

## Isolated pancreatic metastasis from melanoma. Case report

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**SUMMARY: Isolated pancreatic metastasis from melanoma. Case report.**

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*Pancreas is frequently site of isolated metastasis, approximately in the 40% of cases in patient with previous history of malignant neoplasia, more frequently from renal cell carcinoma. The melanoma metastasis can also interest the pancreas in case of disseminated disease (50% of the cases); more rarely the pancreas is site of isolated metastases from melanoma. The treatment of the pancreatic metastases from melanoma is controversial: the therapeutic choices are few and the role of surgery is not well defined. If the metastasis are confined to the pancreas, the surgical treatment can be useful for better long time survival.*

*We report a rare case of melanoma with pancreatic isolated metastasis in a patient with a previous melanotic metastasis to the inguinal lymph nodes without evidence of primitive tumor.*

**RIASSUNTO: Metastasi pancreatiche isolate da melanoma. Caso clinico.**

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*Il pancreas è frequentemente sede di metastasi isolate, nel 40% circa di casi in pazienti con pregressa storia di neoplasia maligna, più frequentemente un carcinoma a cellule renali. Le metastasi da melanoma possono interessare anche il pancreas in caso di malattia disseminata (50% dei casi); più raramente il pancreas è sede di metastasi unica da melanoma. Il trattamento delle metastasi pancreatiche isolate da melanoma è controverso: le scelte terapeutiche sono poche e il ruolo della chirurgia non è ben definito. Se le metastasi sono reseccabili il trattamento chirurgico può migliorare la sopravvivenza a lungo termine.*

*Riportiamo un caso raro di melanoma con metastasi pancreatiche isolate in paziente con linfonodi inguinali metastatici e tumor primitivo non evidenziabile.*

**KEY WORDS:** Melanoma - Pancreatic metastasis - Pancreatectomy.  
Melanoma - Metastasi pancreatiche - Pancreatectomia.

### Introduction

Pancreas is frequently involved in metastatic disease, but very rarely it is site of isolated metastasis from melanoma. A review of literature reports that metastases represent about 2% of all pancreatic tumours (1). More recently Reddi et al. report the following incidence of isolated metastatic cancer from non pancreatic primary disease in 49 subjects underwent partial or total resection of pancreas: renal cell carcinoma 42%, gallbladder cancer 12%, lung cancer 8%, ovarian cancer 8%, sarcoma

8%, melanoma 6%, colon cancer 4%, breast cancer 2% hepatocellular carcinoma 2%, seminoma 2%, Langerhans cell histiocytosis 2%, and non pancreatic endocrine cancer 2% (2).

Management of the pancreatic metastatic melanoma is controversial. Treatment options are limited and the role of surgery is poorly defined: if metastases are confined to the pancreas, resection may be a determinant of long-term survival.

Potential survival benefits of pancreatic resection in selected patients, especially those with metastases from renal cell carcinoma, are established, instead resection for metastatic melanoma is limited and controversial specially when disease is widespread (3).

We report a rare case of pancreatic metastatic melanoma in a patient with a clinical history of cutaneous melanoma metastatic to inguinal lymph nodes without evidence of primary site of the tumor.

## Case report

A 43-years-old woman, with medical history of cutaneous melanoma, treated by left inguinal lymphadenectomy (7 years ago) followed by adjuvant chemotherapy (cisplatin and vinblastin), was referred to us for surgical treatment. During last follow-up, abdominal CT scans showed a hypodense lesion with peripheral enhancement in the tail of the pancreas; lymph nodes around tail of the pancreas and spleen were enlarged (Fig. 1). Ultrasonography (US) showed a hypoechoic tumor, of approximately 17 mm, located in the tail of the pancreas, with a peripheral halo and faint vascular signals in the peripheral part. The patient refused endoscopic US(EUS)-guided FNA. PET scan underlined the presence of accumulation of the radiotracer in the distal portion of the pancreas and in lymph nodes around vessels of the spleen. Clinical examination was unremarkable; the blood tests indicated normal values.

The patient underwent surgical treatment. During laparotomy we found a mass involving distal part of the pancreas and spleen and sticking to the left surrenal gland. An intraoperative exploration excluded the presence of other intra-abdominal metastatic lesions.

A distal pancreatectomy with splenectomy was performed. Histological examination of specimen confirmed metastases from melanoma characterized by mixed spindle cell and epithelial cell with positive staining for S-100 and negative for CK AE1/AE3, synaptophysin, chromogranin A and CEA. All resection margins were clear of malignancy, and no lymph node metastases were detected. Spleen was free from neoplasia.

Patient had a pancreatic fistula that healed spontaneously without treatment. She is still asymptomatic and without evidence of recurrence.

## Discussion

It is estimated that 55,100 cases of invasive melanoma will be diagnosed in the United States in 2004 (4% of all cancer cases) and that 7,910 patients will die of the disease (1% to 2% of all cancer deaths). Melanoma is estimated to be the fifth and seventh most common cancer in men and women, respectively, among new cases of cancer in the United States in 2004. Surgical resection remains the single hope for cure in patients with metastatic melanoma (4).

Pancreas is frequently site for isolated metastases: about 40% of cases in patients with a previous history of malignancy (5) especially from renal cell carcinoma. The incidence ranges from 3% to 10% in reported autopsy series (3). However, the benefits of pancreatic resection in patients with melanoma and other primary malignancies are less certain. Pancreatic metastatic melanoma occurs in 50% of cases of disseminated disease but isolated pancreas metastases are rare (3). They occur in no more than 2% of patients with visceral metastases (2, 6).

It is generally accepted that specific clinical and pathological factors, as tumour depth, ulceration, histological subtype, anatomical site and lymph node involvement, influence survival in patients with primary melanoma (7). However the prognostic factors that determine survival in patients with metastases to the pancreas are unde-



Fig. 1 - CT shows the hypodense lesion in the distal pancreas.

termined except a long disease-free interval after the treatment of primary malignancy which reflects favourable tumour biology with a slow growth pattern and the relative rarity of lymph node invasion (8-10).

In patients with a pancreatic mass, after a history of malignant disease, the diagnosis of metastases is initially suspected based on imaging studies. US are considered the first choice investigation in these patients. CT scan evidence of a pancreatic mass with higher peripheral enhancement of the lesion and a low attenuation on central area is suggestive for pancreatic metastasis but there is no accuracy for specific diagnosis between neuroendocrine tumours and a primary pancreatic neoplasm.

Some authors, as Dumitrascu et al. (4), maintain that EUS-guided FNA is very helpful in the pre-operative management of small pancreatic masses, especially for small neuroendocrine tumors and metastatic lesions. EUS-FNA is considered necessary for comparing pre-operative cytology with post-operative histologic examination and this agreement is considered sufficient for a complete cytological diagnosis of a pancreatic metastasis even in the absence of confirmatory immunocytochemistry (4).

The survival of patients with visceral metastases from melanoma is 6-12 months (11, 12). The role of surgery in patients with melanoma metastases is still undefined because more than one organ can be involved or complete tumour resection is not possible. Survival of the patients undergoing complete surgical resection for isolated pancreatic melanoma metastases are generally better than those managed by non-surgical treatment (6, 8, 9, 11-15). In a series reported by Wood et al., six pa-

tients with isolated pancreatic localization of metastases undergoing to surgical treatment the median survival was 24 months and the 5-years survival disease free was 50%. In the same series, the 5-years survival of 778 patients with no surgery management of visceral melanoma metastases was only 9% (11). Results of chemotherapy are generally disappointing. The overall response rates vary between 15% and 28%, and long-term remission are reported in < 2% of treated cases (3).

Many progresses in surgical treatment of pancreatic tumours have been made during recent years. Total pancreatectomy is indicated only in locally extended tumours that cannot be removed by a distal pancreatectomy (16). Central pancreatectomy is a surgical procedure that removes the middle segment of the pancreas and preserves the distal pancreas and spleen. This procedure is reported in literature as a good treatment for central pancreatic metastases as those from melanoma (4).

For patients with small or low-grade malignant neoplasms, as well as small pancreatic metastases located in

the mid-portion of pancreas, central pancreatectomy is emerging as a safe and effective option with a low risk of developing exocrine and/or endocrine insufficiency.

Malignant tumors of pancreatic body and tail have been considered as a disease with dismal prognosis due to early spreading to adjacent or distal organs. These neoplasms are associated with a lower resectability rate of only 10-12% although surgical resection is the only chance for cure. In most of the available studies on extended distal pancreatectomy the overall mortality was less than 1%.

## Conclusion

The survival of patients undergoing complete resection for isolated pancreatic metastases from melanoma is generally better than those treated by no surgical modalities. Surgical resection remains the single hope for cure for these patients because only complete resection of melanoma metastases gives a long term survival.

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