

Acinar cell carcinoma of the pancreas with neuroendocrine component

Published on 23.05.2009

DOI: 10.1594/EURORAD/CASE.7342

ISSN: 1563-4086

Section: Abdominal imaging

Case Type: Clinical Cases

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Patient: 52 years, female

Clinical History:

Globular panniculitis of probably enzymatic origin in a patient affected by acinar cell tumor of the pancreas with liver, lymph nodes and skeletal metastases.

Imaging Findings:

The patient presented with erythematous lesions extended over the upper and lower limbs and panniculitis of the left leg associated with severe pain and strength defect. Skin biopsy demonstrated globular panniculitis of probably enzymatic origin.

Physical examination revealed a palpable liver and laboratory data showed only anaemia associated with increased lipase levels.

Ultrasonography demonstrated an enlarged liver with multiple hypoechoic lesions characterized by a marginal halo and the presence of a solid hypoechoic lesion located in the proximal tract of the pancreatic tail.

Computed tomography confirmed these findings and showed in addition enlarged para-aortic and intercava-aortic lymph nodes. The liver lesions were of marked hyperdensity in the arterial phase, owing to an important arterial supply.

Skeletal scintigraphy demonstrated a widespread uptake.

A liver biopsy was done to characterize the lesions and immunohistochemical analysis yielded metastases of an acinar cell carcinoma of the pancreas.

The patient underwent six cycles of a polychemotherapeutic treatment including Oxaliplatin, L-Led, 5-FU and Sandostatina, then a CT exam was repeated, revealing a noticeable improvement; in particular, dimensional reduction of liver lesions (up to 30%) and an almost complete disappearance of the pancreatic involvement.

Discussion:

Acinar cell carcinoma of the pancreas is an uncommon tumour representing only 1-2% of all exocrine tumours of this gland. Occasionally it can have a neuroendocrine component.

While acinar tumour cells are reminiscent of cells found in a low grade of neuroendocrine tumours, a neuroendocrine immunohistochemical work-up rarely reveals positive results. These tumour cells usually stain for one of the tumour markers of exocrine pancreas, such as trypsin, lipase, chymotrypsin and phospholipase A2.

Keratin CAM 5.2 is present in all acinar tumour cells.

In this specific case the immunohistochemical analysis didn't confirm the neuroendocrine nature, but the clinical behaviour and the quick response to polychemotherapy indicate the presence of a neuroendocrine component.

Differential Diagnosis List: Acinar cell carcinoma of the pancreas with neuroendocrine component.

Final Diagnosis: Acinar cell carcinoma of the pancreas with neuroendocrine component.

References:

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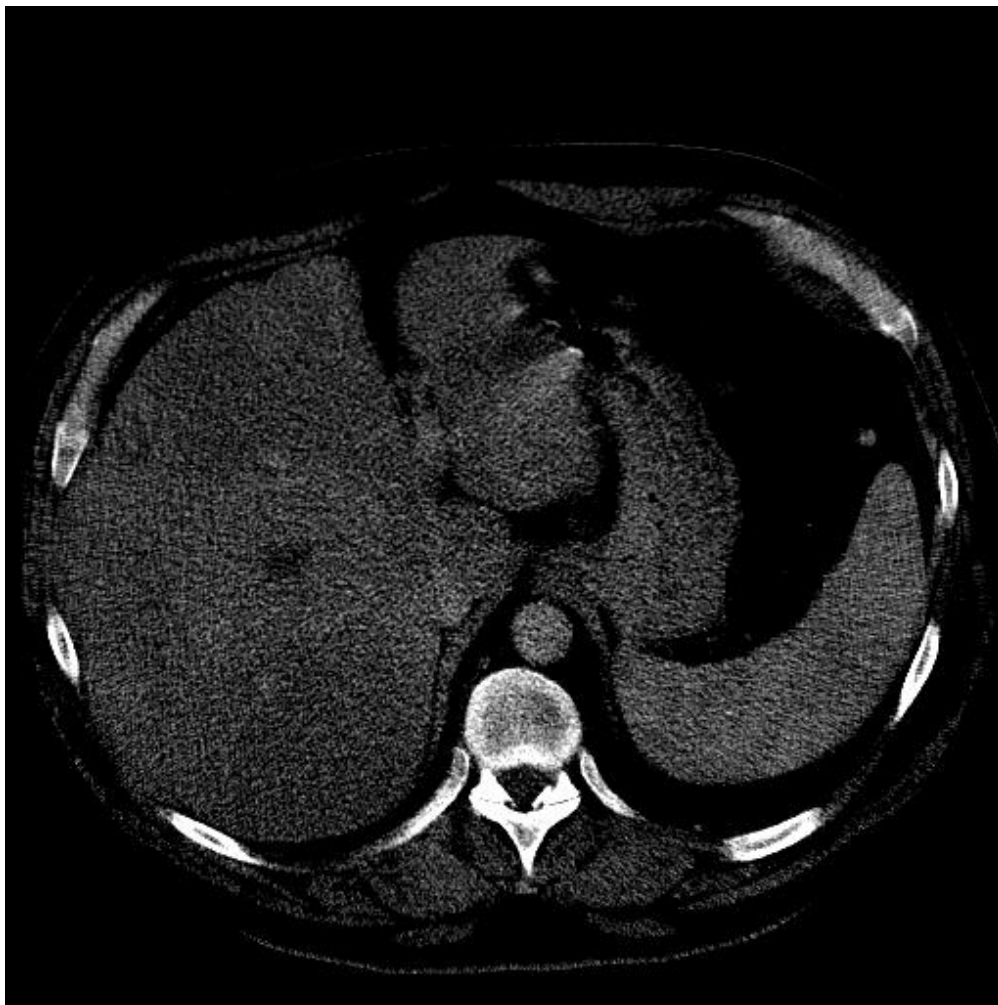
Figure 1

a



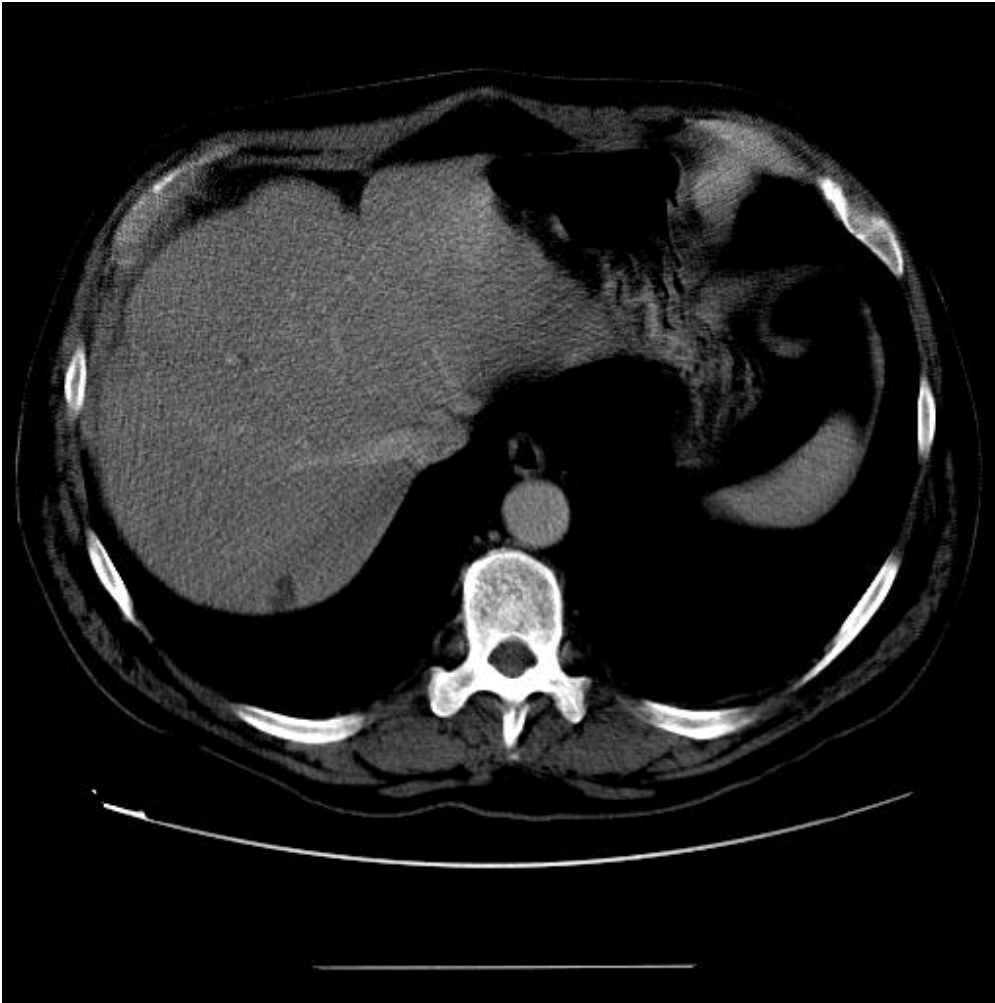
Description: Multiple hyperdense lesions widespread in the liver. **Origin:**

b



Description: One lesion shows a hypodense center, related to necrosis. **Origin:**

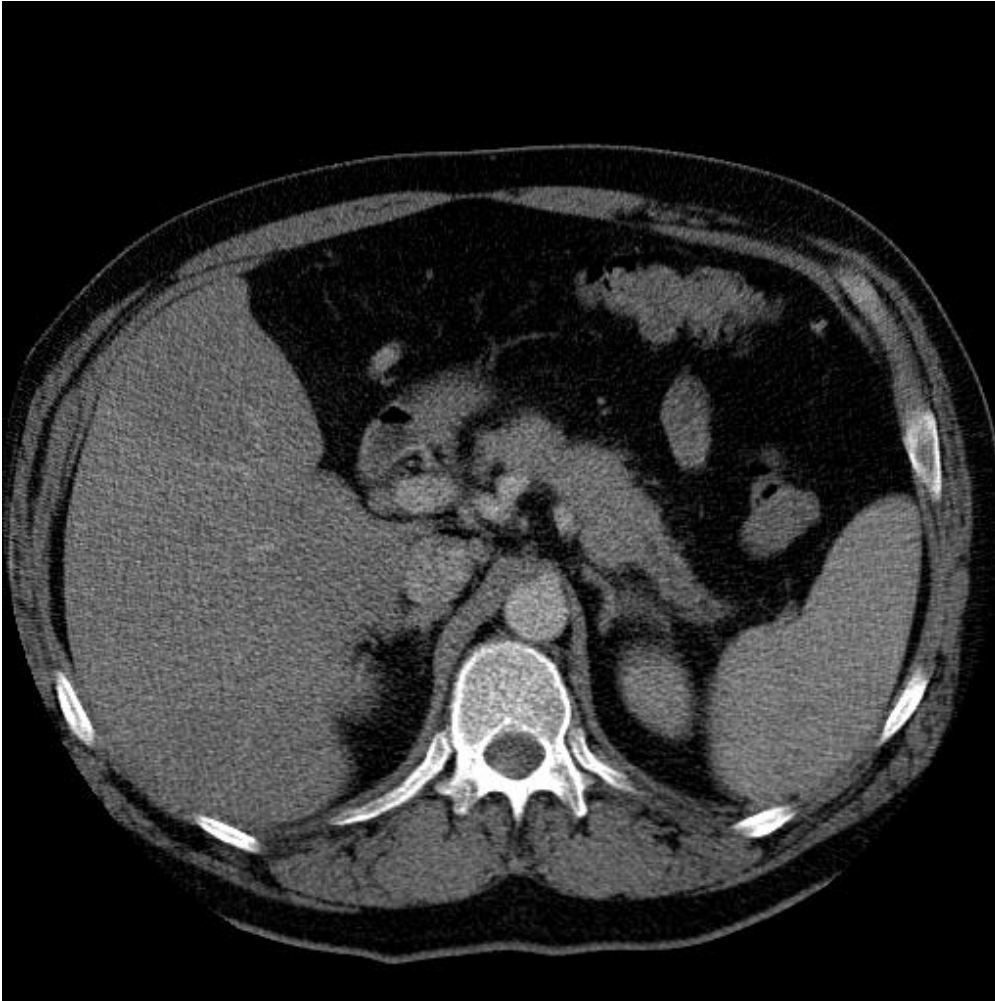
c



Description: Marked dimensional reduction after polychemotherapy, without focal enhancement in liver parenchyma. **Origin:**

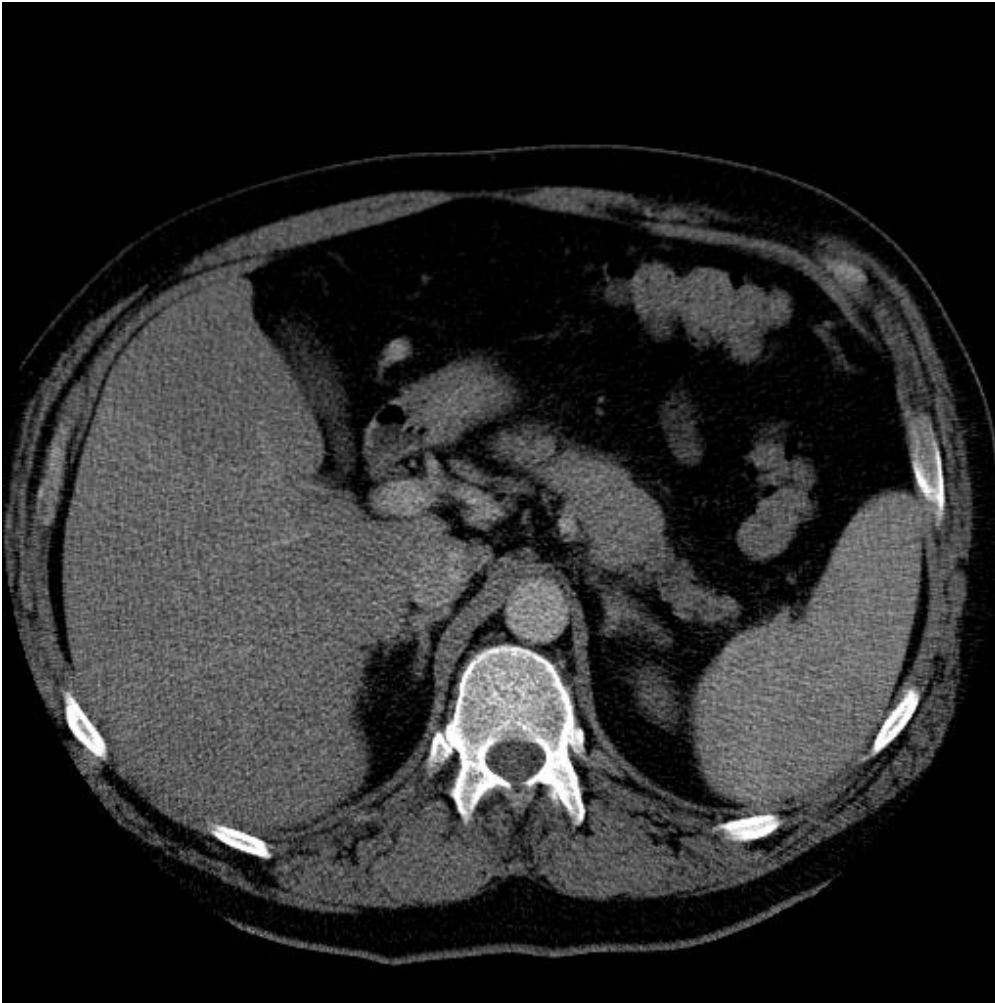
Figure 2

a



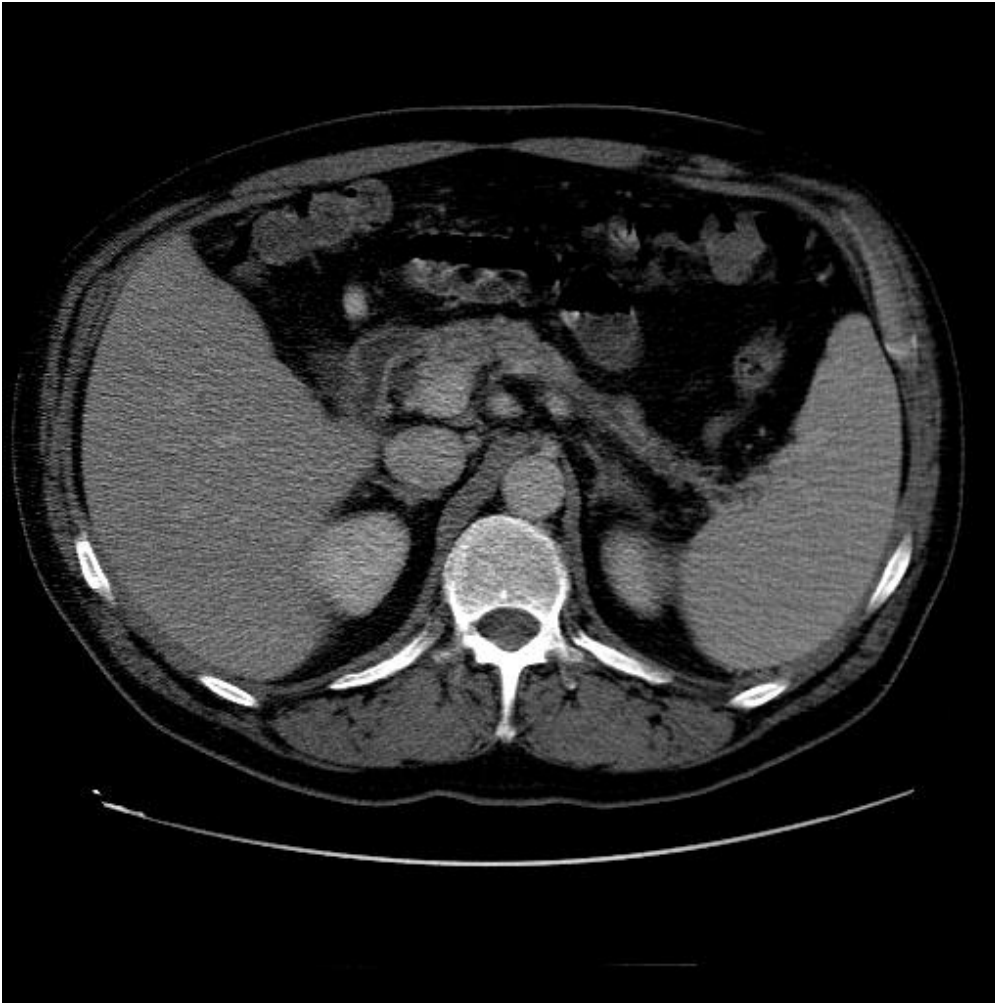
Description: Focal swelling in the proximal tract of the pancreatic tail. **Origin:**

b



Description: A more cephalad CT slice highlights the pancreas lesion. **Origin:**

c



Description: Disappearance of the pancreatic lesion after chemotherapy. **Origin:**