

**Case Report**
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## The Earliest Clinical Sign of Recurring Metastatic Pancreatic Cancer is a Cutaneous Eruption

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**Introduction**

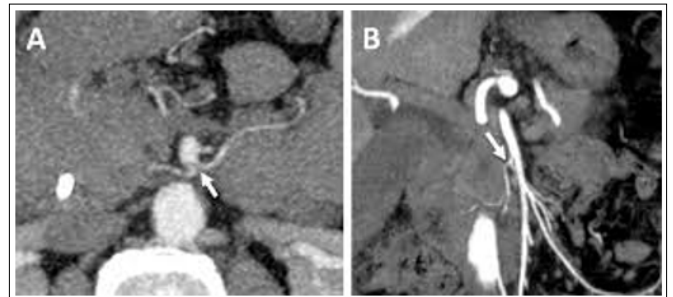
Early identification is essential for improving survival rates since pancreatic cancer frequently has a poor prognosis [1]. Pancreatic cancer is known to spread quickly, yet it seldom spreads to the skin [1]. Umbilical metastases frequently affect this region. Nonumbilical involvement is quite uncommon [2] to our knowledge, there haven't been any additional examples of dermatomal or zosteriform cutaneous pancreatic cancer published in the literature. We describe a rare instance of recurrent pancreatic cancer that manifested as a unilateral, dermatomal, nonumbilical cutaneous metastasis.

**Case Report**

A 71-year-old African American man was seen with a severe rash on the left side of his upper chest that had been present for a month. His primary care physician had prescribed gabapentin, oral prednisone, and two rounds of valacyclovir for what was thought to be varicella zoster infection; yet, the rash and severe, knife-like pain continued. He confirmed having had chicken pox as a youngster but denied ever having any fluid-filled blisters over the whole illness. A pancreatic adenocarcinoma of the ampulla of Vater that was treated with the Whipple technique four years earlier was another noteworthy event in the past. He was not immunosuppressed and in remission at the time of presentation. On the left side of the body, there were solid, violaceous nodules with violaceous indurated plaques around them the medial volar aspect of the left wrist and the upper part of the torso, with dermatomal distribution along the T1, T3, and T4 dermatomes, respectively (Figure. 1, A and B).

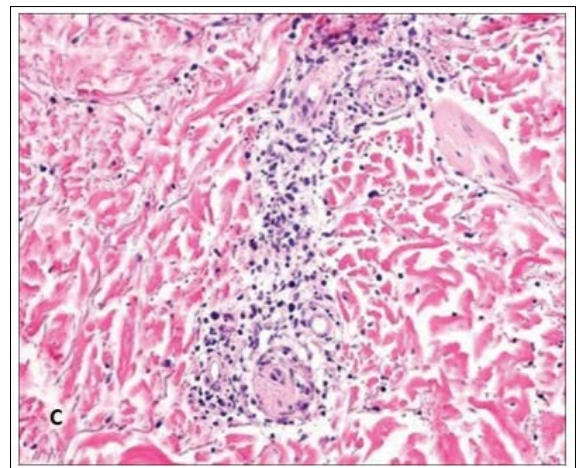
An upper thoracic plaque on the left side's punch biopsy revealed a moderately differentiated adenocarcinoma (Figure. 1, C). According to immunohistochemistry staining, the tumour cells were negative for CDX-2, CK20, and GATA-3 and positive for CK7 and pancytokeratin (Figure. 1, D). These findings increased the likelihood that pancreatobiliary origin metastatic cancer existed. Varicella zoster virus was not detected in the skin

lesion after polymerase chain reaction analysis. A chest CT scan indicated significant left axillary lymphadenopathy that reached the supraclavicular area, with the biggest node measuring up to 2.8 cm additionally enlarged lymph nodes in the right costophrenic angle and perihepatic region.

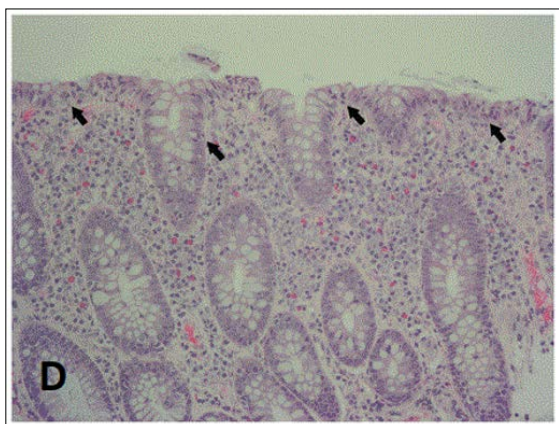


**Figure 1A:** On the left side of the upper part of the torso, there are firm, violaceous nodules that appear in a dermatomal pattern against a backdrop of violaceous indurated plaque.

**Figure 1B:** On the medial volar aspect of the left wrist, there are firm, violaceous nodules that are surrounded by violaceous indurated plaque and appear in a dermatomal pattern.



**Figure 1C:** Atypical gland infiltration as shown in a photomicrograph.



**Figure 1D:** Positive CK7 staining on tumour cells. Original magnifications for C and D are 200 and 40, respectively (C, Hematoxylin-Eosin stain; D, CK7 stain).

A heterogeneous soft tissue mass connected to the left adrenal gland grew in size over time on a computed tomography scan of the abdomen and pelvis with intravenous contrast, and pancreatic ductal dilatation got worse with time. Adenocarcinoma was confirmed by a duodenal biopsy. According to immunohistochemical analyses, the tumour cells stained positively for CK7, CEA, and CA19-9 but negatively for CDX2. Additional testing revealed increased levels of serum CA 125 (591.4 U/mL), CA 19-9 (12,189.0 U/mL), CEA (233.3 ng/mL), and C-reactive protein (141.6 mg/L). The patient's clinical, laboratory, and imaging results were highly suggestive of metastatic pancreatic cancer.

### Discussion

Pancreatic cancer has a median 5-year survival rate of 5.5% [1]. Patients typically don't show any symptoms until the malignancy has spread [1]. The lymph nodes, liver, lung, and adrenal glands are the locations where pancreatic cancer metastasizes most frequently [1]. It is a rare discovery to detect cutaneous metastases from the pancreas, and when it does, the periumbilical region is frequently affected [2]. Nonumbilical cutaneous lesions in the past have been recorded, however they are quite uncommon [1-3]. 16 of the 22 instances of cutaneous metastases from pancreatic cancer, according to Miyahara et al [4], were located in the umbilicus. In 0.50 percent of their autopsy of pancreatic cancer patients (2 out of 420), Lookingbill et al. Occasionally, as was the case in our case, cutaneous lesions may be the first instance of metastatic pancreatic cancer in its clinical presentation. Miyahara et al [4], examined 20 cases of cutaneous pancreatic cancer metastases [5]. Cicatricial lesions were the earliest sign in 11 of the 20 instances where cutaneous metastases existed before the pancreatic cancer diagnosis [2,4,6]. Pancreatic cancer cells may spread to distant nonumbilical skin via the blood and lymphatic system as well as via the lymphatics from the peritoneal cavity, however the precise route of skin metastasis is unknown [1,7]. Only 56 occurrences of zosteriform cutaneous metastasis have been documented in the literature since 1970, according to Savoia et al [8]; the majority of these cases included skin and breast cancers as well as hematologic malignancies. Despite the lack of a proven aetiology, they claimed that an underlying structure as a possibility [2,4,8]. The first instance of metastatic pancreatic cancer in its clinical presentation. Miyahara et al [4]. Examined 20 cases of cutaneous pancreatic cancer metastases [2].

Despite the lack of a proven aetiology, they claimed that an underlying Expression of CK20. Clinicians should be aware that cutaneous lesions, including pancreatic cancer, may be a marker of metastatic malignancy. In particular, people with a history of cancer should be treated with a high index of suspicion. It is essential to know that sometimes skin involvement is the first sign for the diagnosis of pancreatic cancer, and there are already several case series reported in the literature [9-11].

### References

1. Pontinen T, Melin A, Varadi G, Khanmoradi K, Chewaproug D, et al. (2010) Cutaneous metastasis of pancreatic adenocarcinoma after kidney transplant: a case report and review of the literature. *Exp Clin Transplant* 8: 273-276.
2. Zhou HY, Wang XB, Gao F, Bu B, Zhang S, et al. (2014) Cutaneous metastasis from pancreatic cancer: a case report and systematic review of the literature *Oncol Lett* 8: 2654-2660.
3. Abdel-Hafez HZ (2008) cutaneous pancreatic metastasis: a case report and review of literature. *Dermatol Surg* 34: 1580-1583.
4. Miyahara M, Hamanaka Y, Kawabata A, Sato Y, Tanaka A, et al. Cutaneous metastases from pancreatic cancer. *Int J Pancreatol* 20: 127-130.
5. Lookingbill DP, Spangler N, Helm KF (1993) cutaneous metastases in patients with metastatic carcinoma: a retrospective study of 4020 patients. *J Am Acad Dermatol* 29: 228-236.
6. Jun DW, Lee OY, Park CK, Choi HS, Yoon BC, et al. (2005) Cutaneous metastases of pancreatic carcinoma as a first clinical manifestation. *Korean J Intern Med* 20: 260-263.
7. Horino K, Takamori H, Ikuta Y, Nakahara O, Chikamoto A, et al. (2012) Cutaneous metastases secondary to pancreatic cancer. *World J Gastrointest Oncol*, 4: 176-180.
8. Savoia P, Fava P, Deboli T, Quaglino P, Bernengo MG (2009) Zosteriform cutaneous metastases: a literature meta-analysis and a clinical report of three melanoma cases *Dermatol Surg* 35: 1355-1363.
9. Tavío-Hernández E, Cañete-Ruiz Á, Moreno C, Urech M, Cano-Ruiz A (2015) Multiple scalp metastases as a first manifestation of pancreatic denocarcinoma. *Rev Gastroenterol Mex*, 80: 287-289.
10. Matros E, Bailey G, Clancy T, Zinner M, Ashley S, et al. (2006) Cytokeratin 20 expression identifies a subtype of pancreatic adenocarcinoma with decreased overall survival *Cancer* 106: 693-702
11. Miguel MP, Begoña EM, Carlos AP, Daniel MT, Rodolfo DPD, et al. (2023) Cutaneous Metastasis as a Key Manifestation of Adenocarcinoma on Pancreatic Graft. *J Chem Can Res* 1: 1-2.

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