LETTER TO THE EDITOR

Solitary pancreatic metastases of small cell lung cancer

Many types of tumors have been reported to metastasize to the pancreas, including lung carcinoma, prostatic carcinoma, liver carcinoma, stomach carcinoma, colon carcinoma, breast carcinoma, thyroid carcinoma, renal cell carcinoma, Hodgkin disease, hepatoma, malignant melanoma, and meningioma. The most common histologic type of lung cancer that is related to pancreatic metastasis is small cell lung cancer [1,2]. Although pancreatic metastasis occurs toward the end stage of small cell lung cancer [2], we present multiple isolated pancreatic metastases of small cell carcinoma of the lung in this paper.

A 58-year-old old man was admitted with complaints of chest pain and a cough that lasted for 1 month. He had a 40-pack per year smoking history. Clubbing was evident in the physical examination. The initial laboratory workup revealed a normal blood count and biochemistry, including alkaline phosphatase, total bilirubin, amylase, and lipase. A chest computed tomography (CT) scan showed a tumor with an irregular margin on the left hilar region. A bronchoscopic biopsy revealed small cell carcinoma. There were low attenuated masses on the pancreatic head (Fig. 1) and tail in CT of the abdomen. Following six cycles of first-line chemotherapy, consisting of etoposide and cisplatin, pancreatic masses showed partial regression. The pancreatic lesions disappeared after six cycles of second-line chemotherapy with topotecan.

The pancreas is a relatively infrequent site of metastasis for small cell carcinoma of the lung. Although the main complications of these lesions are acute pancreatitis and obstructive jaundice, pancreatic metastases are usually asymptomatic or the symptoms are nonspecific, as was seen in our patient. The occurrence rates of acute pancreatitis, due to pancreatic metastasis of small cell lung carcinoma, vary between 3.3% and 7.5%. These results are lower than the 12–40% rate of small cell lung cancer metastases to the pancreas reported in autopsy findings [1].

It has been reported that most secondary tumors of the pancreas localize to the head of the gland [3]. The presence of masses on the pancreatic head and tail in our patient support this finding. Although secondary pancreatic tumors tend to be multiple rather than single, the usual pattern of pancreatic metastasis from lung cancer was reported to be a solitary mass [4].

However, the sensitivity of modern multidetector helical CT scanners in demonstrating pancreatic metastasis is unknown. A study published in 1989 comparing nonhelical abdominal CT with autopsy results found a true-positive rate of only 53.8% [5].

The most significant limitation of this study was that the pancreatic lesion was not histologically confirmed. However, pancreatic biopsy carries a high rate of morbidity and false-negative results [1]. Nevertheless, a chemotherapy regimen for small cell lung cancer was effective against the pancreatic masses, suggesting that the lesions were small cell cancer. Although it has been reported that small cell carcinoma of the pancreas also respond well to etoposide-cisplatin chemotherapy, 96% of small cell

Figure 1. Low attenuated mass on the pancreatic head.
cancers are of pulmonary origin, and small cell carcinoma of the pancreas is an extremely rare malignancy [2].

References


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