

## **INTERVENTIONAL PULMONOLOGY FOR TRACHEOBRONCHIAL STENOSIS**

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**BACKGROUND/AIMS:** Tracheobronchial stenosis is still a challenging problem and usually causes worrisome symptoms. We report our experiences with interventional bronchoscopy in a recent 13-month period to these group patients and evaluate the benefit of this therapy.

**METHODS:** From May 2005 to May 2006, 19 patients with tracheobronchial stenosis, (16 patients intraluminal tumor, 3 patients external compression) received interventional bronchoscopy or airway stents implant in China Medical University Hospital. We use OLYMPUS PSD-60 unipolar electrodes electrocautery or Ultraflex stent (Boston Scientific; Natick, MA) to the group patients of tracheobronchial stenosis.

**RESULTS:** A total 19 patients (15 men, 4 women), ranging from 20 to 72 years old (Mean age, 57.9 y/o), received the therapy for their airway stenosis. The cause of airway stenosis included: 11 cases of lung malignancy, 1 case of hepatocellular carcinoma, 1 case colon carcinoma causing intrinsic airway obstruction, 3 cases esophageal cancer with external compression and 3 post-intubation stenosis. All patients suffered dyspnea or are dependent on mechanical ventilator (4 patients with ventilator dependent). Patients received interventional bronchoscopy with electrocautery and stents (3 tracheal stents for 3 patients, 10 bronchial stents for 10 patients and 2 bronchial stents for another 3 patients. All patients' symptoms immediately improved and two patients were weaned from the ventilator after the interventional procedure. No complications occurred.

**DISCUSSION/CONCLUSIONS:** Regardless of the etiologies of tracheobronchial stenosis secondary to benign lesion or malignancy, electrocautery and stent implant is considered to provide immediate relief of dyspnea and a worthwhile therapy.

**Key words:** interventional pulmonology, tracheobronchial stenosis, airway stent