

# Metachronous pancreatic metastasis of an ovarian serous papillary adenocarcinoma after 8 years

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## Introduction

The majority of pancreatic tumours are primary. Pancreatic metastases are rare (3,8% of pancreatic lesions) (1), and are more commonly reported in patients with renal cell carcinoma. Metastases of ovarian cancer to the pancreas are very rare but have been reported in the literature (2).

We report a very unusual case of a metachronous pancreatic metastasis from an ovarian cancer occurred 8 years after the first diagnosis.

## Case report

We describe a 70 year-old Caucasian female with a prior history (8 years previously) of bilateral hysterectomy because of ovarian and uterine serous papillary adenocarcinoma poorly differentiated G3 (pT1c, N0), that presented with jaundice.

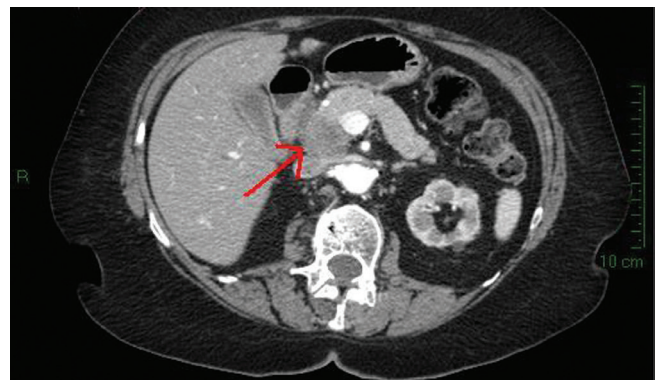
Her past medical history revealed hypertension, Wegener Granulomatosis and bronchial asthma.

Laboratory test results included the following: bilirubin 10.1 mg/dL (normal 0.3-1.2 mg/dL); alanine aminotransferase 478 IU/L (0-40 IU/L); alkaline phosphatase 2667 IU/L (70-290 IU/L);  $\gamma$ GT 2853 IU/L (0-50 IU/L); Ca19-9 35,3 U/mL (0.0-37 IU/mL); CA 125 90,8 U/mL (0.0-35 IU/mL).

Abdominal ultrasound revealed common bile duct (CBD) dilation (20 mm diameter) with concomitant dilatation of intrahepatic biliary tree.

The abdominal CT scan showed a 2.5 cm  $\times$  3 cm hypodense pancreatic head lesion involving the portal vein (Figure 1).

An EUS (Figure 2) confirmed the presence of the pancreatic mass involving the portal vein with CBD stenosis; fine needle aspiration (FNA) was therefore performed with subsequent therapeutic ERCP (Figure 3)



**Figure 1** Contrast enhanced CT scan of the abdomen revealing 2.5 cm  $\times$  3 cm hypodense pancreatic head lesion involving the portal vein (arrow)

with biliary stenting.

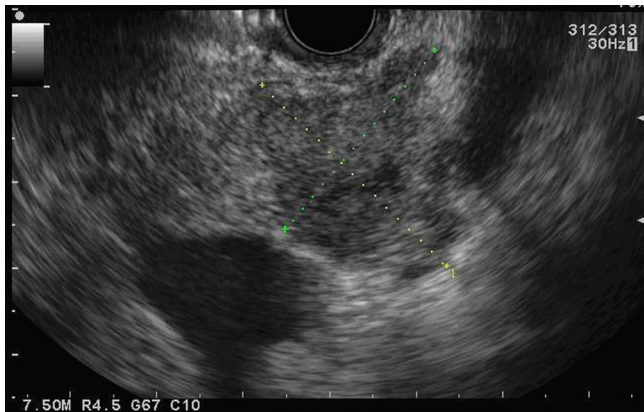
Pathology revealed the presence of adenocarcinoma with CA 125 expression at immunohistochemistry (Figure 4), compatible with ovarian pancreatic metastasis.

The patient is currently receiving repeat chemotherapy with carboplatin and taxol and is now in stable conditions.

## Discussion

Tumours metastasizing to the pancreas are unusual and published series are limited by few patients (3). Pancreatic metastases are quite rare, usually found incidentally, and are more commonly reported in patients with renal cell carcinoma, melanoma, lung, colon or breast cancer (4). Due to the low incidence of pancreatic metastasis, most masses of the pancreas are assumed to be primary pancreatic neoplasms (5).

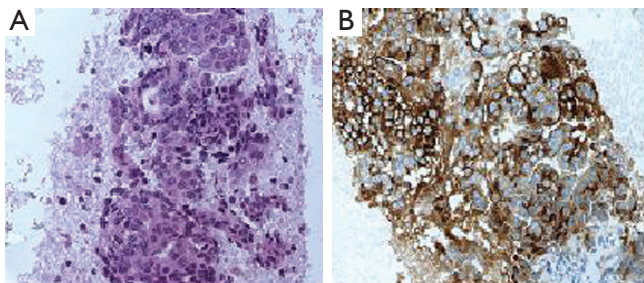
Tissue diagnosis is imperative because imaging alone is incapable of differentiating metastases from primary



**Figure 2** Linear array EUS picture pancreatic hypoechoic solid mass with CBD dilation



**Figure 3** ERCP image displaying CBDS stricture (arrow), with CBD retrodilaton



**Figure 4** Cytological picture of pancreatic FNA: A. Hematossilin Eosin ( $\times 40$ ); B. immunohistochemistry ( $\times 40$ ) with anti CA-125

pancreatic tumours. EUS-FNA allows cytodiagnosis and can have a decisive influence on the selection of appropriate therapeutic strategies (6).

Therefore, a tissue biopsy should be always required particularly in patients with past medical history of neoplasia, to truly differentiate between primary and secondary tumours in order to avoid misdiagnosis and delay in possible treatment.

Our case describes a rare case of a metachronous pancreatic metastasis from an ovarian cancer occurred 8 years after the first diagnosis. There are only few case reports in the literature of ovarian adenocarcinoma metastasis to the pancreas (7,8) and to our knowledge this is the first description of one occurred 8 years after the first diagnosis.

The patient presented with jaundice and imagine techniques revealed a pancreatic head lesion infiltrating the portal vein, initially assumed to be a primary pancreatic tumour.

Because of the previous history of ovarian neoplasia, EUS-FNA of the pancreatic lesion was performed and positive immunohistochemistry with anti CA-125 revealed the presence of a pancreatic metastasis from ovarian cancer and specific chemotherapy with carboplatin and taxol was therefore started.

In conclusion, although rare, pancreatic metastasis is an important cause of focal pancreatic lesions.

Tissue biopsy should be always obtained in order to differentiate primary from secondary pancreatic tumours and to rapidly direct a patient's appropriate therapy, both in terms of chemotherapy and surgery.

### Acknowledgements

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