Journal of Oncological Sciences 4 (2018) 147–148

Contents lists available at ScienceDirect

Journal of Oncological Sciences

journal homepage: https://www.elsevier.com/locate/jons

Case Report

"Squamos cell lung cancer" case applying with dyspepsia complaints

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ARTICLE INFO

Article history:
Received 1 May 2018
Received in revised form
15 August 2018
Accepted 28 August 2018
Available online 18 September 2018

Keywords:
Dyspepsia
Squamos cell lung cancer
Duodenal metastasis

ABSTRACT

We present a patient with uncommon metastases of lung cancer. The patient has been followed-up for early stage laryngeal carcinoma in the remission and has had dyspeptic complaints as well. A 62-year-old male patient had epigastric complaints for three months. In the upper endoscopy, a biopsy specimen taken from the polyp in the second region of the duodenum was reported as squamous cell cancer. Immunohistochemical staining of tumor cells were positive for CK5/6, p40, and p63. A mass in the right lung was detected on thorax tomography. The result of the transthoracic needle biopsy indicated squamous cell cancer. Duodenal metastasis of lung cancer is highly unlikely. Lesions below 1 cm can be safely removed endoscopically. Duodenal metastasis of primary lung cancer can be considered in the differential diagnosis of resistant dyspepsia.

1. Introduction

Lung cancer is the most common malignancy in the world and the leading cause of cancer-related deaths.[1] Traditionally, lung cancers are classified into two main histological groups: small cell lung cancer (SCLC) and non-small cell lung cancer (NSCLC). NSCLC accounts for 85% of total lung cancer cases and includes adenocarcinoma, squamous cell carcinoma and large cell carcinoma subtypes.[2] More than 60% of patients with lung cancer are diagnosed at the local advanced or advanced stage.[3] This is the result of aggressive biology of the tumor and asymptomatic progression to the advanced stage. Patients with lung cancer often refer to a doctor with weight loss, cough, pain, and dyspnea. We wanted to present a case of squamous cell lung cancer diagnosed after the detection of duodenal metastasis with dyspeptic complaints.

2. Case report

A male patient came to our clinic with 20 kg weight loss in 2 months, weakness, back pain and dyspepsia. He was 62 years old, and he had a thirty-pack year smoking in his past. He was operated 1 year ago because of early stage squamos cell laryngeal cancer (He underwent an endolaryngeal frontolateral laryngectomy operation). He was in remission for laryngeal carcinoma. Complete blood count (CBC) showed WBC 22000/mm^3, high sedimentation rate (ESR 66 mm/hour). Other laboratory parameters are within normal limits. Esophagoduodenoscopy scheduled due to dyspeptic complaints and polypoid lesion was detected in the second part of duodenum. Histopathology of the removed duodenal lesion is malignant epithelial tumor and immunohistochemical staining showed the squamous nature of these cells with CK5/6 and p63 positivity (see Fig. 1). Squamous cell carcinoma metastasis should be considered primarily because of CK5/6, p40 and p63 positivity in the primary tumor and the patient's larynx cancer story. Computed tomography (CT) of chest and abdomen showed a mass lesion (66 × 80 mm) at upper lobe of right lung and metastatic lesions in the liver. A transthoracic fine needle biopsy was performed for the mass lesion in his lung and histopathology was squamous cell carcinoma. In his laryngeal examination, there was no evidence of any recurrence. The patient was considered as duodenal metastasis of squamous cell lung cancer. He received palliative radiotherapy due to severe pain in thoracic lesion. ECOG status of our patient was 4 so we followed-up our patient with best supportive care and he died because of respiratory insufficiency.

3. Discussion

Most of the lung cancers are diagnosed at the metastatic stage. Non-small cell lung cancer metastasis usually seen in bones, brain, liver and surrenal glands. Gastrointestinal system metastases are

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Peer review under responsibility of Turkish Society of Medical Oncology.

https://doi.org/10.1016/j.jons.2018.08.001

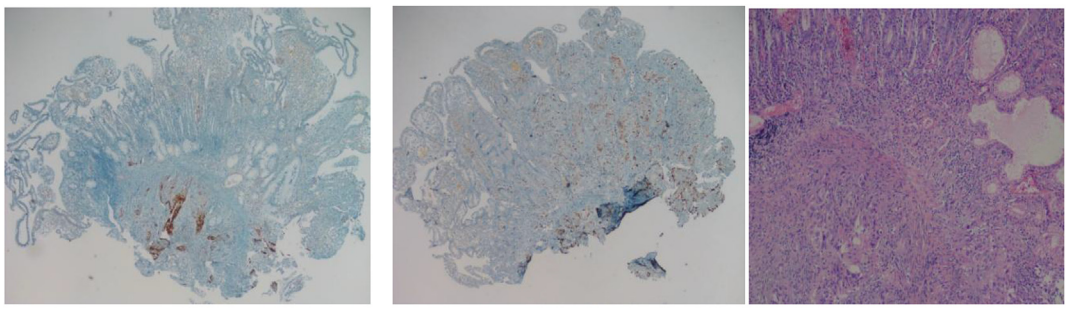

Fig. 1. Hematoxylin-eosin stained sections showed infiltrative characteristic malignant epithelial cells extending into the mucosa in the form of small clusters and single cells in the subepithelial area. Immunohistochemical stainings showed the squamous nature of these cells with CK5/6 and p63 positivity.

Table 1
Previously published case reports of duodenal metastasis from primary lung squamos cell carcinoma.

Age (years)/gender	Complaint	Time of diagnosis	Treatment	Follow-up	Outcome
63/M [9]	Melena, Anemia	24 months after treatment for primary lung cancer	Duodenectomy	5 months	Dead
66/M [10]	Perforation	During chemoradiation for primary lung cancer	Duodenectomy followed by chemotherapy		
65/M [11]	Jaundice, obstruction	–	Endoscopic resection	–	–
54/M [12]	Dysphagia	During chemoradiation for primary lung cancer	Endoscopic resection	2 months	Dead
81/M [13]	Symtomatic anemia	During new diagnosed lung cancer	Palliative chemotherapy		
61/M [14]	Asymptomatic,	6 months after diagnosis	Palliative radiotherapy	1 year	Dead

very rare and usually asymptomatic.[4] Jejunum and ileum are the most common metastatic regions in the gastrointestinal tract.[5]

Hilendbrand et al. identified 58 cases that metastasized to the gastrointestinal tract between 1960 and 2003. Of the 38 localized patients, 55% (21) were reported as jejunal, 32%[12] ileal and 8%[3] reported as duodenal metastases. Squamous cell carcinoma (17/34; 50%) followed by large cell carcinoma (8/34; 24%) and adenocancer (7/34; 21%) were the most frequent histological subtypes of duodenal metastases in lung cancer.[6]

In previous small bowel metastases NSCLC case reports, surgical resection was performed due to fatal complications such as perforation in the majority of patients. 57 case reports and three retrospective studies have revealed that people survives 2.3 months on average. [7] Few studies point out some patients stay alive over 1 year. [8] Duodenal metastases do not have a specific symptom and the sensitivity of tomography is low to detect duodenal metastasis. Therefore, it is rarely noticed, and the prognosis is poor.

We found six cases of squamous cell lung cancer of duodenal metastases in the literature. Two cases were diagnosed with anemia, one patient was perforated, one patient was obstructed, and one patient was asymptomatic with PET imaging. All of the patients had been diagnosed with lung cancer and duodenal metastases were detected thereafter. Endoscopic resection and palliative chemotherapy were the most commonly used treatment modalities. We could reach information of three patients prognosis: despite local treatment, they died within one year of the diagnosis (see Table 1).

In metastatic squamous cell carcinoma, there is no reliable immunohistochemical marker to distinguish primary cancer and metastasis. For this reason, there is a need for additional work to be done in this area. When we evaluated clinically, the patient was in remisson for laryngeal carcinoma. There was a mass in the lung that could be regarded as primary. When the patient was evaluated clinically and radiologically, primary lung cancer was considered.

The diagnosis of lung cancer due to dyspeptic complaints is another feature that distinguishes us from other cases. Among the causes of gastrointestinal symptoms, metastasis should also be kept in mind. Duodenal metastasis can be a reason for resistant dyspepsia complaints of patients.

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