


CASE REPORT

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Surgical indication and management of obstructive colonic metastasis from primary lung adenocarcinoma: report of a case and review of the literature

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Abstract

Background Colonic metastasis from lung cancer is very rare and is typically associated with poor prognosis. Herein, we report the case of a patient who achieved intermediate-term survival using a multimodal treatment approach, including chemotherapy, immunotherapy, radiotherapy, and surgical resection for obstructive colonic metastasis from primary lung adenocarcinoma.

Case presentation A woman in her 50s presented with anemia and a positive fecal occult blood test. Computed tomography revealed a tumor in the right upper lobe of the lung with mediastinal lymphadenopathy and wall thickening in the transverse colon. Colonoscopy revealed a stricture involving 50% of the colonic lumen. Biopsy revealed a poorly differentiated adenocarcinoma positive for CK-7 and TTF-1, very focally positive for napsin A, and negative for CK-20 and CDX-2. Furthermore, positron emission tomography/CT (PET/CT) showed a high maximum standardized uptake value (SUVmax) of 8.2 in the iliac bone. Based on these findings, the patient was diagnosed with primary lung adenocarcinoma with simultaneous metastasis to the transverse colon and iliac bone (cT4N3M1c, cStage IVB).

After receiving first-line chemotherapy with atezolizumab, pemetrexed, and carboplatin, the tumors shrank after 4 courses. Subsequently, the patient received maintenance therapy with atezolizumab and pemetrexed. However, the tumor enlarged after 10 courses. Second-line chemotherapy with docetaxel and ramucirumab (3 courses) failed to achieve tumor reduction. Colonoscopy revealed an impassable colonic tumor. Nineteen months after diagnosis, surgery was planned for imminent intestinal obstruction.

We determined that the colonic tumor was resectable, because laparoscopic exploration revealed no other metastases. The tumor was resected by partial colectomy with ileocolonic anastomosis. The postoperative course was uneventful. Pathological examination revealed a resection margin that was negative for malignancy, and the histological type was consistent with metastatic lung adenocarcinoma.

The patient then received nab-paclitaxel therapy; however, she developed symptoms of superior vena cava syndrome after 3 courses. The patient received palliative irradiation (30 Gy/10 fr) followed by nivolumab. She soon developed a solitary brain metastasis, and stereotactic irradiation was planned. After 3 courses of nivolumab, the metastasis

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