

Metastatic lung adenocarcinoma in appearance of diminutive colonic polyp

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Abstract

Although about 50% of lung cancers have distant metastasis at the time of initial diagnosis, colonic metastases are extremely rare. This report presents a rare clinical case of colonic metastasis from primary adenocarcinoma of the lung.

Introduction

Lung cancer represents the leading cause of tumor death in the world with a five years survival range of 10-20%.¹ The brain, liver, adrenal glands, and bone are the most common sites of metastatic disease in patients with lung cancer.² Metastases of the gastrointestinal tract are very uncommon. The metastatic lesions often seen as ulcero-vegetating or polypoid mass lesions in the colon. Here in we report a case of colon metastases from lung adenocarcinoma presenting with a diminutive colonic polyp.

Case Report

A 63-year-old man was diagnosed with stage 4 lung adenocarcinoma by the department of chest diseases after his application with complaints of chronic cough and weight loss. His



Figure 1. Colonoscopic view of simple diminutive polyp on transverse colon.

history was unremarkable. On chest-computed tomography (CT), a mass lesion destructing the 5th costa and invading serratus anterior muscle on upper lobe posterior segment of the right lung was observed. A bronchoscopic biopsy specimen revealed adenocarcinoma. On positron emission tomography (PET)-CT, in the same lesion on right lung and the adjacent lymph nodes pathologically increased metabolic activity involvement was observed [maximum standardized uptake value (Max SUV): lung tumor 30.03, lymph nodes, 26.4]. In addition, metabolic activity involvement was observed diffuse on descending colon, sigmoid colon, and rectum, and heterogeneously increased on transverse colon (Max SUV: 13.2). We monitored 3 mm sized diminutive polyp in the middle of the transverse colon on colonoscopy (Figure 1). We performed polypectomy with forceps catheter. Preparations stained with Hematoxylin and Eosin were formed from the specimen of pathology and showed an insufficient differentiation from adenocarcinoma, which was assumed to be the colonic metastasis of other primal area (Figure 2A).

In terms of immunohistochemistry results, carcinoma cells were found positive for thyroid transcription factor-1 (TTF-1) (Figure 2B), cytokeratin 7 (CK7) (Figure 2C), and negative for cytokeratin 20 (CK20) (Figure 2D). According to the histological and immunohistological results, the tumor was a metastatic cancer of the primal lung cancer, which triggered the common colonic polyp. The department of chest diseases planned chemotherapy for carcinoma of the lung.

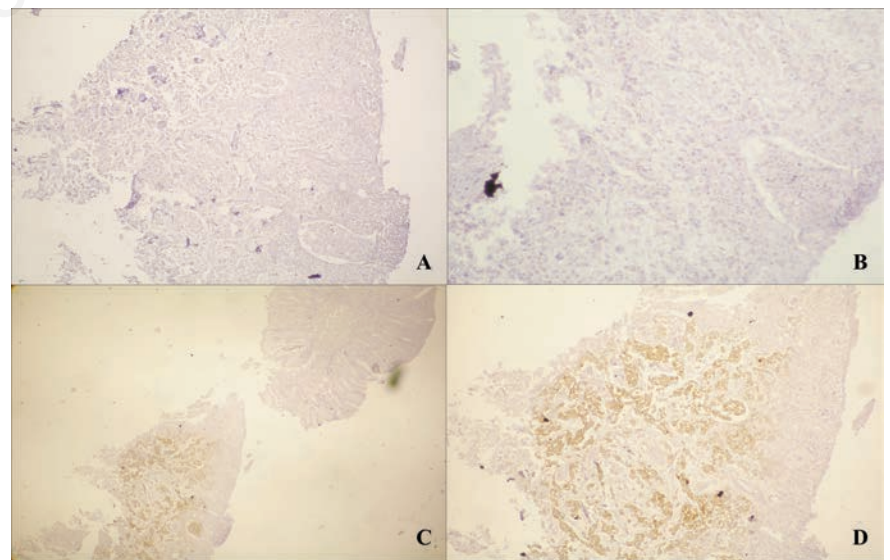


Figure 2. A) On the desmoplastic stroma, a pedunculated polyp including tumor cells in the shape of an infiltrative gland-base (H&E 10 \times). In terms of immunohistochemistry results, carcinoma cells were found positive for thyroid transcription factor-1 (TTF-1) (B), cytokeratin 7 (CK 7) (C), and negative for cytokeratin 20 (CK20) (D).

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Discussion and Conclusions

Colon metastasis of lung cancer is very rare; metastatic lesions often seen as ulcero-vegetating or polypoid mass lesions in the colon, metastatic lesions can be detected in an earlier stage with wider usage of PET-CT.³ Immunohistochemical examination conducted by immunostaining such as TTF-1, Caudal-type

homeobox 2 (CDX2), CK7 and CK20 is helpful in differentiating primary colon carcinoma from metastatic carcinoma of the lung.⁴ Diminutive polyps smaller than 5 mm and seen on colon are often considered as benign. In the literature, metastatic lesion of the colon that is endoscopically detected as diminutive polyp has not been reported. Metastatic lesion in the colon can appear as diminutive polyp.

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