



Ann Ital Chir, Digital Edition 2018, 7
pii: S2239253X18028608 - Epub, May 8
free reading: www.annitalchir.com

Metastasis from pancreatic adenocarcinoma to the cheekbone

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Metastasis from pancreatic adenocarcinoma to the cheekbone

Skeletal metastasis by pancreatic adenocarcinoma are infrequent, and those located in the craniofacial region are very rare. We report the case of a 63-year-old Caucasian woman with a metastatic adenocarcinoma of the pancreatic head previously treated with surgery and chemotherapy presenting a skeletal metastasis in the left cheekbone 5 years after primary treatment. No other similar cases have been previously described. The therapeutic decision was not simple because of the uncommon site of pancreatic metastasis. Surgical resection was the only possibility after the radiotherapy failure.

KEY WORDS: Cheekbone mass, Cheekbone metastasis, Pancreatic adenocarcinoma, Pancreatic adenocarcinoma metastasis

Introduction

Metastasis represents only 1% of all malignancies arising in maxillo-facial region; in most cases, they are represented by adenocarcinomas originating in kidney, prostate and breast¹. Metastasis from pancreatic adenocarcinoma are rare; two cases of orbital metastasis have been previously described^{2,3}. We report the first case of cheekbone metastasis originating from a pancreatic cancer.

Case Report

We report the case of a 63-years-old woman presenting to our department on December 2015 with a painful mass in the left orbito-zygomatic region, referring ipsilateral progressive visual loss. Patient's clinical history sug-

gested the diagnosis of a pancreatic cancer metastasis since 5 years before (July 2010) she underwent "en-bloc" resection of the pancreatic head extended to duodenum and regional lymphnodes in order to remove a pancreatic adenocarcinoma staged as pT3N1.

Three years later atypical pulmonary resection was performed to excise metastasis. Chemotherapy (initially with gemcitabine, and then with vinorelbine) was administered. Nevertheless, about three months after drug withdrawal, the patient noticed a progressive painful swelling at the left zygoma associated with exophthalmos. CT scan showed a 25x25 mm osteolytic lesion of the left cheekbone, and PET-CT (Fig. 1C) confirmed the presence of lesions with increased metabolic activity. Local radiotherapy (total dose: 30 Gy) was performed (July 2015), but progression of the disease (Fig. 1 A, B) with initial visual loss was observed. She presented to our Department on December 2015, and according with Head and Neck Tumor Board because of an unusual localization, it was decided to perform an incisional biopsy of the mass; histological examination was consistent with metastasis from pancreatic adenocarcinoma. On January 2016 palliative surgery consisting in free margins resection of the metastasis and reconstruction with pedicled temporalis flap was performed, confirming previous diagnosis. Indication to adjuvant chemotherapy was done. At today the patient is alive with disease.

Pervenuto in Redazione Marzo 2018. Accettato per la pubblicazione Aprile 2018

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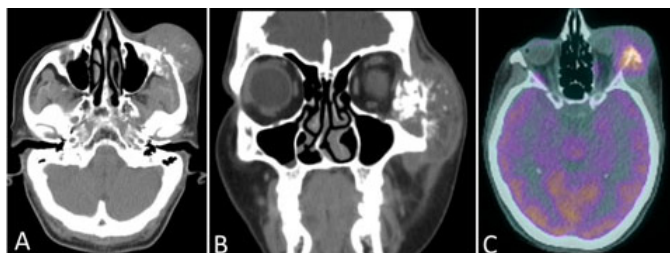


Fig. 1: A) preoperative CT scan with contrast, showing a 49x36 mm osteolytic lesion of the cheekbone (axial view); B) preoperative CT scan with contrast, coronal view; C) pre-operative PET-CT.

Discussion

Skeletal metastasis by pancreatic adenocarcinoma are infrequent, craniofacial bones involvement is rare; in most cases mandible is involved⁴⁻⁹. No other cases of cheekbone metastasis from pancreatic cancer have been previously described. In those cases treatment depends on histological type, patient condition, associated symptoms and the presence of other metastasis. In the case previously described, even in presence of lung disease, it was decided to perform zygomatic mass removal with palliative intent, because of other treatments failure (radiotherapy) and associated symptoms such as pain and visual loss.

Riassunto

Le lesioni metastatiche al distretto testa-collo rappresentano solamente l'1% di tutte le lesioni del distretto cervico facciale. L'istotipo più frequente è l'adenocarcinoma solitamente originato da un tumore primitivo della mammella, della prostata o del rene. Le metastasi ossee al massiccio facciale da carcinoma pancreatico sono alquanto rare e coinvolgono più frequentemente la mandibola. In letteratura inoltre sono stati descritti solamente due casi di interessamento della regione orbitaria. Nell'articolo riportiamo il caso di una paziente di 63 anni giunta alla nostra attenzione nel dicembre 2015 per una tumefazione localizzata in regione orbito zigomatica destra associata ad intenso dolore, esoftalmo e perdita progressiva del visus. La paziente aveva un'anamnesi positiva per adenocarcinoma pancreatico resecato nel 2010 (pT3N1). Tre anni dopo la paziente è stata sottoposta ad intervento chirurgico di resezione atipica polmonare per metastasi da adenocarcinoma pancreatico e successivamente a chemioterapia adiuvante.

Dopo qualche mese la paziente notava la comparsa di una tumefazione a livello della regione zigomatica sinistra: per tale motivo effettuava nel giugno 2015 un trattamento radioterapico (30 Gy) nel corso del quale si

osservava progressione della malattia e perdita della funzione visiva. Nel dicembre 2015 la paziente giungeva dunque, per la prima volta, alla nostra osservazione e, nella riunione multidisciplinare per i tumori del distretto testa-collo, si poneva indicazione ad intervento chirurgico con intento palliativo previa biopsia incisionale per la conferma istologica del sospetto diagnostico. Nel gennaio 2016 la paziente veniva dunque sottoposta ad intervento chirurgico di resezione in margini sani della metastasi da adenocarcinoma pancreatico e ricostruzione con lembo di muscolo temporale omolaterale. Successivamente la paziente ha effettuato un ciclo di chemioterapia adiuvante. Allo stato attuale la paziente è viva seppur non libera da malattia per la persistenza di metastasi polmonari.

In letteratura sono riportati pochi casi di metastatizzazione al distretto maxillo-facciale da adenocarcinoma del pancreas e nessun caso di metastasi zigomatica è stato descritto precedentemente.

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