

Endobronchial metastasis as first manifestation of renal cell carcinoma

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Background. In the majority of cases of endobronchial metastasis, presence of a primary tumour antedated the diagnosis of the metastasis. We showed a case of endobronchial metastasis as first manifestation of renal cell carcinoma.

Case report. A 61-year-old man was admitted to our hospital complaining of cough of 3 months duration. Chest CT scan showed a polypoid mass in the right upper lobe bronchus. Biopsy of the lesion was obtained, and microscopic examination showed metastatic renal cell carcinoma of the bronchial wall.

Conclusions. When endobronchial lesion occurs in the absence of clinical evidence of a primary tumour, appropriate diagnostic studies should be undertaken to exclude the possibility of an asymptomatic extrathoracic tumour.

Key words: bronchial neoplasms - secondary; carcinoma, renal cell - diagnosis

Introduction

The lung is a common site of metastasis in renal cell carcinoma.¹ However, endobronchial metastasis as the first manifestation of renal cell carcinoma seems to be uncommon.²⁻⁷ We report here clinical findings of such a rare case.

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Case report

A 61-year-old man was admitted to our hospital complaining of cough of 3 months duration. He began to smoke cigarettes at the age of 20 years and consumed two packages daily thereafter. He had no previous diseases. On physical examination, his blood pressure was 140/70 mmHg and pulse rate 80/min and regular. Enlarged lymph nodes were not detected. On percussion and auscultation of the chest, increased dullness and diminished breath sounds were noted in the upper half of the right lung field.

Routine blood tests and ECG were normal. The urine was normal. Chest X-ray revealed



Figure 1. Chest CT scan showed a polypoid mass in the right upper lobe bronchus (arrow).



Figure 2. CT scan of the abdomen showing a 4-cm tumour in the lower pole of the right kidney (arrow head) without regional lymph node swelling.

right upper lobe atelectasis with localized pleural effusion. Chest CT scan showed a polypoid mass in the right upper lobe bronchus (Figure 1). On bronchoscopy, an obstructive, polypoid mass was found in the right upper bronchus. Biopsy of the lesion was obtained, and microscopic examination showed metastatic renal cell carcinoma of the bronchial wall. CT scan of the abdomen revealed a 4-cm tumour in the lower pole of the right kidney, but regional lymph node swelling was not observed (Figure 2). No other distant metastatic lesions than lung were found. Thereafter, nephrectomy was performed, and the tumour was confirmed as renal cell carcinoma pathologically.

Discussion

Endobronchial metastases are a late manifestation in the course of solid tumour.⁸⁻¹³ In the majority of cases clinical manifestations of the presence of a primary extrathoracic tumour antedated the diagnosis of endobronchial metastasis.⁸⁻¹³ Occasionally, however, clinical and roentgenographic features of endobronchial metastasis preceded recognition of the primary tumour.²⁻⁷ In 1975, Braman and Whitcob reported 7 of the 15 renal tumours were accompanied by symptoms of a bronchial metastasis three weeks to ten

months before discovery of the primary renal cell carcinoma.¹⁴ Thereafter, however, there have been few reports of endobronchial metastasis being diagnosed before the detection of the primary extrathoracic tumour.^{7,15} In the reports from our country, seven among the 37 patients with endobronchial metastasis from renal cell carcinoma preceded recognition of the primary tumour.¹⁵ Recently, Katsimbri *et al.* reported 8 case of endobronchial metastasis from various organs. In all of the 8 patients, however, clinical manifestations of the presence of a primary extrathoracic tumour antedated the diagnosis of the endobronchial metastases, and the median interval of endobronchial metastases diagnosis from the diagnosis of the primary tumour was 41 months.¹²

Although a few, however, there are reports of endobronchial metastatic lesions being diagnosed before the detection of the primary tumour.²⁻⁷

In this case report, we showed that a certain type of renal cell carcinoma develops endobronchial metastasis with no regional lymph node swelling, and such hematogenous distant metastasis may not necessarily associated with enlarged size of primary lesion. When endobronchial neoplastic lesion occurs in the absence of clinical evidence of an extrathoracic primary tumour, the bronchial neoplasma is almost certain to be a

primary lung cancer. Nevertheless, if atypical clinical or pathological features as primary lung cancer are present, appropriate diagnostic studies should be undertaken to exclude the possibility of an asymptomatic extrathoracic tumour as observed in our case.

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