

# Endoscopic intervention combined with bronchial pulmonary embolism in the treatment of severe lung cancer: A case report

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A 67-year-old medically free patient presented to our department of respiratory and critical care medicine with cough and hematic sputum for more than 2 months. His medical history was significant for chronic cough, dyspnea with intermittent chest pain and weight loss for 6 months. His vital signs were stable. On chest auscultation, he was noted to have right-sided decreased breath sounds and moist rales. Abdominal examination was unremarkable. Positron emission tomography/computed tomography (PET/CT) scan showed that central lung cancer with multiple lymph nodes, right pleura, and right lung metastases. In addition, it has reported colon cancer. We thought that they were double primary tumors. For lung cancer, TNM stage was cT2bN2M1a, IVA. For clinical symptoms, the Performance Status (PS) score was 3. Bronchoscopy was performed and showed that the lumen of right main bronchus was blocked by neoplasm and covered with white necrotic tissue. Histopathological results of bronchial biopsy showed squamous cell carcinoma. After 3 times of high-frequency electrosurgical ablation via bronchoscope, the right main bronchial lumen, the right middle and lower lobe opening were unobstructed though the right upper lobe opening was blocked by new organisms. Then we performed the first course of chemotherapy with paclitaxel and tislelizumab. One month later, the patient underwent percutaneous bronchial artery embolization. After two courses of chemotherapy with cisplatin, paclitaxel and tislelizumab, the patient underwent percutaneous bronchial artery embolization again. Patient did not have hematemesis or spinal cord injury after embolization. At follow-up, he had complete resolution of his symptoms, including intermittent cough. His PS score was 0. Chest computed tomography (CT) revealed the lesion and metastatic lesion in the right lung were smaller than before. TNM stage was cT3N2M0 IIIb. Efficacy assessed as stable disease (SD). So we switched to tislelizumab monotherapy. In this case report, we describe a rare case of severe lung cancer successfully treated with endoscopic intervention and bronchial arterial embolization.