中文題目:肝細胞癌合併支氣管內轉移-病例報告

英文題目: Endobronchial metastases from hepatocellular carcinoma: a case report 作 者:郭欣慧<sup>1</sup>、蔡志仁<sup>2</sup>、林子堯<sup>3</sup>、吳大緯<sup>4</sup>、鍾飲文<sup>4</sup> 服務單位:高雄醫學大學附設醫院<sup>1</sup>內科部<sup>2</sup>病理部<sup>3</sup>肝膽胰內科<sup>4</sup>胸腔內科 Introduction

Metastasis to the bronchus from extrathoracic malignancy is a rare event. For patients with advanced hepatocellular carcinoma, metastasis to pulmonary parenchyma has been documented in up to 50%, nevertheless endobronchial metastases are exceptionally rare. Up to date, no more than eight cases were reported and there has been no randomized controlled trial comparing the efficacy of various treatment methods, such as surgical intervention, radiation, chemotherapy and bronchial stent placement. Herein, we report a case of metastatic hepatocellular carcinoma to main carina treated via transarterial embolization (TAE) and radiotherapy.

## Case Report

A 66-year-old man with cirrhosis (Child-Pugh classification A), chronic hepatitis B infection and recurrent hepatocellular carcinoma (rT3aN0M0), has been receiving Nexavar (Sorafenib) and regular follow-up examinations at the outpatient department. He was referred for anterior chest wall pain, dry cough and hemoptysis for more than one month.

The chest radiograph revealed bulging of the right upper mediastinum compared to previous image. Computed tomography of chest moreover showed lymphadenopathies at upper level paratracheal, prevascular, para-aortic, and subcarinal area. The trachea and both main bronchi were patent. His serum levels of squamous cell carcinoma antigen (0.7 ng/mL) and carcinoembryonic antigen (2.02 ng/mL) were within normal range. In addition, markedly elevated alpha-fetoprotein (155.69 ng/mL) was identified though the local recurrence was well controlled. Bronchoscopic examination found a polypoid lesion which was closing main carina that bled easily if touched. Tumor infiltration was highly suspected for irregular mucosa surface with hyperemic change at ventral part of main carina, as well as some prominent superficial capillaries. The brush cytology and biopsy specimens were carried out. The histopathologic findings indicated metastatic hepatocellular carcinoma for positive hepatocyte paraffin 1 (HepPar1) staining. Under thoracic aortogram and bronchial angiography, right bronchial arterial increased vascularities along right upper lung were depicted. The patient underwent superselective bronchial artery embolization with disappearance of hemoptysis subsequently. Palliative radiotherapy (6000 cGy/30Fr) targeting mediastinum was also administered, resulting in shrinkage of the metastatic lymph nodes.

However, patient's performance status quickly deteriorated and he developed acute respiratory failure secondary to radiation pneumonitis two weeks after completed treatment.

## Discussion

The reported frequency of endobronchial metastases from extrathoracic malignancies varies from 2% to 18%, and the majority of these cases are secondary to breast, colorectal or renal carcinoma. To our knowledge, the endobronchial metastases of hepatocellular carcinoma is an extremely rare phenomenon. For the clinical presentation (i.e. hemoptysis, cough, dyspnea) and radiological imaging of endobronchial metastases are similar to primary bronchogenic cancer, it should be taken into consideration especially when the patient with previous history of hepatocellular carcinoma has clinical or

radiological suspicion of primary lung cancer. Bronchoscopy with thorough cytological or histopathological examination remains the most useful means of investigation. Furthermore, the most specific markers of hepatocellular carcinoma are hepatocyte paraffin 1 (HepPar1), as our patient presented, and alpha-1-fetoprotein. Owing to endobronchial metastases is frequently a manifestation of a far advanced disease stage, the treatment is difficult and should be individualized. Transarterial embolization may be one of therapeutics for hemoptysis from invasive endobranchial metastases.