

# Paratesticular adenocarcinoma: unusual presentation of metastasis of pancreatic cancer

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**Background.** Metastatic paratesticular adenocarcinoma from the pancreatic cancer is very rare. To our knowledge, there are less than 20 cases published in the literature.

**Case report.** We experienced a case of paratesticular adenocarcinoma from the primary pancreatic cancer. A 42-year-old man was presented with locoregionally advanced carcinoma of the tail of the pancreas with intraoperatively found liver metastases and with a tumour in the right hemi-scrotum. Ultrasound of the scrotum revealed a paratesticular tumour. A fine needle aspiration biopsy (FNAB) confirmed a poorly differentiated adenocarcinoma and it was in concordance with the diagnosis of the primary tumour. The patient started treatment with chemotherapy with gemcitabine. Unfortunately, he progressed one month later and the treatment was discontinued.

**Conclusions.** Outcome in the adenocarcinoma of the pancreas is dismal. The only possible treatment option for metastatic disease is systemic therapy but the results are disappointing, as in the present case.

*Key words:* pancreatic neoplasms; neoplasms metastasis; testicular neoplasms - secondary

## Introduction

Pancreatic cancer can be silent for a long time before it manifests with features related to local and distant spread. Paratesticular metastases of pancreatic cancer are unusual tumours. Generally, paratesticular tumours are rare. Primary malignant tumours and metastatic tumours account for 32.9% of all tumours and 6-8% of malignant tumours of paratesticular tissue, respectively. In 47.6% of the cases,

the metastases and the primary tumours are found simultaneously. Uncommonly, in 9.5% they are the first sign of occult cancer. The most common primary sites of metastasis of the paratesticular tissue are prostate, kidney, gastrointestinal tract, lung and breast cancer.<sup>1,2</sup> We report a case of simultaneous metastatic paratesticular adenocarcinoma originating in the tail of the pancreas.

## Case presentation and management

A 42-year-old man was presented to abdominal surgeon with recurrent vague upper abdominal discomfort lasting for few months and without significant weight loss. His past history was not remarkable. Abdominal and endoscopic ultrasound examinations

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revealed a suspicious cystic and nonhomogeneous lesion in the tail of the pancreas. Chest X-ray was negative for metastasis. The abdominal CT scan confirmed a 2 cm cystic lesion in the tail of the pancreas. The serum tumour marker antigens Ca 19-9 and CEA were elevated, 78 U/ml and 2.6 ng/ml, respectively. Explorative laparotomy was done and locoregionally inoperable tumour of the pancreas with multiple liver metastases was found. Histologically, moderately differentiated adenocarcinoma from the pancreas and the liver was confirmed.

Afterwards, the patient was presented to the medical oncologist and he complained of palpable tumour mass in the right hemiscrotum. On examination a painless, hard and irregular 2x2 cm large swelling was identified. Ultrasound revealed a paratesticular tumour. A fine needle aspiration biopsy (FNAB) confirmed a poorly differentiated adenocarcinoma.

Tumour marker antigens Ca 19-9 and CEA were further elevated, 296 U/ml and 15.4 ng/ml, respectively. Based on these findings, the patient was diagnosed as having a metastatic paratesticular adenocarcinoma originating from pancreatic carcinoma with liver metastases.

He started treatment with chemotherapy with gemcitabine. Unfortunately, he progressed one month later and the treatment was discontinued.

## Discussion

Metastatic paratesticular adenocarcinoma from the pancreatic cancer is very rare. To our knowledge, there are less than 20 cases published in the literature. In most cases the primary tumour was located in the body or the tail of the pancreas what is in concordance with the present case.<sup>3-6</sup>

Results from the 154 consecutive autopsies of the patients with pancreatic adenocarcinoma revealed that carcinomas of the body

and/or tail of the pancreas were more frequent characterized by transperitoneal and hematogenous dissemination than carcinomas of the head of the pancreas.<sup>7</sup> Kamisawa *et al* have suggested a mechanism of unusual pattern of spread due to hepatofugal porto-systemic shunting induced by splenic vein obstruction, retrograde lymphatic infiltration or even aggressive tumour characteristics.<sup>8</sup> In the present case, we postulate a hematogenous route of dissemination to the paratesticular tissue because of the presence of liver metastases without any metastatic lymph nodes.

Outcome in the adenocarcinoma of the pancreas is dismal with a five-year survival rate of 4%.<sup>9</sup> The only possible treatment option for metastatic disease is systemic therapy but the results are disappointing, as in the present case.

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