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Case Report
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Cutaneous Metastasis from Pancreatic Carcinoma- A Case Report and Review

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Abstract

Carcinomas of the pancreas represent less than 5% of human malignant neoplasms [5], skin involvement is rare, and metastasis generally occurs at the umbilical area. There are few reported cases with cutaneous lesions disclosing a pancreatic carcinoma at sites other than the umbilical area. We report a case of cutaneous metastases of pancreatic carcinoma to the scalp. The literature on pancreatic cutaneous metastasis is reviewed and discussed.

Case Report

A 59 year old female was referred to the plastic surgical outpatients with a lesion over the scalp which was painless, bled to minor trauma and had slowly increased in size over 3 months.

She had been recently diagnosed with pancreatic carcinoma of the tail with metastasis to the lung and bone following investigations for weight loss and right loin pain (Figure 1).

On physical examination there was a 1 cm ulcerated lesion over the parietal scalp. This was well circumscribed, with a rolled edge and had it was mobile over the deep structures (Figure 2). There were no enlarged lymph nodes present.

The provisional diagnosis made was of an ulcerated nodular Basal cell carcinoma. Excision of the scalp lesion was expedited and the resultant defect was closed with a scalp rotational flap.

Histology demonstrated the dermis to be infiltrated with malignant glandular structures. Immuno-histochemical staining showed a positive reaction to CK 7, CK20, CEA, Mesothelin (Figure 3), which was in keeping with well differentiated pancreatic adenocarcinoma.

Figure 1: Computer Tomography scan showing pancreatic cancer.

Figure 2: Nodular and ulcerated tumour on the scalp.

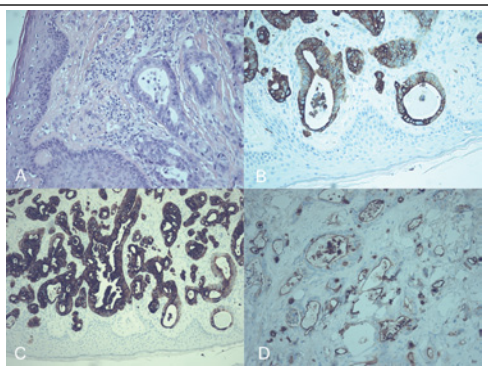

Figure 3: Excision biopsy from scalp lesion shows metastatic adenocarcinoma in the dermis (A) Hematoxylin and Eosin staining x200. Neoplastic glands show a positive reaction to immune-histochemical staining for cancer cells to CK7 (B) and CK20 (C) original magnification x 200. (D) Tumour cells are positive for Mesothelin immune-staining (x200).

She had an uneventful post operative period and when followed up her scalp rotational flap had completely healed.

She was readmitted with a pleural effusion and has since then been receiving palliative chemotherapy with Gemiocitabine.

Discussion

Cutaneous metastases occur in 0.7-9% of all patients with cancer, Breast, lung and colon cancer are the most frequent origins [2]. Cutaneous metastases from pancreatic cancer are very uncommon. Mean age of presentation of cutaneous metastases is 68.4 years and there is a male predominance [1].

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Author [ref]	Age	Sex	Site of skin metastasis	Location of Primary tumour
Takeuchi *et al.*[1]	77	M	Left axilla	Tail
Miyahara *et al.*[2]	43	M	Scalp	Uncus
Miyahara *et al.*[2]	65	M	Mentum	Uncus
Miyahara *et al.*[2]	60	M	Face, neck	Body, tail
Ambro *et al.*[3]	63	M	Scalp	Ductal
Taniguchi *et al.*[4]	67	M	Chest, abdomen	Unknown
Taniguchi *et al.*[4]	69	M	Face, head	Head
Hafez[5]	55	F	Neck	Head
Ohhashi *et al.*[6]	79	M	Neck, chest, abdomen	No details
Ohhashi *et al.*[6]	65	M	Back	No details
Nakano *et al.*[7]	80	M	Occipital scalp	Tail
Nakano *et al.*[7]	80	M	Arm, chest	Unknown
Sakai *et al.*[8]	47	M	Herpes zoster-like	Head
Sironi *et al.*[9]	72	M	Right thigh	Head
Florez *et al.*[10]	84	M	Buttock	Head
Jun *et al.*[11]	68	M	Right forearm, chest	Body, tail
Fukui *et al.*[12]	49	M	Face, chest	No details
Horino *et al.*[13]	65	F	Chest wall	Head
Our case	59	F	Scalp	Tail

Table 1: Non umbilical cutaneous metastasis from pancreatic adenocarcinoma.

Distant spread shows that a pancreatic carcinoma can reach all cutaneous tissue via blood or lymphatic systems. The most frequent cutaneous metastatic site is the umbilicus, known as the Sister Mary Joseph nodule and the pancreatic tail was the most common site of the primary tumour [1]. Our case is interesting in that the unusual cutaneous metastases of pancreatic cancer was to the scalp in contrast to the umbilicus. To the best of our knowledge there are only 3 other reports of pancreatic cancer with cutaneous metastases to the scalp [2-4].

A literature review of the published data, has found 17 cases, with non-umbilical cutaneous metastasis to the face, chest, back, axilla, forearm, buttock and thigh [5]. (Table 1)

Miyahara et al [2] reported 5 cases and reviewed 17 cases of cutaneous metastasis originating from the pancreatic cancer. In 20 cases, the cutaneous metastases were present prior to the diagnosis of pancreatic cancer. In 11 of these cases, the metastatic lesions in the skin were the first symptoms of pancreatic cancer, and in the other 9 cases, the lesions were discovered by physical examination. Horino et al. [13] reviewed 49 reported cases of pancreatic metastasis from 1950 to 1999. In the majority of cases, skin metastatic lesions were the first signs of the pancreatic cancer. Moreover, 90.3% of the cases had multiple organ metastases or peritoneal seeding. Cubilla et al. [14] reported that 8 of 50 (16%) of occult pancreatic cancer had metastatic skin lesions as the first manifestation of the malignancy.

Although such cases are rare, it is important to note that metastatic lesions in the skin may be the first sign and one type of distant metastases originating from pancreatic cancer, this may relate to the propensity for tail of pancreas cancers to remain asymptomatic until a later stage when distant metastasis has already occurred.

Grossly the Cutaneous lesions are oval, firm, solid, non painful nodules. Macroscopically they tend to lack uniformity or distinction and are difficult to distinguish from other skin lesions [1]. Most patients die within 7 months from presentation of cutaneous metastases, therefore metastases to skin indicates widespread general dissemination and a poor prognosis [1].

Immunohistochemical staining of the lesion with for CK 7, 19 and 20 is helpful for identification of the cutaneous lesions primary neoplasm [1].

Conclusion

Cutaneous metastases from pancreatic carcinoma are rare clinical findings, can vary considerably and be non-specific. Metastatic lesions can be the initial presenting sign of pancreatic cancer. When surgery for the pancreatic cancer is contemplated the evaluation and presence of not only liver or lung but also cutaneous metastases has important implications for tumour staging and therapy. To the best of our knowledge, very few patients have been reported with cutaneous metastasis to the scalp disclosing a pancreatic carcinoma, making this a case particularly interesting.

References

1. Takeuchi H, Kawano T, Toda T, Yoshikazu M, Susumu N, et al. (2003) Cutaneous metastasis from pancreatic adenocarcinoma. Hepatogastroenterology 50: 275-277.
2. Miyahara M, Hamanaka Y, Kawabata A, Sato Y, Tanaka A, et al. (1996) Cutaneous metastasis from pancreatic cancer. Int J Pancreatol 20:127-130.
3. Ambro CM, Humphreys TR, Lee JB (2006) Epidermotropically metastatic pancreatic adenocarcinoma. Am J Dermatopathol 28: 60-62.
4. Taniguchi S, Hisa T, Hamada T (1993) Cutaneous metastases of pancreatic carcinoma showing unusual clinical features: A case report and review of literature. Hifu 35: 727-730.
5. Hafez HZ (2008) Cutaneous pancreatic metastasis: a case report and review of literature. Indian J Dermatol 53: 206-209.
6. Ohashi N, Iizumi Y, Komatsu T (1995) Two cases with metastatic skin cancer originally from pancreatic carcinoma. Skin Cancer 10: 395–399.
7. Nakano S, Narita R, Yamamoto M, Ogami Y, Osuki M (1996) Two cases of pancreatic cancer associated with skin metastases. Am J Gastroenterol 91: 410-411.
8. Sakai S, Sugawara M, Hashimoto I (1969) A case of cutaneous metastases from pancreatic carcinoma showing clinical feature of the herpes zoster. Rinsho Dernzu 11: 223-227.
9. Sironi M, Radice F, Taccagni GL, Braga M, Zerbi M (1991) Fine needle aspiration of a pancreatic oxyphylic carcinoma with pulmonary and subcutaneous metastases. Cytopathology 2: 303-309.
10. Florez A, Roson E, Sanchez-Aguilar D, Peteiro C, Toribio J (2000) Solitary cutaneous metastasis on the buttock: A disclosing sign of pancreatic adenocarcinoma. Clin Exp Dermatol 25: 201-203.
11. Jun DW, Lee OY, Park CK, Choi HS, Yoon BC, et al. (2006) Cutaneous metastases of pancreatic carcinoma as a first clinical manifestation. Korean J Intern Med 20: 260-263.
12. Fukui Y, Jo N, Maeshima S (1995) A statistical analysis of thirty-two cases of metastatic skin cancer. Hifu 37: 534-543.
13. Horino K, Hiraoka T, Kanemitsu K, Tsuji T, Inoue K, et al. (1999) Subcutaneous metastases after curative resection for pancreatic carcinoma: A case report and review of the literature. Pancreas 19: 406-412.
14. Cubilla A, Fizgerd PJ (1978) Pancreas cancer: I. Duct adenoncarcinoma, a clinical-pathologic study of 380 patients. Pathol Annu 13: 241-289.