
A case of bronchogenic carcinoma presenting with acute abdomen

Mehmet Ali HABEŞOĞLU¹, Kıvılcım İ. OĞUZÜLGEN², Can ÖZTÜRK², Nalan AKYÜREK³, Leyla MEMİŞ³

¹Başkent Üniversitesi Tıp Fakültesi, Göğüs Hastalıkları Anabilim Dalı, Adana.

²Gazi Üniversitesi Tıp Fakültesi, Göğüs Hastalıkları Anabilim Dalı,

³Gazi Üniversitesi Tıp Fakültesi, Patoloji Anabilim Dalı, Ankara.

ÖZET

Akut batın tablosu ile başvuran bronkojenik karsinoma olgusu

Bronkojenik karsinomların kolon metastazı oldukça nadirdir. Bu makalede son derece az görülen akut batın tablosu ile ortaya çıkan ve başlangıçta kolon karsinomuna bağlı intestinal obstrüksiyon olarak değerlendirilen akciğer kanseri olgusu sunulmuştur. Hasta acil operasyona alınarak kolonda obliteratif lezyon rezeke edilmiş ve “muhtemelen akciğer kökenli epidermoid karsinomunun kolon metastazı” olarak rapor edilmiştir. Daha sonra bronkoskopide sağ alt lobda endobronşiyal lezyon görülerek az diferansiye epidermoid akciğer karsinomu tanısı konmuştur. Bu olguda, kolon metastazı tanısı primer hastalıktan önce konmuştur.

Anahtar Kelimeler: Bronkojenik karsinoma, kolon metastazı, akut batın.

SUMMARY

A case of bronchogenic carcinoma presenting with acute abdomen

Habesoglu MA, Oguzulgen KI, Ozturk C, Akyurek N, Memis L

Department of Chest Disease, Faculty of Medicine, University of Baskent, Adana, Turkey.

Colonic metastasis of the bronchogenic carcinoma is quite rare. Here we document an extremely rare presentation of the lung cancer that presented with acute abdomen and was diagnosed as intestinal obstruction due to colon carcinoma initially. He underwent an urgent operation and the obliterating mass in the colon was resected and reported as “colon metastasis from epidermoid carcinoma probably of the lung”. Afterwards bronchoscopy revealed an endobronchial lesion in the right lower lobe that was diagnosed as poorly differentiated squamous cell lung carcinoma. In this case, colon metastasis was diagnosed before the diagnosis of the primary disease.

Key Words: Bronchogenic carcinoma, colon metastasis, acute abdomen.

Yazışma Adresi (Address for Correspondence):

Dr. Mehmet Ali HABEŞOĞLU, Başkent Üniversitesi Tıp Fakültesi, Adana Uygulama ve Araştırma Hastanesi, Dadaloğlu Mahallesi, Yüreğir, ADANA - TURKEY

e-mail: habesma@superonline.com

Metastatic disease is present in about half of the bronchogenic carcinomas at initial diagnosis. The most common involved sites are bone, liver, adrenal gland and brain. Colonic metastasis from primary carcinoma of the lung has rarely been described. Clinically they may present with symptoms of colonic obstruction, lower gastrointestinal bleeding, bowel perforation, or gastrointestinal fistula (1-3). These findings generally represent after the diagnosis of the primary disease. Here we report a case that presented with acute abdomen because of the colon metastasis of a non-overt lung cancer.

CASE REPORT

A 67 years old man admitted to the Emergency Department with the complaints of abdominal pain, distension, constipation, nausea and vomiting lasting for the last 24 hours. He stated that there was blood in his faeces three months ago. He did not have a known pulmonary pathology. He had a smoking history of 90 packs year. He also complained of cough and sputum in the preceding 2 years and stated that his pulmonary symptoms increased during the last 3 months, having haemoptysis once, 3 months ago.

The patient's body temperature was 36.5°C, blood pressure was 160/110 mmHg, pulse was 96 beats/min, respiration was 24 breaths/min. Chest auscultation revealed decreased breath sounds and long expiration time. The abdomen was distended, defensive, there was tenderness and rebound. There was no peristalsis by auscultation.

In initial laboratory studies complete blood count, electrolytes, renal and liver function tests were normal. On the chest radiogram right cardiophrenic sinus was obscured, suggesting an image of pericardial fat pad.

The patient was examined by the surgeons initially, than rectoscopy and colonoscopy was performed. It revealed a narrowing in the lumen 30-40 cm far from the anal canal. The mucosa of the colon was fragile and oedematous. No infiltration was found. So he was diagnosed as intestinal obstruction due to colon carcinoma and underwent an urgent operation. There was

an obliterating mass in the sigmoid junction. A left hemicolectomy and anastomosis was performed. The macroscopic pathologic findings revealed a mass of 5 x 3 x 1.6 cm. The serosa of the colon was infiltrated. The intestinal lumen was narrowed and the colonic mucosa outside the mass was atrophic. Microscopically, there was a tumoral lesion beginning from the serosa that extended to the lower parts of lamina propria. Cells had syncytial cytoplasm and vesicular nuclei. Rare single cell keratinisation was observed. In the cross-section of the colectomy material, it was seen that the surface epithelium was intact (Figure 1). These findings were interpreted as "colon metastasis from epidermoid carcinoma probably of the lung".

The patient was referred to our clinic after surgery. There was no difference on the radiological findings. But the computed tomography of the chest revealed atelectasis in the apical, medial and lateral segments of the right lower lobe (Figure 2). The bronchoscopy revealed an endobronchial lesion causing total occlusion arising from the medial segment of the right lower lobe. Poorly differentiated squamous cell carcinoma was diagnosed by punch biopsy. In bone scintigraphy there was an increased uptake in the 1/3 proximal part of the left femur, and in abdominal ultrasound a 53 x 27 mm, lobulated, heterogeneous, hypoechoic mass in the right surrenal region was identified; both suggesting metastasis.

The patient was diagnosed as squamous cell carcinoma of the lung stage IV (T₂N₁M₁) and received cisplatin + navelbin therapy for 6 cycles. The patient survived 190 days after the time of the diagnosis.

DISCUSSION

Gastrointestinal metastasis from lung cancer is very rare. In a post-mortem study of Antler and colleagues, 58 gastrointestinal tract metastasis (including oesophagus) were identified in 423 lung cancer patients by autopsy. Colon involvement rate was only 5% (4). In other autopsy study from Japan, rate of gastrointestinal tract metastasis excluding oesophagus was 1.8 % and colonic metastasis rate was only 0.5% (5).

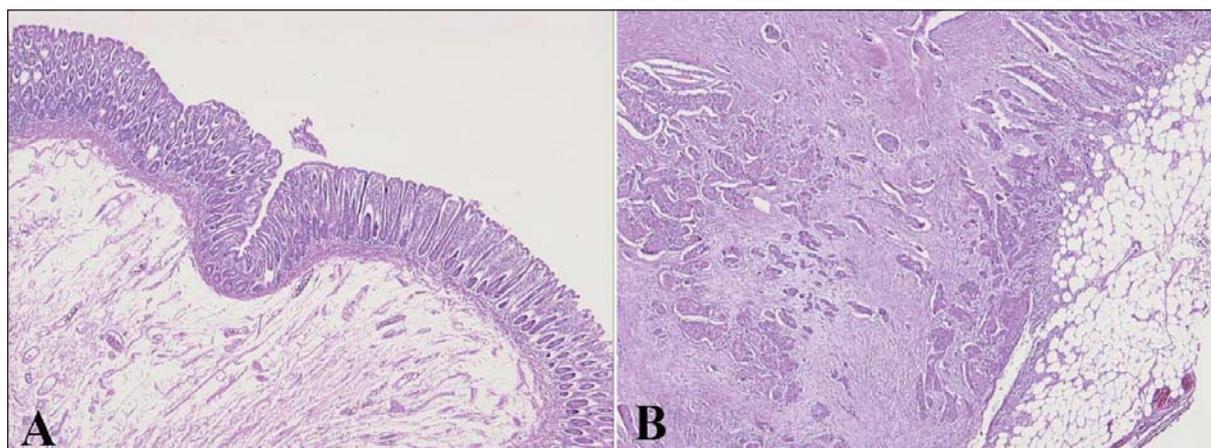


Figure 1. Pathologic images of the colectomy material: images showing the intact surface epithelium (A) (HE x 10 x 1.25) and tumoral infiltration of the serosa (B) (HE x 12.5).



Figure 2. Chest computed tomography: computed tomography revealed atelectasis in the apical, medial and lateral segments of the right lower lobe.

The histological type of bronchogenic carcinoma that causes colonic metastasis varies according to different studies. The most common types were large cell or squamous cell carcinoma (4-6). We believe that it's hard to consider a special type of primary bronchogenic carcinoma, which causes colon metastasis because of the small number of the cases.

The malignancies known to cause secondaries in the large bowel are stomach, breast, ovary, cervix, kidney, lung, bladder, prostate, and melanoma. About 1/3 of the colonic metastases from lung cancer are asymptomatic and the diagnosis is performed by the autopsy. The most common symptoms are abdominal pain, nausea, vomiting, anaemia and weight loss (1,4). These findings generally represent after the diagnosis of the primary disease but can occur

synchronously or before the diagnosis of the primary as in our case (1,7).

Our case initially admitted to the hospital with the findings of acute abdomen. Urgent laparotomy was performed and the metastasis of the colon was diagnosed before primary bronchogenic carcinoma. The pathologic examination of the colectomy material was concordant with metastatic involvement rather than primer tumour. Yet, an endobronchial mass lesion was identified by bronchoscopy afterwards. The examination of the biopsy revealed squamous cell lung carcinoma.

The lung cancer with intestinal metastasis has been reported to have poor prognosis with a mean survival of only 4-8 weeks. The treatment modalities depend on the nature of presentation and extent of the disease. In clinically acute presentation, surgical therapy is a palliative approaches. Surgery shortens the time of hospitalisation and increases the quality of life. The procedure must be well tolerated and perform a sufficient palliation (1,8). In our case, the involved part of the colon was resected totally and a sufficient palliation was obtained. This is the first reported lung cancer case with colon metastasis from Turkey, a country with a high incidence of lung cancer. The patient did not have an additional abdominal problem during his last 190 days.

In conclusion, colonic metastasis of the bronchogenic carcinoma is quite rare and usually diagnosed by autopsy. Sometimes, clinical symptoms due to colon metastasis can be an initial finding. In such cases with limited survival like lung cancer, surgical therapy can provide effective palliation. Curative resections can increase the survival time in appropriate cases.

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