation is most commonly employed with high long-term success for non-malignant causes of airway stenosis but it is also used in malignant diseases. This technique is generally used in conjunction with other techniques.

### II. CASE REPORT

We report a case of a 24-year-old male with lung tuberculosis and stenosis of the left main bronchus. The patient was still under treatment with tuberculosis drugs for 6 months. He underwent rigid bronchoscopy dilatation for the stenosis of the left main bronchus. After three months the flexible bronchoscopy was repeated and resulted normal. EBTB affects the trachea, main bronchi, and upper bronchi (Fig.1) In this case no need for stent (Fig 2).



Figure.1



Figure 2

6-Month after treatment with Isoniazid (H), 6 - Month after Rigid dilatation Rifampicin (R), Ethambutol (E), Pyrazinamide (Z)

### III. DISCUSSION

Diagnosis of EBTB is often delayed as it is difficult to detect on chest radiograph. Symptoms of hemoptysis, wheezing, and dyspnea as well as chest X-ray finding of atelectasis should alert the physician of EBTB. 3D reconstruction CT is not only useful in planning of bronchoscopic intervention or surgery but it can also be used as follow-up EBTB during therapy instead of bronchoscopy. Patients with airway strictures consequent to EBTB will require surgery or bronchoscopic procedures which may include laser, electrocautery, argon plasmacoagulation or cryotherapy, balloon bronchoplasty, or stent. Rigid bronchoscopy dilatation under direct vision is useful in airway stenosis due to tuberculosis with no complications and safe procedure.

**Key words:** Rigid bronchoscopy dilatation, airway stenosis, tuberculosis.



**No Conflict of interest**

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