Contribution of whole body FDG-PET to the detection of distant metastasis in pancreatic cancer

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Objective: Accurate baseline staging is necessary to appropriately treat pancreatic cancer. The present study was undertaken to evaluate the clinical contribution of whole body FDG-PET to the detection of distant metastasis in pancreatic cancer. ***Methods:*** A total of consecutive 42 patients with previously untreated pancreatic cancer were examined. Whole body FDG-PET imaging for initial staging was performed with a 3D acquisition and iterative reconstruction on Siemens ECAT HR+ scanner at 1 hour post 185–200 MBq ^{18}F-FDG injection. PET findings were correlated with clinical and radiological data to determine the impact of PET on staging. ***Results:*** In 16 patients, there were one or more sites of metastasis based on clinical data. FDG-PET correctly identified the presence of metastasis in 13 of 16 patients and its absence in 23 of the remaining 26 patients. Thus, FDG-PET missed 4 metastatic sites in 4 patients (liver and lung metastasis). FDG-PET correctly identified 8 metastatic sites in 7 patients (peritoneal dissemination and liver, bone and supraclavicular lymph node metastasis), which were missed on CT imaging. Based on whole body FDG-PET, the clinical stage was changed in 5 of 42 patients (11.9%). ***Conclusions:*** These results suggest that FDG-PET and CT appear to have a complementary role in the detection of distant metastasis in patients with pancreatic cancer.

Key words: FDG-PET, pancreatic cancer, distant metastasis