

Esophageal Squamous Cell Carcinoma with Pancreatic Metastasis: A Case Report

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Abstract- Malignant tumors of pancreas are usually primary neoplasms and pancreatic metastases are rare findings. We are reporting a case of squamous cell carcinoma (SCC) of the esophagus with pancreatic metastasis. A 59-year old woman was admitted with chief complaint of abdominal pain and mass. She was a known case of esophageal SCC since 4 years before when she had undergone transthoracic esophagectomy and cervical esophago-gastrostomy. In order to evaluate recent abdominal mass, CT scan was done which revealed septated cystic lesion in the body and the tail of the pancreas. Palliative resection of the tumor was performed and its histological study showed SCC compatible with her previously diagnosed esophageal cancer.

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Introduction

The majority of pancreatic carcinomas are primary tumors. Recently, development of imaging techniques has resulted in paying more attention to secondary tumors of pancreas (1). However, pancreatic metastases are still rare clinico-pathological entities (2). Autopsy studies have indicated that just 3-15% of pancreatic tumors are secondary lesions (3). So far, pancreatic metastases from primary malignant tumors of the lung, breast, kidney, and gastrointestinal (GI) tract have been reported (4). Although, pancreatic invasion from adjacent GI adenocarcinomas, especially gastric tumors, is common (5), pancreatic metastasis of esophageal origin is extremely rare. In this report, we present a case of pancreatic metastasis in a patient who was surgically treated for her esophageal squamous cell carcinoma (SCC) 4 years ago.

Case Report

A 59 year old woman was admitted to our department complaining of pain and a mass in her left upper quadrant of the abdomen. Four years before, she had been diagnosed with a well differentiated middle-third esophageal SCC (T3 N1 M0) for which she had undergone transthoracic esophagectomy and cervical

esophago-gastrostomy with free surgical margins without any surgical complications. After the operation, adjuvant chemo-radiation therapy including monthly cycles of bolus 5-fluorouracil (5-FU) and leucovorin for four months and 45 Gy radiation concurrent with the second cycle of chemotherapy had been performed.

At her current admission, ultrasound examination showed a 120 mm cystic lesion with thick wall and echogenic contents anterior to the spleen. A CT scan detected a 120 mm × 90 mm septated cystic mass in the body and the tail of the pancreas (Figure 1).

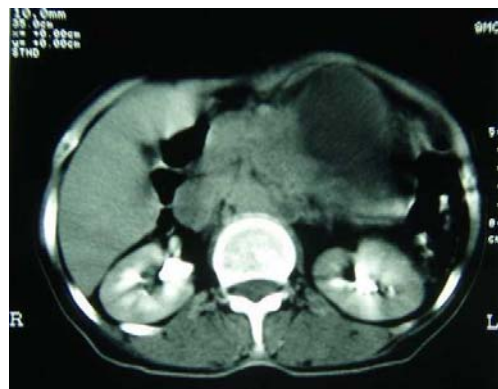


Figure 1. Abdominal Axial CT-scan depicted a 120 mm × 90 mm septated cystic mass in the body and the tail of the pancreas.

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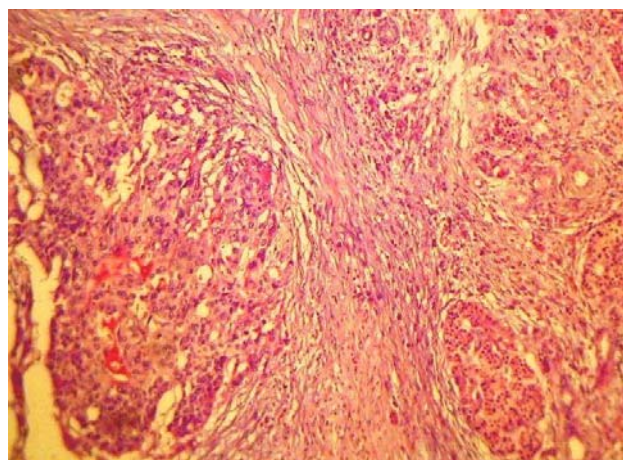
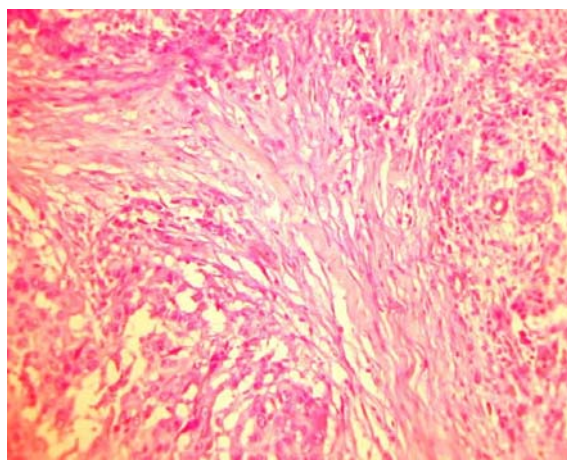


Figure 2. Microscopic cross-section of the resected mass: pathologic features compatible with squamous cell carcinoma (hematoxylin and eosin stain).

Exploratory laparotomy was performed in which, a mass involving the body and the tail of the pancreas with the splenic vessels invasion was observed. No evidences of the other organs involvement were found. Tumor removal, distal pancreatectomy, and splenectomy were performed. Grossly the tumor was a hard mass with 75 × 65 × 58 mm in size. Microscopically, the tumor revealed pathologic features of SCC (Figures 2) which was compatible with the previously resected esophageal tumor in this patient. Adjuvant chemotherapy continued and after passing 6 months from the surgery, the patient was in good general conditions.

Discussion

Distant metastasis in esophageal carcinoma is a common finding and liver, bone and lung are the usual target organs. On the other hand, different primary tumors like kidney, lung and gastrointestinal tract tumors have been reported with pancreatic metastasis (6). Primary SCC of the pancreas is so rare that its presence favors a metastatic lesion (7-9).

In case of our patient, considering the past history of esophageal SCC, the best explanation for her pancreatic lesion would be esophageal cancer metastasis.

Unfortunately, there are few guidelines to manage appropriately such lesions. Although, the potential benefit of metastasectomy of colorectal carcinoma, sarcoma, and renal cell carcinoma is well documented (10,11), experience with pancreatic resection for the treatment of isolated metastatic lesions is very limited (4,12,13). It has been demonstrated that surgical resection of solitary metastatic lesions from colorectal

cancer to pancreas prolongs patients' survival time and improves their quality of life (6). It has also been reported that resection of the pancreatic metastatic lesions in 16 patients with different primary tumors led to longer disease free interval and increased overall survival (14). In this patient, both surgical and oncology teams believed that metastasectomy would offer her a better quality of life because of her long disease-free time period and good general condition.

In conclusion, the possibility of metastatic tumors should be considered in patients with pancreatic lesions and a history of malignant tumors. Surgical resection of solitary metastatic lesions from a primary cancer, when possible, may be justified under certain circumstances.

References

1. Muranaka T, Teshima K, Honda H, Nanjo T, Hanada K, Oshiumi Y. Computed tomography and histologic appearance of pancreatic metastases from distant sources. *Acta Radiol* 1989;30(6):615-9.
2. Nakamura E, Shimizu M, Itoh T, Manabe T. Secondary tumors of the pancreas: clinicopathological study of 103 autopsy cases of Japanese patients. *Pathol Int* 2001;51(9):686-90.
3. Deziel DJ. Metastases to the pancreas. In: Howard JM, Idezuki Y, Ihse I, Prinz RA, editors. *Surgical Diseases of the Pancreas*. 3rd ed. Baltimore: Williams and Wilkins; 1998. p. 643-8.
4. Roland CF, van Heerden JA. Nonpancreatic primary tumors with metastasis to the pancreas. *Surg Gynecol Obstet* 1989;168(4):345-7.

SCC metastasis to pancreas

5. Anagnostopoulos GK, Aithal GP, Ragunath K, Kaye P, Rowlands BJ. Squamous cell carcinoma of the pancreas: report of a case and review of the literature. *JOP* 2006;7(1):47-50.
6. Torres-Villalobos G, Podgaetz E, Anthon FJ, Remes-Troche JM, Robles-Diaz G, Nuñez CC. Single pancreatic metastasis from a previously resected carcinoma of the cecum: a case report. *Curr Surg* 2004;61(3):328-30.
7. Sears HF, Kim Y, Strawitz J. Squamous cell carcinoma of the pancreas. *J Surg Oncol* 1980;14(3):261-5.
8. Layfield LJ, Cramer H, Madden J, Gopez EV, Liu K. Atypical squamous epithelium in cytologic specimens from the pancreas: cytological differential diagnosis and clinical implications. *Diagn Cytopathol* 2001;25(1):38-42.
9. Anagnostopoulos GK, Aithal GP, Ragunath K, Kaye P, Rowlands BJ. Squamous cell carcinoma of the pancreas: report of a case and review of the literature. *JOP* 2006;7(1):47-50.
10. Weber SM, Jarnagin WR, DeMatteo RP, Blumgart LH, Fong Y. Survival after resection of multiple hepatic colorectal metastases. *Ann Surg Oncol* 2000;7(9):643-50.
11. Billingsley KG, Lewis JJ, Leung DH, Casper ES, Woodruff JM, Brennan MF. Multifactorial analysis of the survival of patients with distant metastasis arising from primary extremity sarcoma. *Cancer* 1999;85(2):389-95.
12. Paz A, Koren R, Gal R, Wolloch Y. Late solitary pancreatic metastasis from renal cell carcinoma. *Isr J Med Sci* 1996;32(12):1319-21.
13. Ghavamian R, Klein KA, Stephens DH, Welch TJ, LeRoy AJ, Richardson RL, Burch PA, Zincke H. Renal cell carcinoma metastatic to the pancreas: clinical and radiological features. *Mayo Clin Proc* 2000;75(6):581-5.
14. Hiotis SP, Klimstra DS, Conlon KC, Brennan MF. Results after pancreatic resection for metastatic lesions. *Ann Surg Oncol* 2002;9(7):675-9.

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