

IMAGES IN PANCREATOLOGY

Pancreatic small cell carcinoma incidentally detected by ^{18}F -FDG-PET/CTGiorgio Treglia ^{a,*}, Massimo Bongiovanni ^b, Luca Giovanella ^a^a Department of Nuclear Medicine and PET/CT Centre, Oncology Institute of Southern Switzerland, Via Ospedale, 12, 6500 Bellinzona, Switzerland^b Institute of Pathology, Locarno, Switzerland

Primary small cell carcinoma of the pancreas is a rare tumor which accounts for 1–1.4% of all pancreatic malignancies showing an extremely poor prognosis [1–3]. A 58-year-old male patient with history of non-Hodgkin lymphoma underwent fluorine-18-fluorodeoxyglucose positron emission tomography/computed tomography (^{18}F -FDG-PET/CT) for follow-up. Whole-body ^{18}F -FDG-PET image (Fig. 1(A)), axial CT (Fig. 1(B)) and fused PET/CT images (Fig. 1(C)) showed an area of increased radiopharmaceutical uptake corresponding to a 3 cm nodule located in the pancreatic tail (arrows). No other areas of abnormal radiopharmaceutical uptake were detected in

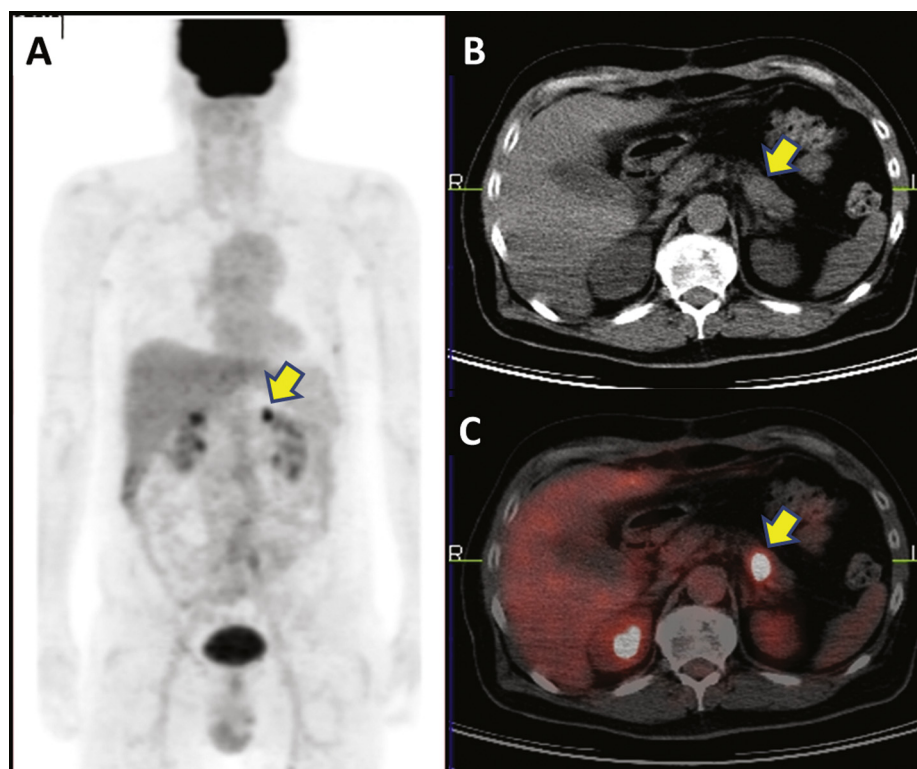


Fig. 1. Pancreatic small cell carcinoma incidentally detected by ^{18}F -FDG-PET/CT (arrows).

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the rest of the body. Based on these PET/CT findings, the patient underwent a fine-needle aspiration biopsy of the pancreatic nodule which showed small cells with scant cytoplasm and “salt and pepper” chromatin. On immunocytochemistry the cells showed high proliferative activity and cytoplasmic expression for synaptophysin. These findings were suggestive for a small cell carcinoma. Due to the presence of limited disease the patient underwent distal pancreatectomy and the diagnosis of small cell carcinoma of the pancreas was confirmed by final histology. The course after surgery was uneventful and the patient was addressed to clinical and imaging follow-up. In our case ^{18}F -FDG-PET/CT has been useful in the early detection of this rare primary pancreatic tumor.

Conflicts of interest:

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References

- [1] Walenkamp AM, Sonke GS, Sleijfer DT. Clinical and therapeutic aspects of extrapulmonary small cell carcinoma. *Cancer Treat Rev* 2009;35:228–36.
- [2] Wang D, Rong Y, Wu W, Jin D. Primary small cell carcinoma of the pancreas: rare type of pancreatic cancer and review of the literatures. *World J Surg Oncol* 2012;10:32.
- [3] Groeschl RT, Christians KK, Turaga KK, Gamblin TC. Management of primary hepatopancreatobiliary small cell carcinoma. *J Surg Oncol* 2013;107:692–5.

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